Prudential sourcebook for Banks, Building Societies and Investment Firms

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Chapter 1

Application

1.1 Application

1.1.1 G There is no overall application statement for *BIPRU*. Each chapter or section has its own application statement. Broadly speaking however, *BIPRU* applies in the following manner:

(1) [deleted]

(2) [deleted]

(3) to a *BIPRU firm*;

(3A) to an *IFPRU investment firm*, only ■ BIPRU 12 (Liquidity standards); and

(4) in relation togroups containing such *firms*:

(a) only ■ BIPRU 12 (Liquidity standards) applies to the group containing any of the *firms* in (3) and (3A); and

(b) *BIPRU* as a whole applies to the group containing only the *firms* in (3).

1.1.2 R *BIPRU* applies to a *firm* in relation to the whole of its business, except where a particular provision provides for a narrower scope.

1.1.2A G *BIPRU* applies to a *collective portfolio management investment firm* that is a *BIPRU firm* in parallel with ■ IPRUINV link 11 (see ■ IPRUINV link 11.6).

1.1.3 G In the main *BIPRU* only applies to a *collective portfolio management investment firm* in respect of *designated investment business* (excluding *managing an AIF* and *managing a UK UCITS*). However ■ BIPRU 2.2 (Internal capital adequacy standards), ■ BIPRU 2.3 (Interest rate risk in the non-trading book), ■ BIPRU 8 (Group risk - consolidation) and ■ BIPRU 11 (Disclosure) apply to the whole of its business.

Purpose

1.1.4 G ■ BIPRU 1.1 implements in part the third paragraph of article 95(2) of the *UK CRR* that permits the *FCA* to apply certain requirements that correspond to the *Banking Consolidation Directive* and the *Capital Adequacy Directive*.

The definition of a BIPRU firm

1.1.7 R None of the following is a *BIPRU firm*:

(1) [deleted]

(2) [deleted]

(3) an *overseas firm*;

(4) [deleted]

(5) an *insurer*; and

(6) an *ICVC*.

1.1.7A G In summary, a *BIPRU firm*:

(1) does not provide the *ancillary service* of safekeeping and administration of *financial instruments* for the account of *clients*, including custodianship and related services such as cash/collateral management, and is not authorised to do so;

(2) is not authorised to provide the following *investment services*:

(a) to deal in any *financial instruments* for its own account;

(b) to underwrite issues of *financial instruments* on a firm commitment basis;

(c) to place *financial instruments* without a firm commitment basis; and

(d) to operate a *multilateral trading facility*;

(3) is authorised to provide one or more of the following *investment services*:

(a) the execution of investors' orders for *financial instruments*; or

(b) the management of individual portfolios of investments in *financial instruments*;

(4) may be authorised to provide one or more of the following *investment services*:

(a) reception and transmission of investors' orders for *financial instruments*; or

(b) investment advice; and

(5) does not hold clients' money and/or securities and is not authorised to do so (it should have a *limitation* or *requirement* prohibiting the holding of client money and its permission should not include *safeguarding and administering investments*).

1.1.10 G (1) This paragraph applies to an *undertaking* that would be a *third country BIPRU firm* if it were *authorised* under the *Act*.

(2) Except in exceptional circumstances, it is the *appropriate regulator's* policy that it will not give an overseas applicant a *Part 4A permission* unless the *appropriate regulator* is satisfied that the applicant will be subject to prudential regulation by its home state *regulatory body* that is broadly equivalent to that provided for in the *Handbook* and the applicable *UK prudential sectoral legislation*. The *appropriate regulator* will take into account not only the requirements to which the *firm* is subject but how they are enforced. The *appropriate regulator* will also take into account the laws, regulations and administrative provisions to which it is subject in its home state. The reasons for that policy include:

(a) it is unlikely that a *firm* that is not subject to equivalent supervision will be able to satisfy the *threshold conditions* (and in particular *threshold condition* 5 (Suitability)) and it is unlikely that it will be possible to establish that the *firm* does satisfy them; and

(b) such a *firm* is likely to pose a threat to the interests of *consumers* and potential *consumers*, particularly as effective supervision of an *overseas firm* depends on cooperation between the *appropriate regulator* and the *regulatory body* that authorises the *firm* in its home country and on the *appropriate regulator* being able to place appropriate reliance on the supervision carried out by such *regulatory body*.

(c) [deleted]

(3) If an *undertaking* is not subject to equivalent supervision in its home state and it wishes to carry on in the *United Kingdom regulated activities* coming within the scope of the activities that define a *BIPRU firm* it should establish a *subsidiary undertaking* in the *United Kingdom*. Such a *subsidiary undertaking* should be able to show, amongst other things, how it would comply with the *threshold conditions* (and in particular *threshold conditions* 3 (Close links) and 5 (Suitability)).

(4) If in exceptional circumstances the *appropriate regulator* does grant a *Part 4A permission* to an *undertaking* that is not subject to equivalent prudential regulation the *appropriate regulator* is likely to take measures under the *regulatory system* to compensate for the lack of equivalent supervision. These may include applying the prudential requirements for *BIPRU firm*s to the *firm*.

(5) An *overseas firm* that is subject to equivalent supervision is subject to the *threshold conditions* and the *Principles*. *BIPRU* and *GENPRU* do not generally apply. ■ BIPRU 12 applies to a *credit institution* with respect to liquidity risk in relation to its *United Kingdom branch*.

Meaning of dealing on own account

1.1.23 R
FCA

(1) *Dealing on own account* means (for the purpose of *GENPRU* and *BIPRU*) the service of dealing in any *financial instruments* for own account as referred to in paragraphs 3 of Part 3 of Schedule 2 to the *Regulated Activities Order*, subject to (2) and (3).

(2) A *CAD investment firm* that executes investors' orders for *financial instruments* and holds such

financial instruments for its own account does not for that reason *deal on own account* if all of the following conditions are met:

(a) such *position* only arises as a result of the *CAD investment firm's* failure to match investors' order precisely;

(b) the total market value of all such *positions* is no higher than 15% of the *CAD investment firm's initial capital*;

(c) (in the case of a *BIPRU firm*) it complies with the *main BIPRU firm Pillar 1 rules*;

(d) [deleted]

(e) (in the case of a *CAD investment firm*) it would comply with the *rules* in (2)(c) if it had been a *BIPRU firm* on the basis of the following assumptions:

(i) its head office had been in the *UK*; and

(ii) it had carried on all its business in the UK and had obtained whatever *Part 4A permission* required for doing so; and

(f) such *positions* are incidental and provisional in nature and strictly limited to the time required to carry out the transaction in question.

(3) Holding of *non-trading book positions* in *financial instruments* in order to invest *capital resources* is not *dealing on own account* for the purposes referred to in article 4(1)(2)(c) of the *UK CRR* (see ■ BIPRU 1.1.7A G).

[**Note:** Article 5(2) of the *Capital Adequacy Directive* (Definition of dealing on own account)]

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1.2 Definition of the trading book

Application

1.2.1 R This section applies to a *BIPRU firm*.

Purpose

1.2.2 G Pursuant to the third paragraph of article 95(2) of the *UK CRR*, this section applies certain provisions that correspond to the *Capital Adequacy Directive* and the *Banking Consolidation Directive* relating to the *trading book*. The precise provisions are listed as a note after each *rule*.

Definition of the trading book: General

1.2.3 R The *trading book* of a *firm* consists of all *position* in *CRD financial instrument* and *commodities* held either with trading intent or in order to hedge other elements of the *trading book* and which are either free of any restrictive covenants on their tradability or able to be hedged.

[**Note**: *CAD* Article 11(1)]

Definition of the trading book: Positions

1.2.4 R The term *position* includes proprietary positions and positions arising from client servicing and market making.

[**Note**: *CAD* Article 11(2) second sentence]

1.2.5 G *Positions* arising from client servicing include those arising out of contracts where a *firm* acts as principal (even in the context of activity described as 'broking' or 'customer business'). Such *positions* should be allocated to a *firm's trading book* if the intent is trading (see ■ BIPRU 1.2.10 R). This applies even if the nature of the business means that generally the only risks incurred by the *firm* are counterparty risks (i.e. no market risk charges apply). If the nature of the business means that generally the only risks incurred by the *firm* are counterparty risks, the *position* will generally still meet the trading intent requirement in ■ BIPRU 1.2.10 R if the *position* would meet the trading intent requirement if *position* risk did arise. The *appropriate regulator* understands that business carried out under International Uniform Brokerage Execution ("Give-Up") Agreements involve back to back trades as principal. Thus *positions* arising out of business carried out under such agreements should be allocated to a *firm's trading book*.

Definition of the trading book: Repos

1.2.6 R Term trading-related repo-style transactions that a *firm* accounts for in its *non-trading book* may be included in the *trading book* for capital requirement purposes so long as all such repo-style transactions are included. For this purpose, trading-related repo-style transactions are defined as those that meet the requirements of ■ BIPRU 1.2.4 R, ■ BIPRU 1.2.10 R and ■ BIPRU 1.2.12 R, and both legs are in the form of either cash or securities includable in the *trading book*. Regardless of where they are booked, all repo-style transactions are subject to a *non-trading book* counterparty credit risk charge.

[**Note**: *CAD* Annex VII Part D point 4]

1.2.6A G Capital requirements for term trading-related repo-style transactions are the same whether the risks arise in the *trading book* as counterparty credit risk or in the *non-trading book* as credit risk.

CRD financial instruments

1.2.7 R A *CRD financial instrument* means any contract that gives rise to both a financial asset of one party and a financial liability or equity instrument of another party.

[**Note**: *CAD* Article 3(1)(e)]

1.2.8 R *CRD financial instrument*s include both primary *CRD financial instrument* or cash instruments, and derivative *CRD financial instrument*s the value of which is derived from the price of an underlying *CRD financial instrument*, a rate, an index or the price of another underlying item and include as a minimum the instruments specified in Part 1 of Schedule 2 to the *Regulated Activities Order*.

[**Note**: *CAD* Article 3(1) last paragraph]

1.2.9 G Generally, for the purpose of the definition of *CRD financial instrument*:

(1) a financial asset means cash, the right to receive cash or another financial asset, the contractual right to exchange financial assets on potentially favourable terms or an equity instrument; and

(2) a financial liability means the contractual obligation to deliver cash or another financial asset or to exchange financial liabilities under conditions that are potentially unfavourable.

Trading intent

1.2.10 R *Position*s held with trading intent for the purpose of the definition of the *trading book* are those held intentionally for short-term resale and/or with the intention of benefiting from actual or expected short-term price differences between buying and selling prices, or from other price or interest rate variations.

[**Note**: *CAD* Article 11(2) first sentence]

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1.2.11 R Trading intent must be evidenced on the basis of the strategies, policies and procedures set up by the *firm* to manage the *position* or portfolio in accordance with ■ BIPRU 1.2.12 R.

[**Note**: *CAD* 11(3)]

1.2.12 R *Positions*/portfolios held with trading intent must comply with the following requirements:

(1) there must be a clearly documented trading strategy for the *position*/ instrument or portfolios, approved by senior management, which must include the expected holding horizon;

(2) there must be clearly defined policies and procedures to monitor the *position* against the *firm's* trading strategy including the monitoring of turnover and stale *position* in the *firm's trading book*; and

(3) there must be clearly defined policies and procedures for the active management of the *position*, which must include the following:

(a) *position* entered into on a trading desk;

(b) *position* limits are set and monitored for appropriateness;

(c) dealers have the autonomy to enter into/manage the *position* within agreed limits and according to the approved strategy;

(d) *positions* are reported to senior management as an integral part of the *firm's* risk management process; and

(e) *positions* are actively monitored with reference to market information sources and an assessment made of the marketability or hedge-ability of the *position* or its component risks, including the assessment of, the quality and availability of market inputs to the valuation process, level of market turnover, sizes of *positions* traded in the market.

[**Note**: *CAD* Annex VII Part A]

Internal hedges

1.2.13 R Internal hedges may be included in the *trading book*, in which case ■ BIPRU 1.2.14 R to ■ BIPRU 1.2.16 R apply.

[**Note**: *CAD* Article 11(5)]

1.2.14 R (1) An internal hedge is a *position* that materially or completely offsets the component risk element of a *non-trading book position* or a set of *position*. *Positions* arising from internal hedges are eligible for *trading book* capital treatment, provided that they are held with trading intent and that the general criteria on trading intent and prudent valuation specified in ■ BIPRU 1.2.12 R and the *trading book systems and controls rules*. In particular:

(a) internal hedges must not be primarily intended to avoid or reduce capital requirements;

(b) internal hedges must be properly documented and subject to particular internal approval and audit procedures;

(c) the internal transaction must be dealt with at market conditions;

(d) the bulk of the market risk that is generated by the internal hedge must be dynamically managed in the *trading book* within the authorised limits; and

(e) internal transactions must be carefully monitored.

(2) Monitoring must be ensured by adequate procedures.

[**Note**: *CAD* Annex VII Part C point 1]

1.2.15 R The treatment referred to in ■ BIPRU 1.2.14 R applies without prejudice to the capital requirements applicable to the "*non-trading book* leg" of the internal hedge.

[**Note**: *CAD* Annex VII Part C point 2]

1.2.16 R By way of derogation from ■ BIPRU 1.2.14 R to ■ BIPRU 1.2.15 R, when a *firm* hedges a *non-trading book* credit risk exposure using a credit derivative booked in its *trading book* (using an internal hedge), the *non-trading book* exposure is not deemed to be hedged for the purposes of calculating capital requirements unless the *firm* purchases from an eligible third party protection provider a credit derivative meeting the requirements set out in ■ BIPRU 5.7.13 R (Additional requirements for credit derivatives) with regard to the *non-trading book* exposure. Without prejudice to the second sentence of ■ BIPRU 14.2.10 R, where such third party protection is purchased and is recognised as a hedge of a *non-trading book* exposure for the purposes of calculating capital requirements, neither the internal nor external credit derivative hedge mustbe included in the *trading book* for the purposes of calculating capital requirements.

[**Note**: *CAD* Annex VII Part C point 3]

Size thresholds

1.2.17 R (1) Subject to (3), a *firm* may calculate its capital requirements for its *trading book* business in accordance with the *standardised approach* to credit risk (or, if it has an *IRB permission*, the *IRB approach*) as it applies to the *non-trading book* where the size of the *trading book* business meets the following requirements:

(a) the *trading book* business of the *firm* does not normally exceed 5% of its total business;

(b) its total *trading book position* do not normally exceed €15 million; and

(c) the *trading book* business of the *firm* never exceeds 6% of its total business and its total *trading book positions* never exceed €20 million.

(2) Subject to (3), if (1) applies, the following are disapplied:

(a) the *rules* relating to the *interest rate PRR*, the *equity PRR*, the *CIU PRR* and the *PRR* calculated under ■ BIPRU 7.11 (Credit derivatives in the trading book);

(b) the *rules* relating to the *option PRR* (but only in relation to *positions* which under ■ BIPRU 7.6.5 R (Table: Appropriate calculation for an option or warrant) may be subject to one of the other *PRR charges* listed in (2)(a) or which would be subject

to such a *PRR charge* if ■ BIPRU 7.6.5 R did not require an *option PRR* to be calculated);

(c) ■ ■ BIPRU 7.10 (Use of a Value at Risk Model) so far as ■ BIPRU 7.10 relates to the risks covered by the requirements in (a) and (b); and

(d) ■ BIPRU 14 (Capital requirements for settlement and counterparty risk).

(3) If (1) applies, the following continue to apply:

(a) the *rules* relating to the *commodity PRR* and the *foreign currency PRR*;

(b) the *rules* relating to the *option PRR* (so far as not disapplied under (2)(b);

(c) ■ BIPRU 7.10 (so far as not disapplied under (2)(c));

(d) ■ BIPRU 14.2.3 R to ■ BIPRU 14.2.8 R (Credit derivatives); and

(e) ■ BIPRU 14.2.15 R to ■ BIPRU 14.2.16 R (Collateral for *repurchase transactions* and other products).

[**Note**: *CAD* Article 18(2)]

1.2.18 R In order to calculate the proportion that *trading book* business bears to total business for the purpose of ■ BIPRU 1.2.17 R (1)(a) to ■ BIPRU 1.2.17R (1)(c) the *firm* must refer to the size of the combined on- and off-balance-sheet business. For this purpose, debt instruments must be valued at their market prices or their principal values, equities at their market prices and derivatives according to the nominal or market values of the instruments underlying them. Long *positions* and short *positions* must be summed regardless of their signs.

[**Note**: *CAD* Article 18(3)]

1.2.19 R If a *firm* should happen for more than a short period to exceed either or both of the limits imposed in ■ BIPRU 1.2.17 R (1)(a) and ■ BIPRU 1.2.17R (1)(b) or either or both of the limits imposed in ■ BIPRU 1.2.17 R (1)(c):

(1) ■ BIPRU 1.2.17 R ceases to apply; and

(2) the *firm* must notify the *appropriate regulator*.

[**Note**: *CAD* Article 18(4)]

1.2.20 G As required by ■ BIPRU 8.7.21 R (Special rules for the consolidated market risk requirement), a *firm* should consider whether it meets the threshold conditions in ■ BIPRU 1.2.17 R on both an unconsolidated (or solo) basis and a consolidated basis. If a *firm's* trading activities on both an unconsolidated (or solo) basis and a consolidated basis are below the threshold size, it may be appropriate for the *firm* not to adopt the *trading book* treatment. However, even if the *firm* does not apply the *trading book* treatment it should still adopt a *trading book policy statement*. That statement may be restricted to identifying the activities the *firm* normally considers to be trading and that would constitute part of its *trading book*. The *firm* should use this policy statement to help it to decide whether or not adopting the *trading book* treatment is appropriate.

Systems and controls for the trading book

1.2.21 R A *firm* must implement policies and processes for the measurement and management of all material sources and effects of market risks.

[**Note**: *BCD* Annex V, Part 7 point 10]

1.2.22 R A *firm* must establish and maintain systems and controls to manage its *trading book*, in accordance with the *trading book systems and controls rules*, ■ BIPRU 1.2.6 R (Definition of the trading book: Repos) and the *overall financial adequacy rule* to ■ BIPRU 1.2.27 R (Trading book policy statements).

[**Note**: *CAD* Article 11(4)]

1.2.23 R A *firm* must establish and maintain systems and controls sufficient to provide prudent and reliable valuation estimates.

[**Note**: *CAD* Annex VII Part B point 1]

1.2.24 R Systems and controls must include at least the following elements:

(1) documented policies and procedures for the process of valuation (including clearly defined responsibilities of the various areas involved in the determination of the valuation, sources of market information and review of their appropriateness, frequency of independent valuation, timing of closing prices, procedures for adjusting valuations, month end and ad-hoc verification procedures); and

(2) reporting lines for the department accountable for the valuation process that are clear and independent of the front office.

[**Note**: *CAD* Annex VII Part B point 2]

1.2.25 R The reporting line in relation to the matters covered by ■ BIPRU 1.2.21 R to ■ BIPRU 1.2.24 R must ultimately be to an executive *director* on the *firm's governing body*.

[**Note**: *CAD* Annex VII Part B point 2 (last sentence)]

Trading book policy statements

1.2.26 R A *firm* must have clearly defined policies and procedures for determining which *positions* to include in the *trading book* for the purposes of calculating its capital requirements, consistent with the criteria set out in ■ BIPRU 1.2.3 R to ■ BIPRU 1.2.4 R, ■ BIPRU 1.2.10 R to ■ BIPRU 1.2.11 R, ■ BIPRU 1.1.13 R and ■ BIPRU 1.2.22 R and taking into account the *firm's* risk management capabilities and practices. Compliance with these policies and procedures must be fully documented and subject to periodic internal audit.

[**Note**: *CAD* Annex VII Part D point 1]

1.2.27 R A *firm* must have clearly defined policies and procedures for overall management of the *trading book*. At a minimum these policies and procedures must address:

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(1) the activities the *firm* considers to be trading and as constituting part of the *trading book* for capital requirement purposes;

(2) the extent to which a *position* can be marked-to-market daily by reference to an active, liquid two-way market;

(3) for *positions* that are marked-to-model, the extent to which the *firm* can:

(a) identify all material risks of the *position*;

(b) hedge all material risks of the *position* with instruments for which an active, liquid two-way market exists; and

(c) derive reliable estimates for the key assumptions and parameters used in the model;

(4) the extent to which the *firm* can, and is required to, generate valuations for the *position* that can be validated externally in a consistent manner;

(5) the extent to which legal restrictions or other operational requirements would impede the *firm's* ability to effect a liquidation or hedge of the *position* in the short term;

(6) the extent to which the *firm* can, and is required to, actively risk manage the *position* within its trading operation; and

(7) the extent to which the *firm* may transfer risk or *positions* between the *non-trading book* and *trading book* and the criteria for such transfers.

[**Note**: *CAD* Annex VII Part D point 2]

1.2.28 G The policies and procedures referred to in ■ BIPRU 1.2.27 R (1) should cover:

(1) the *CRD financial instrument* and *commodities* that the *firm* proposes to trade in, including the currencies, maturities, issuers and quality of issues; and

(2) any instruments to be excluded from its *trading book*.

1.2.29 R (1) The policies and procedures referred to in the *overall financial adequacy rule* and ■ BIPRU 1.2.27 R must be recorded in a single written document. A *firm* may record those policies and procedures in more than one written document if the *firm* has a single written document that identifies:

(a) all those other documents; and

(b) the parts of those documents that record those policies and procedures.

(2) A *trading book policy statement* means the single document referred to in this *rule*.

1.2.30 R (1) A *firm* must notify the *appropriate regulator* as soon as is reasonably practicable when it adopts a *trading book policy statement*.

(2) A *firm* must notify the *appropriate regulator* as soon as is reasonably practicable if the *trading book policy statement* is subject to significant changes.

1.2.31 G A significant change for the purpose of the *overall Pillar 2 rule* includes new types of customers or business requiring different funding or provisioning.

1.2.32 G There is likely to be an overlap between what the *trading book policy statement* should contain and other documents such as dealing or treasury manuals. A cross reference to the latter in the *trading book policy statement* is adequate and material in other documents need not be set out again in the *trading book policy statement*. However where this is the case the matters required to be included in the *trading book policy statement* should be readily identifiable.

1.2.33 G The *trading book policy statement* may be prepared on either a consolidated or a solo (or solo-consolidated) basis. It should be prepared on a consolidated basis when a group either manages its trading risk centrally or employs the same risk management techniques in each group member. A *trading book policy statement* prepared on a consolidated basis should set out how it applies to each *firm* in the group and should be approved by each such *firm's governing body*.

Treatments common to the trading book and the non-trading book

1.2.34 G Capital requirements for *foreign currency* risk and *commodity position* risk are the same whether the risk arises in the *trading book* or the *non-trading book*. The calculation of capital requirements for *foreign currency* risk is set out in ■ BIPRU 7.5. The calculation of capital requirements for *commodity position* risk is set out in ■ BIPRU 7.4.

Trading book treatments

1.2.35 G All *positions* that are in a *firm's trading book* require capital to cover *position* risk and may require capital to cover counterparty credit risk. Counterparty credit risk in the *trading book* is dealt with by ■ BIPRU 14.

Non-trading book treatments

1.2.36 G All *positions* that are not in a *firm's trading book* are included in its *non-trading book* and subject capital requirements for the *non-trading book* unless they are deducted from *capital resources* under GENPRU 2.2 (Capital resources).

1.3 Applications for advanced approaches and waivers

Application

1.3.1 R This section of the *Handbook* applies to every *BIPRU firm* that wishes to apply for a permission to use any of the approaches set out in ■ BIPRU 1.3.2 G.

Purpose

1.3.2 G

(1) A *firm* may apply for a *waiver* in respect of:

(a) the *IRB approach*;

(b) [deleted]

(c) the *CCR internal model method*; and

(d) the *VaR model approach*.

(2) A *firm* should apply for a *waiver* if it wants to:

(a) apply the *CAD 1 model approach*; or

(b) apply the *master netting agreement internal models approach*; or

(c) disapply consolidated supervision under ■ BIPRU 8 for its *UK consolidation group* or *non-UK sub-group*; or

(d) apply the treatment in ■ BIPRU 2.1 (Solo-consolidation waiver); or

(da) apply the treatment for a *core UK group* in ■ BIPRU 3.2.25 R (Zero risk-weighting for intra-group exposures).

(e) [deleted]

(f) [deleted]

Article 129

1.3.3 G [deleted]

1.3.4 G [deleted]

1.3.5 G [deleted]

1.3.6 G [deleted]

Article 129 permissions and waivers - specific conditions

1.3.7 D [deleted]

1.3.8 D [deleted]

1.3.9 D [deleted]

Waiver - general

1.3.10 G As explained in ■ SUP 8, under section 138A of the *Act*, the *appropriate regulator* may not grant a *waiver* to a *firm* unless it is satisfied that:

(1) compliance by the *firm* with the *rules*, or with the *rules* as modified, would be unduly burdensome or would not achieve the purpose for which the *rules* were made; and

(2) the *waiver* would not adversely affect the advancement of any of the *appropriate regulator's* objectives.

1.3.11 G The conditions relating to the use of an approach listed in ■ BIPRU 1.3.2 G referred to in the relevant chapter of *BIPRU* are minimum standards. Satisfaction of those conditions does not automatically mean the *appropriate regulator* will grant a *waiver* referred to in those paragraphs. The *appropriate regulator* will in addition also apply the tests in section 138A of the *Act*.

1.3.12 G In the *appropriate regulator's* view, if the minimum standards referred to in ■ BIPRU 1.3.11 G are satisfied, the conditions referred to in ■ BIPRU 1.3.10 G (1) will generally be met.

Forms and method of application

1.3.13 D Subject to ■ BIPRU 1.3.14 D to ■ BIPRU 1.3.20 D, if a *firm* wishes to apply for a *waiver* to apply an approach set out in ■ BIPRU 1.3.2 G, it must comply with ■ SUP 8.3.3 D.

1.3.14 D [deleted]

1.3.15 D If a *firm* wishes to apply for a *waiver* to use the *IRB approach*, it must complete and submit the form in ■ BIPRU 1 Annex 2D D.

1.3.16 D If a *firm* wishes to apply for a *waiver* to use the *CCR internal model method*, it must complete and submit the form in ■ BIPRU 1 Annex 3D D.

1.3.17 D [deleted]

1.3.18 D [deleted]

1.3.19 G In respect of the application for *waivers* to apply the approaches set out in ■ BIPRU 1.3.2 G (1), the *appropriate regulator* will aim to give decisions on applications as soon as practicable. However, the *appropriate regulator* expects that it will take a significant period to determine and give a decision due to the complexity of the issues raised by the applications. Details of timelines for applications for waivers to use advanced approaches are set out on the *appropriate regulator* website.

1.3.20 D Where a *firm* applies for a *solo consolidation waiver*, it must demonstrate how each of the conditions set out in ■ BIPRU 2.1.20 R to ■ BIPRU 2.1.24 R are met and address the criteria set out in the *guidance* in ■ BIPRU 2.1.25 G as part of its application in accordance with ■ BIPRU 1.3.13 D.

1.3.21 G Before sending in an application for a *waiver*, a *firm* may find it helpful to discuss the application with its usual supervisory

contact at the *appropriate regulator*. However, the *firm* should still ensure that all relevant information is included in the application.

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1.4 Actions for damages

1.4.1 R A contravention of the *rules* in *BIPRU* does not give rise to a right of action by a *private person* under section 138D of the *Act* (and each of those *rules* is specified under section 138D(3) of the *Act* as a provision giving rise to no such right of action).

Application form to apply the advanced measurement approach

[deleted]

Application form to apply the IRB approach

This annex consists only of one or more forms.

Forms

Application form to apply the CCR internal model method approach

This annex consists only of one or more forms.

Forms

Chapter 2

Capital

2

2.1 Solo consolidation

Application

2.1.1 R This section applies to a *BIPRU firm* that has a *solo consolidation waiver*.

Purpose

2.1.2 G Pursuant to the third paragraph of article 95(2) of the *UK CRR*, this section applies requirements that correspond to Articles 70 and 118 of the *Banking Consolidation Directive*so far as they apply under Articles 2 and 28 of the *Capital Adequacy Directive* to *CAD investment firms* that are subject to the requirements imposed by the *UK* legislation that implemented *MiFID* (or which would have been subject to those requirements if its head office were in the *UK*), but excluding a *bank*, *building society*, a *credit institution*, a *local* and an exempt CAD firm..

2.1.3 G The *rules* in *GENPRU* and *BIPRU* do not allow a *firm* that is a *parent undertaking* to incorporate the capital and requirements of a *subsidiary undertaking* in the calculation of that *firm's capital resources* and *capital resources requirement*. A *firm* that wishes to incorporate a *subsidiary undertaking* for this purpose should therefore apply for a *solo consolidation waiver*.

Applying for a solo consolidation waiver

2.1.4 G ■ BIPRU 1.3 (Applications for advanced approaches) explains how to apply for a *solo consolidation waiver*.

General

2.1.5 G The *appropriate regulator* will not grant a *firm* a *solo consolidation waiver* with respect to a *subsidiary undertaking* unless the *firm* and the *subsidiary undertaking* meet the standards in ■ BIPRU 2.1.19 R to ■ BIPRU 2.1.24 R.

2.1.6 G A *solo consolidation waiver* will modify the relevant parts of *GENPRU*, *BIPRU* and *SYSC* referred to in ■ BIPRU 2.1.7 R to ■ BIPRU 2.1.8 R to apply ■ BIPRU 2.1 to a *firm*.

The basic rules for solo consolidation

2.1.7 R A *firm* that has a *solo consolidation waiver* must incorporate in the calculation of its requirements under the *main BIPRU firm Pillar 1 rules* each

subsidiary undertaking to which the *solo consolidation waiver* applies. This does not apply to the *base capital resources requirement*.

2.1.8 R

(1) A *firm* that has a *solo consolidation waiver* must meet the obligations in ■ SYSC 12.1.13 R (Application of certain systems and controls *rules* on a consolidated basis) on a consolidated basis with respect to the *firm* and each *subsidiary undertaking* to which the *firm's solo consolidation waiver* applies.

(2) If (1) applies, ■ SYSC 12.1.13 R applies to the group made up of the *firm* and its *subsidiary undertakings* referred to in (1) in the same way as it applies to a *UK consolidation group* or *non-UK sub-group*.

(3) If (1) applies, the provisions of *SYSC* and *BIPRU* listed in ■ SYSC 12.1.13 R do not apply to the *firm* on a solo basis.

Solo consolidation and capital and concentration risk requirements

2.1.9 R ■ BIPRU 2.1.10 R to ■ BIPRU 2.1.18 R apply for the purposes of ■ BIPRU 2.1.7 R.

2.1.10 R A *firm* must treat itself and each *subsidiary undertaking* referred to in ■ BIPRU 2.1.7 R as a single *undertaking* and must apply, on that basis, ■ BIPRU 8 (Group risk - consolidation) to the group made up of the *firm* and such *subsidiary undertakings* in the same way as ■ BIPRU 8 applies to a *UK consolidation group* or *non-UK sub-group*.

2.1.11 R Subject to ■ BIPRU 2.1.13 R, a *firm* must calculate its *capital resources* in accordance with ■ BIPRU 8.6 (Consolidated capital resources).

2.1.12 R A *firm* must calculate its *capital resources requirement* in accordance with ■ BIPRU 8.7.13 R (3) (Treating group members as a single undertaking for consolidation purposes).

2.1.13 R Where *GENPRU* applies a different method of calculating *capital resources* or *capital resources requirements* depending on the category into which the *firm* in question falls, the method that applies is the one that would apply to the *firm* on a solo basis.

2.1.14 G For example, the effect of ■ BIPRU 2.1.13 R is that if a *firm* that is applying ■ BIPRU 2.1 is a *limited licence firm* it should continue to apply the *capital resources* and *capital resources requirement* applicable to a *limited licence firm*.

2.1.15 R A *firm* must continue to calculate its *base capital resources requirement* and the requirement in ■ GENPRU 2.1.42 R (Calculation of capital resources requirement on authorisation) on a solo basis.

2.1.16 R [deleted]

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2.1.17 G [deleted]

2.1.18 R A *firm* must include in full any *subsidiary undertaking* in respect of which the *firm* applies ■ BIPRU 2.1 in the calculations under ■ BIPRU 2.1.7 R.

Minimum standards

2.1.19 R A *firm* must not apply ■ BIPRU 2.1 to a *subsidiary undertaking* to which the *firm's solo consolidation waiver* applies ■ BIPRU 2.1 unless in addition it meets the conditions in ■ BIPRU 2.1.20 R to ■ BIPRU 2.1.24 R.

2.1.20 R The risk evaluation, measurement and control procedures of the *firm* must cover the *subsidiary undertaking* referred to in ■ BIPRU 2.1.19 R.

2.1.21 R The *firm* must hold more than 75% of the voting rights attaching to the *shares* in the capital of the *subsidiary undertaking* referred to in ■ BIPRU 2.1.19 R and must have the right to appoint or remove a majority of the members of the *governing body* of the *subsidiary undertaking*.

2.1.22 R The material *exposures* or material liabilities of the *subsidiary undertaking* referred to in ■ BIPRU 2.1.19 R must be to the *firm*.

2.1.23 R Where the *firm* is a *parent institution in the UK*, it must have measures in place that ensure the satisfactory allocation of risks within the group consisting of the *firm* and each *subsidiary undertaking* to which ■ BIPRU 2.1 is applied.

2.1.24 R A *firm* must be able to demonstrate fully to the *appropriate regulator* the circumstances and arrangements, including legal arrangements, by virtue of which there are no material practical or legal impediments, and none are foreseen, to the prompt transfer of the *capital resources* of the *subsidiary undertaking* referred to in ■ BIPRU 2.1.19 R or repayment of liabilities when due by the *subsidiary undertaking* to the *firm*.

2.1.25 G The following are the criteria that the *appropriate regulator* will take into account when considering whether the condition in ■ BIPRU 2.1.24 R is going to be met:

(1) the speed with which funds can be transferred or liabilities repaid to the *firm* and the simplicity of the method for the transfer or repayment;

(2) whether there are any interests other than those of the *firm* in the *subsidiary undertaking* and what impact those other interests may have on the *firm's* control over the *subsidiary undertaking* and on the ability of the *firm* to require a transfer of funds or repayment of liabilities;

(3) whether the prompt transfer of funds or repayment of liabilities to the *firm* might harm the reputation of the *firm* or its *subsidiary undertakings*;

(4) whether there are any tax disadvantages for the *firm* or the *subsidiary undertaking* as a result of the transfer of funds or repayment of liabilities;

(5) whether there are any exchange controls that may have an impact on the transfer of funds or repayment of liabilities;

(6) whether there are assets in the *subsidiary undertaking* available either to be transferred or liquidated for the purposes of the transfer of funds or repayment of liabilities;

(7) whether any regulatory requirements impact on the ability of the *subsidiary undertaking* to transfer funds or repay liabilities promptly;

(8) whether the purpose of the *subsidiary undertaking* prejudices the prompt transfer of funds or repayment of liabilities;

(9) whether the legal structure of the *subsidiary undertaking* prejudices the prompt transfer of funds or repayment of liabilities;

(10) whether the contractual relationships of the *subsidiary undertaking* with the *firm* and other third parties prejudices the prompt transfer of funds or repayment of liabilities;

(11) whether past and proposed flows of funds between the *subsidiary undertaking* and the *firm* demonstrate the ability to make prompt transfer of funds or repayment of liabilities; and

(12) whether the degree of solo consolidation by the *firm* undermines the *appropriate regulator's* ability to assess the soundness of the *firm* as a legal entity (taking into account any other *subsidiary undertakings* to which ■ BIPRU 2.1 is being applied).

2.1.26 G The effect of ■ BIPRU 2.1.19 R is that even though a *firm's solo consolidation waiver* applies ■ BIPRU 2.1 with respect to a *subsidiary undertaking*, the *firm* should not apply ■ BIPRU 2.1 with respect to that *subsidiary undertaking* unless in addition it meets the conditions in ■ BIPRU 2.1.20 R to ■ BIPRU 2.1.24 R.

2.1.27 G A *firm* should not apply ■ BIPRU 2.1 to a *subsidiary undertaking* to which the *firm's solo consolidation waiver* applies if it ceases to be a *subsidiary undertaking* of the *firm* even if the *solo consolidation waiver* is not varied by removing the *subsidiary undertaking*.

2.1.28 G If a *subsidiary undertaking* referred to in ■ BIPRU 2.1.27 G later becomes a *subsidiary undertaking* again the *firm* should not apply ■ BIPRU 2.1 to it unless the *solo consolidation waiver* is varied to re-apply it with respect to the *subsidiary undertaking*.

2.2 Internal capital adequacy standards

Application

2.2.1 G ■ BIPRU 2.2 applies to a *BIPRU firm*.

Purpose

2.2.2 G

(1) ■ BIPRU 2.2 sets out *guidance* on ■ GENPRU 1.2 (Adequacy of financial resources) so far as it applies to a *BIPRU firm*. In particular it sets out *guidance* on how a *firm* should carry out its *ICAAP*, as well as some factors the *appropriate regulator* will take into consideration when undertaking a *SREP*. The terms *ICAAP* and *SREP* are explained in ■ BIPRU 2.2.4 G. ■ BIPRU 2.2.41 R-■ BIPRU 2.2.43 R are *rules* that apply to a *firm* with an *IRB permission*.

(2) ■ BIPRU 2.2 is for the most part written on the basis that ■ GENPRU 1.2 (Adequacy of financial resources) applies to a *firm* on a solo basis. However it is still relevant when ■ GENPRU 1.2 applies on a consolidated basis. When ■ GENPRU 1.2 applies on a consolidated basis, ■ BIPRU 2.2 should be read with appropriate adjustments.

Meaning of capital

2.2.3 G For the purpose of ■ BIPRU 2.2, "capital" refers to a *firm's* financial resources, *capital resources* and internal capital, all as referred to in the *overall Pillar 2 rule*.

The ICAAP and the SREP: Introduction

2.2.4 G The adequacy of a *firm's* capital needs to be assessed both by a *firm* and the *appropriate regulator*. This process involves:

(1) an *internal capital adequacy assessment process* (*ICAAP*), which a *firm* is obliged to carry out in accordance with the *ICAAP rules*; and

(2) a *supervisory review and evaluation process* (*SREP*), which is conducted by the *appropriate regulator*.

The ICAAP and the SREP: The ICAAP

2.2.5 G The obligation to conduct an *ICAAP*, includes requirements on a *firm* to:

(1) carry out regularly assessments of the amounts, types and distribution of financial resources, *capital resources* and internal capital that it

considers adequate to cover the nature and level of the risks to which it is or might be exposed (■ GENPRU 1.2.30 R to ■ GENPRU 1.2.41 G (the *overall Pillar 2 rule* and related *rules*);

(2) identify the major sources of risk to its ability to meet its liabilities as they fall due (the *overall Pillar 2 rule*);

(3) conduct stress and scenario tests (the *general stress and scenario testing rule*), taking into account, in the case of a *firm* with an *IRB permission*, the stress test required by ■ BIPRU 4.3.39 R to ■ BIPRU 4.3.40 R (Stress tests used in assessment of capital adequacy for a *firm* with an *IRB permission*);

(4) ensure that the processes, strategies and systems required by the *overall Pillar 2 rule* and used in its *ICAAP*, are both comprehensive and proportionate to the nature, scale and complexity of that *firm's* activities (■ GENPRU 1.2.35 R); and

(5) document its *ICAAP* (■ GENPRU 1.2.60 R).

2.2.6 G Where a *firm* is a member of a group, it should base its *ICAAP* on the consolidated financial position of the group. The group assessment should include information on diversification benefits and transferability of resources between members of the group and an apportionment of the capital required by the group as a whole to the *firm* (■ GENPRU 1.2.44 G to ■ GENPRU 1.2.56 G (Application of ■ GENPRU 1.2 on a solo and consolidated basis: Processes and tests)). A *firm* may, instead of preparing the *ICAAP* itself, adopt as its *ICAAP* an assessment prepared by other group members.

2.2.7 G A *firm* should ensure that its *ICAAP* is:

(1) the responsibility of the *firm's governing body*;

(2) reported to the *firm's governing body*; and

(3) forms an integral part of the *firm's* management process and decision-making culture.

The ICAAP and the SREP: The SREP

2.2.8 G The *appropriate regulator* will review a *firm's ICAAP*, including the results of the *firm's* stress tests carried out under *GENPRU* and *BIPRU*, as part of its *SREP*. Provided that the *appropriate regulator* is satisfied with the appropriateness of a *firm's* capital assessment, the *appropriate regulator* will take into account that *firm's ICAAP* and stress tests in its *SREP*. More material on stress tests for a *firm* with an *IRB permission* can be found in ■ BIPRU 2.2.41 R to ■ BIPRU 2.2.45 G.

2.2.9 G The *SREP* is a process under which the *appropriate regulator*:

(1) reviews the arrangements, strategies, processes and mechanisms implemented by a *firm* to comply with *GENPRU*, *BIPRU* and *SYSC* and with requirements imposed by or under the *regulatory system* and evaluates the risks to which the *firm* is or might be exposed;

(2) determines whether the arrangements, strategies, processes and mechanisms implemented by the *firm* and the capital held by the *firm* ensures a sound management and coverage of the risks in (1); and

(3) (if necessary) requires the *firm* to take the necessary actions or steps at an early stage to address any failure to meet the requirements referred to in (1).

2.2.10 G As part of its *SREP*, the *appropriate regulator* may ask a *firm* to provide it with the results of that *firm's ICAAP*, together with an explanation of the process used. Where appropriate, the *appropriate regulator* will ask for additional information on the *ICAAP*.

2.2.11 G As part of its *SREP*, the *appropriate regulator* will consider whether the amount and quality of capital which a *firm* should hold to meet its *CRR* in ■ GENPRU 2.1 (Calculation of capital resources requirements) is sufficient for that *firm* to comply with the *overall financial adequacy rule*.

2.2.12 G After completing a review as part of the *SREP*, the *appropriate regulator* will normally give that *firm* individual *guidance* (*individual capital guidance*), advising it of the amount and quality of capital which it should hold to meet the *overall financial adequacy rule*.

2.2.12A G As part of its *SREP*, the *appropriate regulator* will also consider whether a *firm* should hold a *capital planning buffer* and, in that case, the amount and quality of such *capital planning buffer*. In making these assessments, the *appropriate regulator* will have regard to the nature, scale and complexity of a *firm's* business and of the major sources of risks relevant to such business as referred to in the *general stress and scenario testing rule*. Accordingly, a firm's *capital planning buffer* should be of sufficient amount and adequate quality to allow the *firm* to continue to meet the *overall financial adequacy rule* in the face of adverse circumstances, after allowing for realistic management actions.

2.2.12B G After completing a review as part of the *SREP*, the *appropriate regulator* may notify the *firm* of the amount and quality of capital which it should hold as a *capital planning buffer* over and above the level of capital recommended as its *ICG*. The *appropriate regulator* may set a *firm's capital planning buffer* either as an amount and quality of capital which it should hold now (that is, at the time of the *appropriate regulator's* notification following the *firm's SREP*) or, in exceptional cases, as a forward looking target that the *firm* should build up over time.

2.2.12C G Where the amount or quality of capital which the *appropriate regulator* considers a *firm* should hold to meet the *overall financial adequacy rule* or as a *capital planning buffer* is not the same as that which results from a *firm's ICAAP*, the *appropriate regulator* usually expects to discuss any such difference with the *firm*. Where necessary, the *appropriate regulator* may consider the use of its powers under section 166 of the *Act* (Reports by skilled persons) to assist in such circumstances.

2.2.13 G If a *firm* considers that the *individual capital guidance* given to it is inappropriate to its circumstances it should, consistent with *Principle* 11 (Relations with regulators), inform the *appropriate regulator* that it disagrees with that *guidance*. The *appropriate regulator* may reissue *individual capital guidance* if, after discussion with the *firm*, the *appropriate regulator* concludes that the amount or quality of capital that the *firm* should hold to meet the *overall financial adequacy rule* is different from the amount or quality initially suggested by the *appropriate regulator*.

2.2.13A G If a *firm* disagrees with the *appropriate regulator's* assessment as to the amount or quality of *capital planning buffer* that it should hold, it should, consistent with *Principle* 11 (Relations with regulators), notify the *appropriate regulator* of its disagreement. The *appropriate regulator* may reconsider its initial assessment if, after discussion with the *firm*, the *appropriate regulator* concludes that the amount or quality of capital that the *firm* should hold as *capital planning buffer* is different from the amount or quality initially suggested.

2.2.14 G The *appropriate regulator* will not give *individual capital guidance* to the effect that the amount of capital advised in that *guidance* is lower than the amount of capital which a *firm* should hold to meet its *CRR*.

2.2.15 G If, after discussion, the *appropriate regulator* and a *firm* still do not agree on an adequate level of capital, the *appropriate regulator* may consider using its powers under section 55J of the *Act* to vary on its own initiative a *firm's Part 4A permission* so as to require it to hold capital in accordance with the *appropriate regulator's* view of the capital necessary to comply with the *overall financial adequacy rule*. In deciding whether it should use its powers under section 55J, the *appropriate regulator* will take into account the amount and quality of the *capital planning buffer* which the *firm* should hold as referred to in ■ BIPRU 2.2.12A G and ■ BIPRU 2.2.12B G. ■ SUP 7 provides further information about the *appropriate regulator's* powers under section 45.

The drafting of individual capital guidance and capital planning buffer

2.2.16 G If the *appropriate regulator* gives *individual capital guidance* to a *firm*, the *appropriate regulator* will state what amount and quality of capital the *appropriate regulator* considers the *firm* needs to hold in order to comply with the *overall financial adequacy rule*. It will generally do so by saying that the *firm* should hold *capital resources* of an amount which is at least equal to a specified percentage of that *firm's capital resources requirement* plus one or more static add-ons in relation to specific risks in accordance with the *overall Pillar 2 rule*.

2.2.17 G

(1) *Individual capital guidance* may refer to two types of *capital resources*.

(2) The first type is referred to as general capital. It refers to total *tier one capital resources* and *tier two capital resources* after deductions.

(3) The second type is referred to as total capital. It refers to total *tier one capital resources*, *tier two capital resources* and *tier three capital resources* after deductions.

2.2.18 G

(1) In both of the cases in ■ BIPRU 2.2.17 G *capital resources* should be calculated in the same way as they are in GENPRU 2.2 (Capital resources). This includes the *rules* limiting the amount of capital that can be included in the various tiers of capital when *capital resources* are being calculated.

(2) ■ GENPRU 2.2.42 R does not allow *innovative tier one capital* to count as *tier one capital resources* for certain purposes. This restriction does not apply for the purposes in ■ BIPRU 2.2.17 G.

2.2.19 G

(1) *Individual capital guidance* may also be given with respect to group capital resources. This paragraph explains how such *guidance* should be interpreted unless the *individual capital guidance* specifies another interpretation.

(2) If ■ BIPRU 8.2.1 R (General consolidation *rule* for a *UK consolidation group*) applies to the *firm* the *guidance* relates to its *UK consolidation group*. If ■ BIPRU 8.3.1 R (General consolidation *rule* for a *non-UK sub-group*) applies to the *firm* the *guidance* relates to its *non-UK sub-group*. If both apply to the *firm* the *guidance* relates to its *UK consolidation group* and to its *non-UK sub-group*.

(3) The *guidance* will be on the *overall financial adequacy rule* as it applies on a consolidated basis under ■ GENPRU 1.2.59 R (Application of ■ GENPRU 1.2 on a solo and consolidated basis: Adequacy of resources) and insofar as it refers to capital resources.

(4) ■ BIPRU 2.2.16 G to ■ BIPRU 2.2.18 G apply for the purpose of this paragraph as they apply to *guidance* given on a solo basis. References to *capital resources* should be read as being to *consolidated capital resources*.

2.2.19A G

Where the *appropriate regulator* notifies a *firm* that it should hold a *capital planning buffer*, the notification will state what amount and quality of capital the *appropriate regulator* considers that is adequate for the *firm* to hold as such. This will normally be notified to the *firm* together with its *individual capital guidance* and expressed as a separate amount of *capital resources* that the *firm* should hold in excess of the amount of *capital resources* indicated as its *individual capital guidance*.

2.2.19B G

For the purposes of ■ BIPRU 2.2.19A G, ■ BIPRU 2.2.17 G to ■ BIPRU 2.2.19 G apply as they apply to *individual capital guidance*. References in those provisions to *individual capital guidance* or *guidance* should be read as if they were references to *capital planning buffer*. In relation to ■ BIPRU 2.2.19G (3) and ■ GENPRU 1.2.59 R, where the *general stress and scenario testing rule*, as part of the *ICAAP rules*, applies to a *firm* on a consolidated basis, the *appropriate regulator* may notify the *firm* that it should hold a group *capital planning buffer*. In these cases, the *firm* should ensure that the group holds a *capital planning buffer* of sufficient amount and adequate quality to allow it to

continue to meet the *overall financial adequacy rule* in the face of adverse circumstances, after allowing for realistic management actions.

Failure to meet individual capital guidance and monitoring and reporting on the capital planning buffer

2.2.20 G A *firm's* continuing to hold capital in accordance with its *individual capital guidance* and its ability to carry on doing so is a fundamental part of the *appropriate regulator's* supervision of that *firm*. Therefore if a *firm's capital resources* have fallen, or are expected to fall, below the level advised in *individual capital guidance*, then, consistent with *Principle* 11 (Relations with regulators), a *firm* should inform the *appropriate regulator* of this fact as soon as practicable, explaining why this has happened or is expected to happen and:

(1) what action the *firm* intends to take to increase its capital resources or to reduce its risks and hence its capital requirements; or

(2) what modification the *firm* considers should be made to the *individual capital guidance* which it has been given.

2.2.21 G In the circumstance set out in ■ BIPRU 2.2.20 G, the *appropriate regulator* may ask a *firm* for alternative or more detailed proposals and plans or further assessments and analyses of capital adequacy and risks faced by the *firm*. The *appropriate regulator* will seek to agree with the *firm* appropriate timescales and scope for any such additional work, in light of the circumstances which have arisen.

2.2.22 G If a *firm* has not accepted *individual capital guidance* given by the *appropriate regulator* it should, nevertheless, inform the *appropriate regulator* as soon as practicable if its capital resources have fallen, or are expected to fall, below the level suggested by that *individual capital guidance*.

2.2.23 G Monitoring the use of a *firm's capital planning buffer* is also a fundamental part of the *appropriate regulator* supervision of that *firm*. A *firm* should only use its *capital planning buffer* to absorb losses or meet increased capital requirements if certain adverse circumstances materialise. These should be circumstances beyond the *firm's* normal and direct control, whether relating to a deteriorating external environment or periods of stress such as macroeconomic downturns or financial/market shocks, or firm-specific circumstances.

2.2.23A G Consistent with *Principle* 11 (Relations with regulators), a *firm* should notify the *appropriate regulator* as early as possible in advance where it has identified that it would need to use its *capital planning buffer*. The *firm's* notification should at least state:

(1) what adverse circumstances are likely to force the *firm* to draw down its *capital planning buffer*;

(2) how the *capital planning buffer* will be used up in line with the *firm's* capital planning projections; and

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(3) what plan is in place for the eventual restoration of the *capital planning buffer*.

2.2.23B G Following discussions with the *firm* on the items listed in ■ BIPRU 2.2.23AG (1) to ■ BIPRU 2.2.23AG (3), the *appropriate regulator* may put in place additional reporting arrangements to monitor the *firm's* use of its *capital planning buffer* in accordance with the plan referred to in ■ BIPRU 2.2.23AG (3). The *appropriate regulator* may also identify specific trigger points as the *capital planning buffer* is being used up by the *firm*, which could lead to additional supervisory actions.

2.2.23C G Where a *firm's capital planning buffer* is being drawn down due to circumstances other than those referred to in ■ BIPRU 2.2.23 G, such as poor planning or mismanagement, the *appropriate regulator* may ask the *firm* for more detailed plans for it to restore its *capital planning buffer*. In the light of the relevant circumstances, the *appropriate regulator* may consider taking other remedial actions, which may include using its powers under section 55L (in the case of the *FCA*) or section 55M (in the case of the *PRA*) of the *Act* to impose on its own initiative such requirements on a *firm* as it considers appropriate.

2.2.23D G A *firm* should inform the *appropriate regulator* where its *capital planning buffer* is likely to start being drawn down even if it has not accepted the *appropriate regulator's* assessment as to the amount or quality of its *capital planning buffer*.

2.2.23E G Where a *firm* has started to use its *capital planning buffer* in circumstances where it was not possible to notify in advance, it should notify the *appropriate regulator* and provide the information referred to in ■ BIPRU 2.2.23A G as soon as practicable afterwards.

2.2.23F G ■ BIPRU 2.2.20 G to ■ BIPRU 2.2.23E G also apply to *individual capital guidance* and to *capital planning buffer* on a consolidated basis as referred to in ■ BIPRU 2.2.19 G.

Proportionality of an ICAAP

2.2.24 G ■ BIPRU 2.2.25 G to ■ BIPRU 2.2.27 G set out what the *appropriate regulator* considers to be a proportional approach to preparing an *ICAAP* as referred to in ■ GENPRU 1.2.35 R (The processes, strategies and systems required by the *overall Pillar 2 rule* should be comprehensive and proportionate), according to the relative degree of complexity of a *firm's* activities. If a *firm* adopts the appropriate approach, it may enable the *appropriate regulator* more easily to review a *firm's ICAAP* when the *appropriate regulator* undertakes its *SREP*. The *appropriate regulator* is also likely to place more reliance on an *ICAAP* which takes the appropriate form described in ■ BIPRU 2.2.25 G to ■ BIPRU 2.2.27 G than would otherwise be the case although there may also be circumstances in which the *appropriate regulator* will be able to rely on an *ICAAP* that is not drawn up in that form.

2.2.25 G

(1) This paragraph applies to a small *firm* whose activities are simple and primarily not credit-related.

(2) In carrying out its *ICAAP* it could:

(a) identify and consider that *firm's* largest losses over the last 3 to 5 years and whether those losses are likely to recur;

(b) prepare a short list of the most significant risks to which that *firm* is exposed;

(c) consider how that *firm* would act, and the amount of capital that would be absorbed, in the event that each of the risks identified were to materialise;

(d) consider how that *firm's CRR* might alter under the scenarios in (c) and how its *CRR* might alter in line with its business plans for the next 3 to 5 years;

(e) consider whether any of the risks in the *overall Pillar 2 rule* is applicable to the *firm* (it is unlikely that any of those risks not already identified in (a) or (b) will apply to a *firm* whose activities are simple);

(f) document the ranges of capital required in the scenarios identified and form an overall view on the amount and quality of capital which that *firm* should hold, ensuring that its senior management is involved in arriving at that view; and

(g) (in order to determine the amount of capital that would be absorbed in the circumstances detailed in (c)) carry out simple sensitivity tests where the *firm* analyses the impact of a shift in the key risk parameters identified in (b) on the earnings of the *firm*.

(3) A *firm* is also expected to form a view on the consolidated amount of capital it should hold as well as the capital required to be held in respect of each of the individual risks identified under the *overall Pillar 2 rule*. For that purpose, it may conservatively sum the results of the individual tests performed in (2)(c). If the *firm* chooses however to reduce that sum on the understanding that not all risks will materialise at the same time, then the *firm* should perform scenario tests that demonstrate that a reduction in capital is legitimate.

(4) A *firm* should conduct stress tests and scenario analyses in accordance with ■ GENPRU 1.2.42 R to assess how that *firm's* capital and *CRR* would alter and what that *firm's* reaction might be to a range of adverse scenarios, including operational and market events. Where relevant, a *firm* should also consider the impact of a severe economic or industry downturn on its future earnings, *capital resources* and *capital resources requirement*, taking into account its business plans. The downturn scenario should be based on forward looking hypothetical events calibrated against the most adverse movements in individual risk drivers experienced over a long historical period.

2.2.26 G

In relation to a *firm* whose activities are moderately complex, in carrying out its *ICAAP*, ■ BIPRU 2.2.25 G (3) to ■ (4) apply. In addition, it could:

(1) having consulted the management in each major business line, prepare a comprehensive list of the major risks to which the business is exposed;

(2) estimate, with the aid of historical data, where available, the range and distribution of possible losses which might arise from each of those risks and consider using shock stress tests to provide risk estimates;

(3) consider the extent to which that *firm's CRR* adequately captures the risks identified in (1) and (2);

(4) for areas in which the *CRR* is either inadequate or does not address a risk, estimate the additional capital (if any) needed to protect that *firm* and its *customers*, in addition to any other risk mitigation action that *firm* plans to take;

(5) consider the risk that that *firm's* own analyses of capital adequacy may be inaccurate and that it may suffer from management weaknesses, which affect the effectiveness of its risk management and mitigation;

(6) project that *firm's* business activities forward in detail for one year and in less detail for the next 3 to 5 years and estimate how that *firm's* capital and *CRR* would alter, assuming that business develops as expected;

(7) assume that business does not develop as expected and consider how that *firm's* capital and *CRR* would alter and what that *firm's* reaction to a range of adverse economic scenarios might be (see ■ GENPRU 1.2.30 R to ■ GENPRU 1.2.43 G (the *overall Pillar 2 rule* and related *rules* and *guidance*)). Where appropriate, the adverse scenarios should consider the impact of market events that are instantaneous or occur over an extended period of time but which are nevertheless still co-dependent on movements in economic conditions;

(8) document the results obtained from the analyses in (2), (4), (6), and (7) in a detailed report for that *firm's* senior management, and, where relevant, its *governing body*; and

(9) ensure that systems and processes are in place to review against performance the accuracy of the estimates made in (2), (4), (6) and (7).

2.2.27 G

(1) This paragraph applies to a proportional *ICAAP* in the case of a *firm* whose activities are complex.

(2) A proportional approach to that *firm's ICAAP* should cover the matters identified in ■ BIPRU 2.2.26 G, but is likely also to involve the use of models, most of which will be integrated into its day-to-day management and operation.

(3) Models of the sort referred to in (2) may be linked so as to generate an overall estimate of the amount of capital that a *firm* considers appropriate to hold for its business needs. For example, a *firm* is likely to use value at risk models for *market risk* (see ■ BIPRU 7.10), advanced

modelling approaches for credit risk (see ■ BIPRU 4) and, possibly, *advanced measurement approaches* for *operational risk* (see ■ BIPRU 6.5). A *firm* might also use economic scenario generators to model stochastically its business forecasts and risks. A *firm* may also link such models to generate information on the economic capital desirable for that *firm*. A model which a *firm* uses to generate its target amount of economic capital is known as an economic capital model (ECM). Economic capital is the target amount of capital which maximises the return for a *firm's* stakeholders for a desired level of risk.

(4) A *firm* is also likely to be part of a *group* and to be operating internationally. There is likely to be centralised control over the models used throughout the *group*, the assumptions made and their overall calibration.

(5) The more a *firm* integrates into its business such economic capital modelling, the more it is likely to focus on managing risks for the benefit of its stakeholders. Consequently, ECMs may produce capital estimates that differ from the amount of capital needed for regulatory purposes. For the *appropriate regulator* to rely on the results of a *firm's* models, including ECMs, a *firm* should be able to explain the basis and results of its models and how the amount of capital produced by its models reflects the amount of capital needed for regulatory purposes. It may be that those amounts are not equal. Where they are not equal, the *appropriate regulator* will expect a *firm* to discuss any differences with the *appropriate regulator*. However, it may prove difficult to reconcile the outcome of a *firm's* modelling with the *appropriate regulator's* own assessment of the adequacy of that *firm's* capital. This may be the case when, for instance, matters of judgment are involved in arriving at a *firm's* capital assessment, or the *appropriate regulator* relies on information which cannot be fully disclosed to the *firm* (for example comparisons with the *firm's* peers). Nevertheless, a *firm* whose ECM produces a different amount of capital to that required for regulatory purposes is still obliged to comply with the *overall Pillar 2 rule*. A *firm* should therefore be able to explain to the *appropriate regulator* how the outcome of its ECM is adjusted so that it complies with the *overall financial adequacy rule* and the *overall Pillar 2 rule*.

(6) Stress testing should provide senior management with a consolidated view of the amount of risk the *firm* is or might be exposed to under the chosen stress events. Senior management should therefore be presented with information that considers the possibility of the risks materialising simultaneously in various proportions. For instance, it would be misrepresentative to simulate *market risk* stressed events without considering that, in those circumstances, market *counterparties* may be more likely to default. Accordingly, a *firm* could:

(a) carry out combined stress tests where assets and liabilities are individually subjected to simultaneous changes in two or more risk drivers; for instance, the change in value of each loan made by a *firm* may be estimated using simultaneous changes to both interest rates and stock market or property values;

(b) integrate the results of market and credit risk models rather than aggregating the results of each model separately; and

(c) consider scenarios which include systemic effects on the *firm* of wider failures in the *firm's* market or systems upon which the *firm* depends and also any possible systemic effects caused by the *firm* itself suffering losses which affect other market participants which in turn exacerbate the *firm's* position.

(7) Furthermore, if a complex *firm* uses an ECM it should validate the assumptions of the model through a comprehensive stress testing programme. In particular this validation should:

(a) test correlation assumptions (where risks are aggregated in this way) using combined stresses and scenario analyses;

(b) use stress tests to identify the extent to which the *firm's* risk models omit non-linear effects, for instance the behaviour of derivatives in market risk models; and

(c) consider not just the effect of parallel shifts in interest rate curves, but also the effect of curves becoming steeper or flatter.

Guidance on risks to be covered in an ICAAP

2.2.28 G ■ BIPRU 2.2.30 G to ■ BIPRU 2.2.40 G set out *guidance* on some of the sources of risk identified in the *overall Pillar 2 rule*. ■ BIPRU 2.2.41 R to ■ BIPRU 2.2.45 G have material relating to a *firm* with an *IRB permission*.

2.2.29 G

(1) A *firm* may take into account factors other than those identified in the *overall Pillar 2 rule* when it assesses the level of capital it wishes to hold. These factors might include external rating goals, market reputation and its strategic goals. However, a *firm* should be able to distinguish, for the purpose of its dialogue with the *appropriate regulator*, between capital it holds in order to comply with the *overall financial adequacy rule*, capital that it holds as a *capital planning buffer* and capital held for other purposes.

(2) The calibration of the *CRR* assumes that a *firm's* business is well-diversified, well-managed with assets matching its liabilities and good controls, and stable with no large, unusual or high risk transactions. A *firm* may find it helpful to assess the extent to which its business in fact differs from these assumptions and therefore what adjustments it might be reasonable for it to make to the *CRR* to arrive at an adequate level of *capital resources*.

Interest rate risk arising from non-trading book activities

2.2.30 G A *firm* should assess its exposure to changes in interest rates, in particular risks arising from the effect of interest rate changes on *non-trading book* activities that are not captured by the *CRR*. In doing so, a *firm* may wish to use stress tests to determine the impact on its balance sheet of a change in market conditions.

Securitisation risk

2.2.31 G A *firm* should assess its exposure to risks transferred through the *securitisation* of assets should those transfers fail for whatever reason. A *firm* should consider the effect on its financial position of a *securitisation*

arrangement failing to operate as anticipated or of the values and risks transferred not emerging as expected.

Residual risk

2.2.32 G A *firm* should assess its exposure to residual risks that may result from the partial performance or failure of *credit risk mitigation* techniques for reasons that are unconnected with their intrinsic value. This could result from, for instance, ineffective documentation, a delay in payment or the inability to realise payment from a guarantor in a timely manner. Given that residual risks can always be present, a *firm* should assess the appropriateness of its *CRR* against its assumptions which underlie any risk mitigation measures it may have in place.

Concentration risk

2.2.33 G A *firm* should assess, and monitor, in detail its exposure to sectoral, geographic, liability and asset concentrations. The *appropriate regulator* considers that concentrations in these areas increase a *firm's* exposure to credit risk. Where a *firm* identifies such concentrations it should consider the adequacy of its *CRR*.

Liquidity risk

2.2.34 G In accordance with the *overall Pillar 2 rule* a *firm* should consider its exposure to *liquidity risk* and assess its response should that risk materialise.

2.2.35 G When assessing *liquidity risk*, a *firm* should consider the extent to which there is a mismatch between assets and liabilities.

2.2.36 G A *firm* should also, when assessing *liquidity risk*, consider the amount of assets it holds in highly liquid, marketable forms that are available should unexpected cash flows lead to a liquidity problem. The price concession of liquidating assets is of prime concern when assessing such *liquidity risk* and should therefore be built into a *firm's ICAAP*.

2.2.37 G Some further areas to consider in developing the *liquidity risk* scenario might include:

(1) any mismatching between expected asset and liability cash flows;

(2) the inability to sell assets quickly;

(3) the extent to which a *firm's* assets have been pledged; and

(4) the possible need to reduce large asset positions at different levels of market liquidity and the related potential costs and timing constraints.

Business risk: General

2.2.38 G A *firm's CRR*, being risk-sensitive, may vary as business cycles and economic conditions fluctuate over time. A deterioration in business or economic

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conditions could require a *firm* to raise capital or, alternatively, to contract its businesses, at a time when market conditions are most unfavourable to raising capital. Such an effect is known as procyclicality.

2.2.39 G To reduce the impact of cyclical effects, a *firm* should aim to maintain an adequate *capital planning buffer* during an upturn in business and economic cycles such that it has sufficient capital available to protect itself in unfavourable market conditions.

2.2.40 G To assess its expected capital requirements over the economic and business cycles, a *firm* may wish to project forward its financial position taking account of its business strategy and expected growth according to a range of assumptions as to the state of the economic or business environment which it faces. For example, an *ICAAP* should include an analysis of the impact that the actions of a *firm's* competitors might have on its performance, in order to see what changes in its environment the *firm* could sustain. Projections over a three to five year period would be appropriate in most circumstances. A *firm* may then calculate its projected *CRR* and assess whether it could be met from expected financial resources. Additional *guidance* on capital planning over an economic and business cycle can be found in ■ GENPRU 1.2.73A G (Capital planning).

Business risk: Stress tests for firms using the IRB approach

2.2.41 R A *firm* with an *IRB permission* must ensure that there is no significant risk that it will not be able to meet its capital resource requirements for credit risk under ■ GENPRU 2.1 (Calculation of capital resources requirements) at all times throughout an economic cycle, including the capital resources requirements for credit risk indicated by any stress test carried out under ■ BIPRU 4.3.39 R to ■ BIPRU 4.3.40 R (Stress tests used in assessment of capital adequacy for a *firm* with an *IRB permission*) as being likely to apply in the scenario tested. For the purpose of deciding what *capital resources* are or will be available to meet those credit risk requirements from time to time a *firm* must exclude *capital resources* that are likely to be required to meet its other capital requirements under ■ GENPRU 2.1 at the relevant time. A *firm* must also be able to demonstrate to the *appropriate regulator* at any time that it is complying with this *rule*.

2.2.42 R ■ BIPRU 2.2.41 R applies to a *firm* on a solo basis if ■ BIPRU 4 (IRB approach) applies to it on a solo basis and applies on a consolidated basis if ■ BIPRU 4 does.

2.2.43 R If ■ BIPRU 2.2.41 R applies to a *firm* on a consolidated basis the following adjustments are made to ■ BIPRU 2.2.41 R in accordance with the general principles of ■ BIPRU 8 (Group risk - consolidation):

(1) references to *capital resources* are to the *consolidated capital resources* of the *firm's UK consolidation group* or, as the case may be, its *non-UK sub-group*; and

(2) references to the capital requirements in ■ GENPRU 2.1 (Calculation of capital resources requirements) are to the consolidated capital requirements with respect to the *firm's UK consolidation group* or, as

the case may be, its *non-UK sub-group* under ■ BIPRU 8 (Group risk - consolidation).

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2.2.44 G If a *firm's* current available *capital resources* are less than the capital resources requirement indicated by the stress test that need not be a breach of ■ BIPRU 2.2.41 R. The *firm* may wish to set out any countervailing effects and off-setting actions that can be demonstrated to the satisfaction of the *appropriate regulator* as being likely to reduce the difference referred to in the first sentence. The *appropriate regulator* is only likely to consider a demonstration of such actions as credible if those actions are set out in a capital management plan based on the procedures in ■ GENPRU 1.2.73A G (Capital planning) and including a plan of the type referred to in ■ GENPRU 1.2.73A G (5) that has been approved by the *firm's* senior management or *governing body*.

2.2.45 G The countervailing factors and off-setting actions that a *firm* may rely on as referred to in ■ BIPRU 2.2.44 G include, but are not limited to, projected balance sheet shrinkage, growth in *capital resources* resulting from retained profits between the date of the stress test and the projected start of the economic downturn, the possibility of raising new capital in a downturn, the ability to reduce dividend payments or other distributions, and the ability to allocate capital from other risks which can be shown to be negatively correlated with the *firm's* credit risk profile.

Systems and controls

2.2.46 G A *firm* may decide to hold additional capital to mitigate any weaknesses in its overall control environment. These weaknesses might be indicated by the following:

(1) a failure by a *firm* to complete an assessment of its systems and controls to establish whether they comply with *SYSC*; or

(2) a failure by a *firm's* senior management to approve its financial results; or

(3) a failure by a *firm* to consider an analysis of relevant internal and external information on its business and control environment.

2.2.47 G In considering if there are any systems and control weaknesses and their effect on the adequacy of the *CRR*, a *firm* should be able to demonstrate to the *appropriate regulator* that all the issues identified in *SYSC* have been considered and that appropriate plans and procedures exist to deal adequately with adverse scenarios.

Risks which may be considered according to the nature of the activities of a firm

2.2.48 G (1) ■ BIPRU 2.2.61 G to ■ BIPRU 2.2.70 G set out *guidance* for:

(a) [deleted]

(b) an asset management *firm*; and

(c) a securities *firm*;

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whose activities are either simple or moderately complex.

(2) ■ BIPRU 2.2.49 G to ■ BIPRU 2.2.70 G provide examples of the sorts of risks which such a *firm* might typically face and of stress tests or scenario analyses which it might carry out as part of its *ICAAP*.

(3) The material on securities *firms* is also relevant to a *commodities firm*.

Banks and building societies

2.2.49 G

2.2.50 G

2.2.51 G

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2.2.60 G

An asset management firm

2.2.61 G An asset manager is primarily exposed to *operational risk* and reputational risk.

2.2.62 G When assessing reputational risk an asset manager should consider issues such as:

(1) how poor performance can affect its ability to generate profits;

(2) the effect on its financial position should one or more of its key fund managers leave that *firm*;

(3) the effect on its financial position should it lose some of its largest customers; and

(4) how poor customer services can affect its financial position; for example, a *firm* which has outsourced the management of customer accounts may want to consider the impact on its own reputation of the service provider failing to deliver the service.

2.2.63 G As an asset manager's mandates become more complex, the risk of it failing to comply fully with the terms of its contracts increases. In the event of such failure, a *firm* can be exposed to substantial losses resulting from *customers*' claims and legal actions. Although the *appropriate regulator* would expect an asset manager to have in place adequate controls to mitigate that risk, it may also like to consider the potential cost to it should *customers* claim that it has not adhered to mandates. Past claims and compensation may provide a useful benchmark for an asset manager to assess its sensitivity to future legal action. In assessing the adequacy of its capital, an asset manager may therefore consider whether it could absorb the highest operational loss it has suffered over the last 3 to 5 years.

2.2.64 G In relation to the issues identified in ■ BIPRU 2.2.63 G, an asset manager should consider, for example:

(1) the direct cost to it resulting from fraud or theft;

(2) the direct cost arising from *customers*' claims and legal action in the future; an asset manager could consider the impact on its financial position if a legal precedent were to encourage its *customers* to take legal action against that *firm* for failing to advise correctly on a certain type of product; the relevance of such scenarios is likely to depend on whether the asset manager is acting on a discretionary basis or solely as advisor; and

(3) where it has obtained professional indemnity insurance, the deductibles and individual or aggregate limits on the sums insured.

2.2.65 G The *appropriate regulator* expects an asset manager to consider the impact of economic factors on its ability to meet its liabilities as they fall due. An asset manager should therefore develop scenarios which relate to its strategic and business plan. An asset manager might therefore consider:

(1) the effect of a market downturn affecting both transaction volumes and the market values of assets in its funds; in assessing the impact of such a scenario, an asset manager may consider the extent to which it can remain profitable (for example, by rapidly scaling down its activities and reducing its costs);

(2) the impact on current levels of capital if it plans to undertake a significant restructuring; and

(3) the impact on current levels of capital if it plans to enter a new market or launch a new product; it should assess the amount of capital it needs to hold, when operating for the first time in a market in which it lacks expertise.

A securities firm

2.2.66 G

(1) A securities *firm* may consider the impact of the situations listed in (a) to (c) on its capital levels when assessing its exposure to concentration risk:

(a) the potential loss that could arise from large exposures to a single *counterparty*;

(b) the potential loss that could arise from exposures to large transactions or to a product type; and

(c) the potential loss resulting from a combination of events such as a sudden increase in volatility leaving a hitherto fully-margined client unable to meet the margin calls due to the large size of the underlying *position* and the subsequent difficulties involved in liquidating its *position*.

(2) An example of the analysis in (1)(b) relates to a securities *firm* which relies on the income generated by a large, one-off corporate finance transaction. It may want to consider the possibility of legal action arising from that transaction which prevents the payment of its fees. Additionally, an underwriting *firm* may, as a matter of routine, commit to place a large amount of securities. It may therefore like to assess the impact of losses arising from a failure to place the securities successfully.

2.2.67 G

Where a securities *firm* deals in illiquid securities (for example, unlisted securities or securities listed on illiquid markets), or holds illiquid assets, potentially large losses can arise from trades that have failed to settle or because of large unrealised market losses. A securities *firm* may therefore consider the impact of *liquidity risk* on its exposure to:

(1) credit risk; and

(2) market risk.

2.2.68 G

Counterparty risk *rules* only partially capture the risk of settlement failure as the quantification of risk is only based on mark-to-market values and does not take account of the volatility of the securities over the settlement period. A securities *firm's* assessment of its exposure to counterparty risk should take into account:

(1) whether it acts as arranger only or whether it also executes trades;

(2) the types of execution venues which it uses; for example, the London Stock Exchange or a retail service provider (RSP) have more depth than *multilateral trading facilities*; and

(3) whether it offers extended settlements and free delivery compared to delivery versus payment business.

2.2.69 G

(1) A securities *firm* should also consider the impact of external factors on the levels of capital it needs to hold. Scenarios covering such external factors should relate to its strategy and business plan. A securities *firm* might wish to consider the questions in (2) to (7).

(2) Whether it plans to participate in a one-off transaction that might strain temporarily or permanently its capital.

(3) Whether the unevenness of its revenue suggests that it should hold a capital buffer. Such an assessment could be based, for instance, on an analysis of past revenue and the volatility of its capital.

(4) How its income might alter as interest rates fluctuate where it is obliged to pay interest to its clients in excess of interest it earns on client money deposits.

(5) How its capital would be affected by a market downturn. For instance, how sensitive that *firm* is to a sharp reduction of trading volumes.

(6) How political and economic factors will affect that *firm's* business. For instance, a *commodity firm* may wish to consider the impact of a sharp increase in prices on initial margins and, consequently, on its liquidity.

(7) Whether it anticipates expanding its activities (for example, by offering clearing services), and if so, the impact on its capital.

2.2.70 G

A securities *firm* may also want to assess the impact of its internal credit limits on its levels of capital. For instance, a *firm* whose internal procedures authorise dealing without cash in the account or without pre-set dealing limits might consider more capital is required than if it operated stricter internal credit limits.

Capital models

2.2.71 G

A *firm* may approach its assessment of adequate capital by developing a model, including an ECM (see ■ BIPRU 2.2.27 G), for some or all of its business risks. The assumptions required to aggregate risks modelled and the confidence levels adopted should be considered by a *firm's* senior management. A *firm* should also consider whether any relevant risks, including systems and control risks, are not captured by the model.

2.2.72 G

A *firm* should not expect the *appropriate regulator* to accept as adequate any particular model that it develops or automatically to reflect the results from the model in any *individual capital guidance* or *capital planning buffer*. However, the *appropriate regulator* will take into account the results of a sound and prudent model when giving *individual capital guidance* or when dealing with the *firm* in relation to its *capital planning buffer* (see ■ GENPRU 1.2.19 G (Outline of provisions related to ■ GENPRU 2.1 (Adequacy of financial resources))).

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2.2.73 G There is no prescribed approach as to how a *firm* should develop its internal capital model. However, a *firm* should be able to demonstrate:

(1) the confidence levels set and whether these are linked to its corporate strategy;

(2) the time horizons set for the different types of business that it undertakes;

(3) the extent of historic data used and back-testing carried out;

(4) that it has in place a process to verify the correctness of the model's outputs; and

(5) that it has the skills and resources to operate, maintain and develop the model.

2.2.74 G In relation to the use of an ECM (see ■ BIPRU 2.2.27 G), the *appropriate regulator* is likely to place more reliance on a *firm's ICAAP* if the *firm* provides the following information:

(1) a comparison of the amount of capital that the ECM generates in respect of each of the risks captured in the *CRR* before aggregation with the corresponding components of the *CRR* calculation; and

(2) evidence that the *guidance* in ■ BIPRU 2.2.71 G to ■ BIPRU 2.2.78 G has been followed.

2.2.75 G If a *firm* adopts a top-down approach to developing its internal model, it should be able to allocate the outcome of the internal model to risks it has previously identified in relation to each separate legal entity, business unit or business activity, as appropriate. In relation to a *firm* which is a member of a group, ■ GENPRU 1.2.53 R (Application of ■ GENPRU 1.2 on a solo and consolidated basis: Processes and tests) sets out how internal capital identified as necessary by that *firm's ICAAP* should be allocated.

2.2.76 G If a *firm's* internal model makes explicit or implicit assumptions in relation to correlations within or between risk types, or in relation to diversification benefits between business types, the *firm* should be able to explain to the *appropriate regulator*, with the support of empirical evidence, the basis of those assumptions.

2.2.77 G A *firm's* model should also reflect the past experience of both the *firm* and the sectors in which it operates.

2.2.78 G The values assigned to inputs into a *firm's* model should be derived either stochastically, by assuming the value of an item can follow an appropriate probability distribution and by selecting appropriate values at the tail of the distribution, or deterministically, using appropriate prudent assumptions. For options or guarantees which change in value significantly in certain economic or demographic circumstances, a stochastic approach would normally be appropriate.

2.3 Interest rate risk in the non-trading book

Application

2.3.1 R This section of the *Handbook* applies to a *BIPRU firm*.

2.3.2 G

(1) [deleted]

(2) [deleted]

(3) [deleted]

(4) [deleted]

2.3.3 G Interest rate risk in the *non-trading book* may arise from a number of sources for example:

(1) risks related to the mismatch of repricing of assets and liabilities and off balance sheet short and long-term positions;

(2) risks arising from hedging exposure to one interest rate with exposure to a rate which reprices under slightly different conditions;

(3) risk related to the uncertainties of occurrence of transactions e.g. when expected future transactions do not equal the actual transactions; and

(4) risks arising from consumers redeeming fixed rate products when market rates change.

Purpose

2.3.4 G ■ BIPRU 2.3 sets out more detail on how the systems and controls requirements in *SYSC* and ■ GENPRU 1.2.30 R (Processes, strategies and systems for risks) and the requirements about stress and scenario testing in ■ GENPRU 1.2.36 R apply to interest rate risk in the *non-trading book*.

2.3.5 G ■ BIPRU 2.3 applies requirements that correspond to Article 124(5) of the *Banking Consolidation Directive*.

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Proportionality

2.3.6 G The *guidance* on proportionality in ■ BIPRU 2.2 applies to ■ BIPRU 2.3.

Stress testing for interest rate risk: General requirement

2.3.7 R

(1) As part of its obligations under ■ GENPRU 1.2.30 R (Processes, strategies and systems for risks) and ■ GENPRU 1.2.36 R (Stress and scenario tests) a *firm* must carry out an evaluation of its exposure to the interest rate risk arising from its non-trading activities.

(2) The evaluation under (1) must cover the effect of a sudden and unexpected parallel change in interest rates of 200 basis points in both directions.

(3) A *firm* must immediately notify the *appropriate regulator* if any evaluation under this *rule* suggests that, as a result of the change in interest rates described in (2), the economic value of the *firm* would decline by more than 20% of its *capital resources*.

2.3.8 G A *firm* should, under ■ BIPRU 2.3.7 R (2), apply a 200 basis point shock to each major currency exposure.

2.3.9 G For a larger and/or more complex *firm*, appropriate systems to evaluate and manage interest rate risk in the *non-trading book* should include:

(1) the ability to measure the exposure and sensitivity of the *firm's* activities, if material, to repricing risk, yield curve risk, basis risk and risks arising from embedded optionality (for example, pipeline risk, prepayment risk) as well aschanges in assumptions (for example those about customer behaviour);

(2) consideration as to whether a purely static analysis of the impact on their current portfolio of a given shock or shocks should be supplemented by a more dynamic simulation approach; and

(3) scenarios in which different interest rate paths are computed and in which some of the assumptions (e.g. about behaviour, contribution to risk and balance sheet size and composition) are themselves functions of interest rate level.

2.3.10 G Under ■ GENPRU 1.2.60 R, a *firm* is required to make a written record of its assessments made under ■ GENPRU 1.2. A *firm's* record of its approach to evaluating and managing interest rate risk as it affects the *firm's* non-trading activities should cover the following issues:

(1) the internal definition of and boundary between "banking book" and "trading activities" (see ■ BIPRU 1.2);

(2) the definition of economic value and its consistency with the method used to value assets and liabilities (e.g. discounted cashflows);

(3) the size and the form of the different shocks to be used for internal calculations;

(4) the use of a dynamic and / or static approach in the application of interest rate shocks;

(5) the treatment of commonly called "pipeline transactions" (including any related hedging);

(6) the aggregation of multicurrency interest rate exposures;

(7) the inclusion (or not) of non-interest bearing assets and liabilities (including capital and reserves);

(8) the treatment of current and savings accounts (i.e. the maturity attached to exposures without a contractual maturity);

(9) the treatment of fixed rate assets (liabilities) where customers still have a right to repay (withdraw) early;

(10) the extent to which sensitivities to small shocks can be scaled up on a linear basis without material loss of accuracy (i.e. covering both convexity generally and the non-linearity of pay-off associated with explicit option products);

(11) the degree of granularity employed (for example offsets within a time bucket); and

(12) whether all future cash flows or only principal balances are included.

2.3.11 G The *appropriate regulator* will periodically review whether the level of the shock referred to in ■ BIPRU 2.3.7 R (2) is appropriate in the light of changing circumstances, in particular the general level of interest rates (for instance periods of very low interest rates) and their volatility. A *firm's* internal systems should therefore be flexible enough to compute its sensitivity to any standardised shock that is prescribed. If a 200 basis point shock would imply negative interest rates or if such a shock would otherwise be considered inappropriate, the *appropriate regulator* will consider adjusting the requirements accordingly.

Stress testing for interest rate risk: Frequency

2.3.12 R

(1) A *firm* must carry out the evaluations required by ■ BIPRU 2.3.7 R as frequently as necessary for it to be reasonably satisfied that it has at all times a sufficient understanding of the degree to which it is exposed to the risks referred to in that *rule* and the nature of that exposure. In any case it must carry out those evaluations no less frequently than required by (2) or (3).

(2) The minimum frequency of the evaluation in ■ BIPRU 2.3.7 R (1) is once each year.

(3) The minimum frequency of the evaluation in ■ BIPRU 2.3.7 R (2) is once each quarter.

2

Consolidation

2.3.13 R ■ GENPRU 1.2.45 R to ■ GENPRU 1.2.59 R (Application of ■ GENPRU 1.2 on a solo and consolidated basis) apply to ■ BIPRU 2.3 as they apply to ■ GENPRU 1.2.30 R and ■ GENPRU 1.2.36 R.

Chapter 3

Standardised credit risk

3

3.1 Application and purpose

Application

3.1.1 R ■ BIPRU 3 applies to a *BIPRU firm*.

Purpose

3.1.2 G Pursuant to the third paragraph of article 95(2) of the *UK CRR*, ■ BIPRU 3 applies requirements that correspond to:

(1) Articles 78 to 80, paragraph (1) of Article 81, Article 83, Annex II and Parts 1 and 3 of Annex VI of the *Banking Consolidation Directive*;

(2) Article 18 of the *Capital Adequacy Directive* so far as it applies Articles 78 to 80, paragraph (1) of Article 81, Article 83 and Parts 1 and 3 of Annex VI of the *Banking Consolidation Directive* to *investment firms*; and

(3) Article 40 of the *Capital Adequacy Directive* for the purposes of the calculation of credit risk under the *Banking Consolidation Directive*.

3.1.3 G ■ BIPRU 3.1 sets out how a *firm* should calculate the *credit risk capital component*, which is one of the elements that make up the *credit risk capital requirement* under ■ GENPRU 2.1.51 R. Part of that calculation involves calculating *risk weighted exposure amounts* for *exposures* in the *firm's non-trading book*. The rest of ■ BIPRU 3 sets out how the *firm* should carry out that calculation.

3.1.4 G ■ BIPRU 5 deals with the effect of *credit risk mitigation* on the calculation of *risk weighted exposure amounts*. ■ BIPRU 13 deals with the calculation of *exposure* values for certain kinds of products. ■ BIPRU 14.3 deals with the calculation of the *counterparty risk capital component* for unsettled transactions in the *trading book* and *non-trading book*. ■ BIPRU 14.4 deals with *capital resources* with respect to *free deliveries*.

Calculation of the credit risk capital component

3.1.5 R The *credit risk capital component* of a *firm* is 8% of the total of its *risk weighted exposure amounts* for *exposures* falling into ■ BIPRU 3.1.6 R, calculated in accordance with ■ BIPRU 3.

3.1.6 R An *exposure* falls into this *rule* if:

(1) it is in a *firm's non-trading book*;and

(2) it has not been deducted from the *firm's capital resources* under GENPRU 2.2.

3

3.2 The central principles of the standardised approach to credit risk

3.2.1 R Subject to ■ BIPRU 13:

(1) the *exposure* value of an asset item must be its balance-sheet value, subject to any value adjustments required by ■ GENPRU 1.3; and

(2) the *exposure* value of an off-balance sheet item listed in the table in ■ BIPRU 3.7.2 R must be the percentage of its value set out in that table.

[**Note**: *BCD* Article 78(1) part]

3.2.2 R The off-balance sheet items listed in the table in ■ BIPRU 3.7.2 R must be assigned to the risk categories as indicated in that table.

[**Note**: *BCD* Article 78(1) part]

3.2.3 R Where an *exposure* is subject to *funded credit protection*, a *firm* may modify the *exposure* value applicable to that item in accordance with ■ BIPRU 5.

[**Note**: *BCD* Article 78(3)]

3.2.4 G ■ BIPRU 13 sets out the method for determination of the *exposure* value of a *financial derivative instrument*, with the effects of contracts of novation and other netting agreements taken into account for the purposes of that method in accordance with ■ BIPRU 13.7.

[**Note**: reference to *BCD* Article 78(2) first sentence. Implementation in ■ BIPRU 13]

3.2.5 G ■ BIPRU 13.3 and ■ BIPRU 13.8 set out the provisions applying to the treatment and determination of the *exposure* value of *repurchase transactions*, *securities or commodities lending* or borrowing transactions, *long settlement transactions* and *margin lending transactions* (*SFTs*).

[**Note**: reference to *BCD* Article 78(2) second sentence. Implementation in ■ BIPRU 13]

3.2.6 G ■ BIPRU 13 also sets out the methods for the determination of *exposure* values for *long settlement transactions*.

3

3.2.7 G ■ BIPRU 13.8 provides that, in the case of a *firm* using the *financial collateral comprehensive method* under ■ BIPRU 5, where an *exposure* takes the form of an *SFT*, the *exposure* value should be increased by the volatility adjustment appropriate to such *securities* or *commodities* set out in ■ BIPRU 5.4.30 R to ■ BIPRU 5.4.65 R (Supervisory volatility adjustments approach and the own estimates of volatility adjustments approach).

[**Note**: reference to *BCD* Article 78(1), part. Implementation in ■ BIPRU 13]

3.2.8 G ■ BIPRU 13.3.13 R and ■ BIPRU 13.8.8 R set out the provisions relating to determination of the *exposure* value of certain credit risk *exposures* outstanding with a *central counterparty*, where the *central counterparty* credit risk *exposures* with all participants in its arrangements are fully collateralised on a daily basis.

[**Note**: reference to *BCD* Article 78(4). Implementation in ■ BIPRU 13]

Exposure Classes

3.2.9 R A *firm* must assign each *exposure* to one of the following *exposure* classes:

(1) claims or contingent claims on central governments or *central banks*;

(2) claims or contingent claims on regional governments or local authorities;

(3) claims or contingent claims on administrative bodies and non-commercial *undertakings*;

(4) claims or contingent claims on *multilateral development banks*;

(5) claims or contingent claims on *international organisation*;

(6) claims or contingent claims on *institutions*;

(7) claims or contingent claims on corporates;

(8) retail claims or contingent retail claims;

(9) claims or contingent claims secured on real estate property;

(10) past due items;

(11) items belonging to regulatory high-risk categories;

(12) claims in the form of *covered bonds*;

(13) *securitisation* positions;

(14) short-term claims on *institutions* and corporates;

(15) claims in the form of *CIUs*; or

(16) other items.

[**Note**: *BCD* Article 79(1)]

3

3.2.10 R To be eligible for the *retail exposure* class, an *exposure* must meet the following conditions:

(1) the *exposure* must be either to an individual *person* or *persons*, or to a small or medium sized entity;

(2) the *exposure* must be one of a significant number of *exposures* with similar characteristics such that the risks associated with such lending are substantially reduced; and

(3) the total amount owed to the *firm*, its *parent undertakings* and its *subsidiary undertakings*, including any past due *exposure*, by the obligor client or *group of connected clients*, but excluding claims or contingent claims secured on residential real estate collateral, must not, to the knowledge of the *firm*, exceed €1 million.

[**Note**: *BCD* Article 79(2)]

3.2.11 R A *firm* must take reasonable steps to acquire the knowledge referred to in ■ BIPRU 3.2.10 R (3).

[**Note**: *BCD* Article 79(2)(c) last sentence]

3.2.12 R *Securities* are not eligible for the *retail exposure* class.

[**Note**: *BCD* Article 79(2) last sentence]

3.2.13 R The present value of retail minimum lease payments is eligible for the *retail exposure* class.

[**Note**: *BCD* Article 79(3)]

Retail exposures: Significance

3.2.14 G A key driver of the preferential *risk weight* afforded *retail exposures* is the lower correlation and systematic risk associated with such *exposures*. This aspect is unrelated to the absolute number of *retail exposures*. Accordingly in defining what constitutes a significant number of *retail exposures* for the purpose of ■ BIPRU 3.2.10 R (2), a *firm* need only satisfy itself that the number of *retail exposures* is sufficiently large to diversify away idiosyncratic risk. This assessment will be subject to supervisory review and part of a *firm's SREP*. It will be looked at as one of the issues relating to overall diversification.

Retail exposures: Aggregation: Reasonable steps

3.2.15 G In deciding what steps are reasonable for the purposes of ■ BIPRU 3.2.11 R, a *firm* may take into account complexity and cost, as well as the materiality of the impact upon its capital calculation. A *firm* should be able to demonstrate to the *appropriate regulator* that it has complied with the obligation to take reasonable steps under ■ BIPRU 3.2.11 R in the way it takes these factors into account.

Retail exposures: Aggregation: Single risk

3.2.16 G

(1) The definition of *group of connected clients* is set out in the *Glossary*. Paragraph (2) of that definition is "two or more *persons* ... who are to be regarded as constituting a single risk because they are so interconnected that, if one of them were to experience financial problems, the other or all of the others would be likely to encounter repayment difficulties".

(2) Say that a *firm* has *exposures* to A and B. When deciding whether A and B come within paragraph (2) of the definition two conditions should be satisfied. Firstly the connections between A and B should mean that if A experiences financial problems, B should be likely to encounter repayment difficulties. Secondly, the connections between A and B should mean that if B experiences financial problems, A should be likely to encounter repayment difficulties.

(3) The *guidance* in ■ BIPRU 3.2.16 G is provided for the purpose of ■ BIPRU 3.2.10 R only and not for the purposes of any other provision in the Handbook that uses the defined term *group of connected clients*.

Retail exposures: Aggregation: Personal and business exposures

3.2.17 G

If a *firm* has *exposures* to an owner of a *retail SME* in his personal capacity and *exposures* to the *retail SME* the *firm* should aggregate the two types of *exposure* for the purpose of ■ BIPRU 3.2.10 R (3), although it should not include claims secured on residential real estate collateral. In deciding what steps are reasonable for the purposes of ■ BIPRU 3.2.11 R in aggregating these two types of *exposure*, a *firm* may take into account the materiality of those personal *exposures*. A *firm* should be able to demonstrate to the *appropriate regulator* that it has complied with the obligation to take reasonable steps under ■ BIPRU 3.2.11 R when taking into account materiality in this way.

Retail exposures: Exchange rate

3.2.18 G

Where an exposure is denominated in a currency other than the euro, a *firm* may calculate the euro equivalent for purposes of ■ BIPRU 3.2.10 R using any appropriate set of exchange rates provided its choice has no obvious bias and that the *firm* is consistent in its approach to choosing rates.

Retail exposures: Frequency of monitoring

3.2.19 G

A *firm* may monitor compliance with the €1m threshold in ■ BIPRU 3.2.10 R on the basis of approved limits provided it has internal control procedures that are sufficient to ensure that amounts owed cannot diverge from approved limits to such an extent as to give rise to a material breach of the €1m threshold.

3.2.20 R

(1) To calculate *risk weighted exposure amounts*, *risk weights* must be applied to all *exposures*, unless deducted from *capital resources*, in accordance with the provisions of ■ BIPRU 3.4.

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(2) The application of *risk weights* must be based on the *standardised credit risk exposure class* to which the *exposure* is assigned and, to the extent specified in ■ BIPRU 3.4, its credit quality.

(3) Credit quality may be determined by reference to:

(a) the credit assessments of *eligible ECAIs* in accordance with the provisions of ■ BIPRU 3; or

(b) the credit assessments of export credit agencies as described in ■ BIPRU 3.4.

[**Note**: *BCD* Article 80(1)]

3.2.21 R For the purposes of applying a *risk weight*, as referred to in ■ BIPRU 3.2.20 R, the *exposure* value must be multiplied by the *risk weight* specified or determined in accordance with the *standardised approach*.

[**Note**: *BCD* Article 80(2)]

3.2.22 R Notwithstanding ■ BIPRU 3.2.20 R, where an *exposure* is subject to credit protection the *risk weight* applicable to that item may be modified in accordance with ■ BIPRU 5.

[**Note**: *BCD* Article 80(4)]

3.2.23 R *Risk weighted exposure amounts* for *securitised exposures* must be calculated in accordance with ■ BIPRU 9.

[**Note**: *BCD* Article 80(5)]

3.2.24 R *Exposures* the calculation of *risk weighted exposure amounts* for which is not otherwise provided for under the *standardised approach* must be assigned a *risk weight* of 100%.

[**Note**: *BCD* Article 80(6)]

Zero risk-weighting for intra-group exposures: core UK group

3.2.25 R (1) Subject to ■ BIPRU 3.2.35 R, and with the exception of *exposures* giving rise to liabilities in the form of the items referred to in ■ BIPRU 3.2.26 R, a *firm* is not required to comply with ■ BIPRU 3.2.20 R (Calculation of risk weighted exposures amounts under the standardised approach) in the case of the *exposures* of the *firm* to a counterparty which is its *parent undertaking*, its *subsidiary undertaking* or a *subsidiary undertaking* of its *parent undertaking* provided that the following conditions are met:

(a) the counterparty is

(i) a *core concentration risk group counterparty*; and

(ii) an *institution*, *financial holding company*, *mixed financial holding company*, *financial institution*, *asset management company* or *ancillary services undertaking* subject to appropriate prudential requirements;

(b) [deleted]

(ba) (in relation to a *subsidiary undertaking*) 100% of the voting rights attaching to the *shares* in the counterparty's capital is held by the *firm* or a *financial holding company* (or a *subsidiary undertaking* of the *financial holding company*), whether individually or jointly, and that the *firm* or *financial holding company* (or its *subsidiary undertaking*) must have the right to appoint or remove a majority of the members of the board of *directors*, committee of management or other governing body of the counterparty;

(c) the counterparty is subject to the same risk evaluation, measurement and control procedures as the *firm*;

(d) the counterparty is incorporated in the *United Kingdom* ; and

(e) there is no current or foreseen material practical or legal impediment to the prompt transfer of *capital resources* or repayment of liabilities from the counterparty to the *firm*.

(2) Where a *firm* chooses under (1) not to apply ■ BIPRU 3.2.20 R, it must assign a *risk weight* of 0% to the *exposure*.

(3) A *firm* need not apply the treatment in (1) and (2) to every *exposure* that is eligible for that treatment.

[**Note**: *BCD* Article 80(7)]

3.2.25A G

(1) [deleted]

(2) [deleted]

3.2.26 R

A *firm* must not apply the treatment in ■ BIPRU 3.2.25 R to *exposures* giving rise to liabilities in the form of any of the following items:

(1) in the case of a *BIPRU firm*, any *tier one capital* or *tier two capital*; and

(2) in the case of any other *undertaking*, any item that would be *tier one capital* or *tier two capital* if the *undertaking* were a *BIPRU firm*.

[**Note**: *BCD* Article 80(7), part]

3.2.27 R

(1) [deleted]

(a) [deleted]

(b) [deleted]

(c) [deleted]

(2) [deleted]

3.2.27A R

(1) For the purpose of ■ BIPRU 3.2.25R (1)(e), a *firm* must be able on an ongoing basis to demonstrate fully to the *appropriate regulator* the circumstances and arrangements, including legal arrangements, by virtue of which there are no material practical or legal impediments, and none are foreseen, to the prompt transfer of *capital resources* or repayment of liabilities from the counterparty to the *firm*.

(2) In relation to a counterparty that is not a *firm*, the arrangements referred to in (1) must include a legally binding agreement with each *firm* that is a member of the *core UK group* that it will promptly on demand by the *firm* increase the *firm's capital resources* by an amount required to ensure that the *firm* complies with ■ GENPRU 2.1 (Calculation of capital resources requirements) and any other requirements relating to *capital resources* or concentration risk imposed on a *firm* by or under the *regulatory system*.

(3) For the purpose of (2), the obligation to increase the *firm's capital resources* may be limited to capital resources available to the *counterparty* and may reasonably exclude such amount of capital resources that, if transferred to the *firm*, would cause the *counterparty* to become balance sheet insolvent in the manner contemplated in section 123(2) of the Insolvency Act 1986.

3.2.28 G For the purpose of ■ BIPRU 3.2.25 R (1)(c) it is the risk management functions of the group that should be integrated, rather than the group's operational management. A *firm* should ensure that if risk management functions are integrated in this way it should be possible for the *appropriate regulator* to undertake qualitative supervision of the management of the integrated risk management function.

3.2.29 G In relation to a *core concentration risk group counterparty*, an *undertaking* is included within the scope of consolidation of a group on a full basis if it is at the head of the group or if its assets and liabilities are taken into account in full as referred to in ■ BIPRU 8.5.2 G (Basis of inclusion of undertakings in consolidation).

3.2.29A G

(1) In relation to ■ BIPRU 3.2.25 R (1)(ba), a *subsidiary undertaking* should generally be 100% owned and controlled by a single shareholder. However, if a *subsidiary undertaking* has more than one shareholder, that *undertaking* may be a member of the *core UK group* if all its shareholders are also members of the same *core UK group*.

(2) For the purpose of ■ BIPRU 3.2.25R (1)(d) (Incorporation in the UK), if a counterparty is of a type that falls within the scope of the *Insolvency Proceedings Regulation* and it is established in the *United Kingdom* other than by incorporation, a *firm* wishing to include that counterparty in its *core UK group* may apply to the *appropriate regulator* for a *waiver* of this condition if it can demonstrate fully to the *appropriate regulator* that the counterparty's centre of main interests is situated in the *United Kingdom* within the meaning of that Regulation.

3.2.30 G For the purpose of ■ BIPRU 3.2.25R (1)(e) (Prompt transfer of capital resources):

(1) in the case of an *undertaking* that is a *firm* the requirement in ■ BIPRU 3.2.25R (1)(e) for the prompt transfer of *capital resources* refers to *capital resources* in excess of the capital and financial resources requirements to which it is subject under the *regulatory system*; and

(2) [deleted]

(3) the *FCA* will consider the following criteria:

(a) the speed with which funds can be transferred or liabilities repaid to the *firm* and the simplicity of the method for the transfer or repayment;

(b) whether there are any interests other than those of the *firm* in the *core concentration risk group counterparty* and what impact those other interests may have on the firm's control over the core group concentration risk group counterparty and the ability of the *firm* to require a transfer of funds or repayment of liabilities;

(c) whether there are any tax disadvantages for the *firm* or the *core concentration risk group counterparty* as a result of the transfer of funds or repayment of liabilities;

(d) whether the purpose of the *core concentration risk group counterparty* prejudices the prompt transfer of funds or repayment of liabilities;

(e) whether the legal structure of the *core concentration risk group counterparty* prejudices the prompt transfer of funds or repayment of liabilities;

(f) whether the contractual relationships of the *core concentration risk group counterparty* with the *firm* and other third parties prejudices the prompt transfer of funds or repayment of liabilities; and

(g) whether past and proposed flows of funds between the *core concentration risk group counterparty* and the *firm* demonstrate the ability to make prompt transfer of funds or repayment of liabilities.

3.2.31 G The requirement in ■ BIPRU 3.2.25 R (1)(e) for the prompt repayment of liabilities refers to the prompt repayment of liabilities when due.

3.2.32 G The *guidance* in ■ BIPRU 3.2.30 G - ■ BIPRU 3.2.31 G does not apply to ■ BIPRU 2.1 (Solo consolidation) even though the provisions have similar wording. This is because the purpose of the provisions in ■ BIPRU 2.1 is to define the conditions under which two *undertakings* should be treated as a single *undertaking*. The purpose of ■ BIPRU 3.2.25 R (1) is to define the circumstances in which it is appropriate to apply a zero *risk weight*.

3.2.33 G A *firm* that has chosen to apply the treatment in ■ BIPRU 3.2.25 R should monitor the *exposures* to which a 0% *risk weight* is applied under that treatment and report these to the *appropriate regulator* as required.

3.2.34 G If a *firm* has an *IRB permission* and *exposures* are exempted from the *IRB approach* under ■ BIPRU 4.2.26 R (6) the *firm* may apply a 0% *risk weight* to them under ■ BIPRU 3.2.25 R (2) (Zero risk weighting for intra-group exposures) if the conditions in ■ BIPRU 3.2.25 R (1) are satisfied.

3.2.35 R (1) A *firm* may not apply ■ BIPRU 3.2.25 R unless it has a *core UK group waiver*.

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(2) [deleted]

(3) A *firm* may stop applying ■ BIPRU 3.2.25 R or may stop applying it to some *exposures*.

(4) [deleted]

(5) A *firm* must notify the *appropriate regulator* if it becomes aware that any *exposure* that it has treated as exempt under ■ BIPRU 3.2.25 R has ceased to meet the conditions for exemption or if the *firm* ceases to treat an *exposure* under that *rule*.

3.2.36 G [deleted]

3.2.37 G ■ BIPRU 3 Annex 1 G is a flow chart guide to assessing whether an intra-group *exposure* can be zero *risk weighted* using the *standardised approach* subject to the conditions set out in ■ BIPRU 3.2.25 R - ■ BIPRU 3.2.35 R.

Exposures to recognized third-country investment firms, clearing houses and investment exchanges

3.2.38 R For the purposes of the *standardised approach* (including as it applies for the purposes of ■ BIPRU 14) and without prejudice to ■ BIPRU 13.3.13 R and ■ BIPRU 13.8.8 R (Exposure to a central counterparty), *exposures* to *recognised third country investment firms* and *exposures* to *recognised clearing houses*, *designated clearing houses*, *recognised investment exchanges* and *designated investment exchanges* must be treated as exposures to *institutions*.

[**Note**: *CAD* Article 40]

3.3 The use of the credit assessments of ratings agencies

3.3.1 R An external credit assessment may be used to determine the *risk weight* of an *exposure* in accordance with ■ BIPRU 3.2.20 R to ■ BIPRU 3.2.26 R only if the *ECAI* which provides it is recognised by the *appropriate regulator* as an *eligible ECAI* for the purposes of the standardised approach to credit risk.

[**Note**: *BCD* Article 81(1)]

Recognition of ratings agencies

3.3.2 G The *appropriate regulator* will recognise an *ECAI* as an *eligible ECAI* for the purposes of ■ BIPRU 3, or will refuse to recognise an *ECAI* or will revoke its recognition of an *ECAI* as an *eligible ECAI* in accordance with the *Capital Requirements Regulations 2006*.

3.3.3 G Regulation 22 of the *Capital Requirements Regulations 2006* deals with recognition by the *appropriate regulator* of *eligible ECAIs* for *exposure risk weight* purposes. Regulation 25 deals with revoking recognition.

3.3.4 G The criteria which the *appropriate regulator* must apply when assessing *ECAIs* for recognition for *exposure risk weighting* purposes are set out in Regulation 22 and Schedule 1 to the *Capital Requirements Regulations 2006*. In making an assessment against those criteria and in carrying out the mapping process described in ■ BIPRU 3.3.7 G to ■ BIPRU 3.3.9 G the *appropriate regulator* will have regard to the approach set out in the Committee of European Banking Supervisors' "Guidelines on the recognition of External Credit Assessment Institutions" dated 20 January 2006. The *appropriate regulator* does not expect to recognise an *ECAI* unless the information set out in those guidelines has been submitted to it.

3.3.5 G The list of *eligible ECAIs* is published on the *appropriate regulator* website. When the *appropriate regulator* recognises an *ECAI* as an *eligible ECAI*, it publishes that decision by amending the list of *eligible ECAIs* on the *appropriate regulator* website to include the name of the *eligible ECAI*. When the *appropriate regulator* determines that the recognition of an *ECAI* should be revoked, it publishes that decision by deleting the name of the *ECAI* from the list on the *appropriate regulator* website

3.3.6 G [deleted]

3

Mapping of credit assessments

3.3.7 G Under Regulation 22(3) of the *Capital Requirements Regulations 2006* the *appropriate regulator* is obliged to determine, taking into account the requirements set out in Schedule 2 to the *Capital Requirements Regulations 2006*, with which of the *credit quality steps* set out in Part 1 of Annex VI of the *Banking Consolidation Directive* the relevant credit assessments of an *eligible ECAI* are to be associated. Those determinations should be objective and consistent.

3.3.8 R The *credit quality step* with which a relevant credit assessment of an *eligible ECAI* is to be associated is that in the table mapping the credit assessments of *eligible ECAIs* to *credit quality steps* published by the *appropriate regulator* under Regulation 22(3) of the *Capital Requirements Regulations 2006*.

3.3.9 G The table mapping the credit assessments of *eligible ECAIs* to *credit quality steps* is published on the *appropriate regulator's* website and amended from time to time in line with additions to and deletions from the list of *eligible ECAIs*.

[**Note**: For the most recent version of the table, refer to: http://www.fca.org.uk/your-fca/documents/fsa-ecais-standardised for the *FCA* and http://www.bankofengland.co.uk/publications/Documents/other/pra/policy/2013/ecaisstandardised.pdf for the *PRA*]

3.4 Risk weights under the standardised approach to credit risk

Risk weights: Exposures to central governments or central banks: Treatment

3.4.1 R Without prejudice to ■ BIPRU 3.4.2 R to ■ BIPRU 3.4.9 R, exposures to central governments and central banks must be assigned a 100% *risk weight*.

[**Note**: *BCD* Annex VI Part 1 point 1]

3.4.2 R Subject to ■ BIPRU 3.4.4 R, *exposures* to central governments and *central banks* for which a credit assessment by a *nominated ECAI* is available must be assigned a *risk weight* according to the table in ■ BIPRU 3.4.3 R in accordance with the assignment by the *appropriate regulator* in accordance with the *Capital Requirements Regulations 2006* of the credit assessments of *eligible ECAIs* to six steps in a *credit quality assessment scale*.

[**Note**: *BCD* Annex VI Part 1 point 2]

Table: Exposures to central governments and central banks for which a credit assessment by a nominated ECAI is available

3.4.3 R This table belongs to ■ BIPRU 3.4.2 R.

Credit quality step	1	2	3	4	5	6
Risk weight	0 %	20 %	50 %	100 %	100 %	150 %

3.4.4 R *Exposures* to the European Central Bank must be assigned a 0% *risk weight*.

[**Note**: *BCD* Annex VI Part 1 point 3]

Exposures in the national currency of the borrower

3.4.5 R *Exposures* to the central government of the *UK* and the Bank of England denominated and funded in sterling must be assigned a *risk weight* of 0%.

[**Note**: *BCD* Annex VI Part 1 point 4]

3.4.6 R When the *competent authorities* of a third country which apply supervisory and regulatory arrangements at least equivalent to those applied in the *UK* assign a *risk weight* which is lower than that indicated in ■ BIPRU 3.4.1 R to

■ BIPRU 3.4.3 R to *exposures* to their central government and *central bank* denominated and funded in the domestic currency, a *firm* may *risk weight* such *exposures* in the same manner.

[**Note**: *BCD* Annex VI Part 1 point 5]

3

Use of credit assessments by export credit agencies

3.4.7 R An export credit agency credit assessment may be recognised by a *firm* for the purpose of determining the *risk weight* to be applied to an *exposure* under the *standardised approach* if either of the following conditions is met:

(1) the credit assessment is a consensus risk score from export credit agencies participating in the OECD "Arrangement on Guidelines for Officially Supported Export Credits"; or

(2) the export credit agency publishes its credit assessments, and the export credit agency subscribes to the OECD agreed methodology, and the credit assessment is associated with one of the eight minimum export insurance premiums (MEIP) that the OECD agreed methodology establishes.

[**Note**: *BCD* Annex VI Part 1 point 6]

3.4.8 R *Exposures* for which a credit assessment by an export credit agency is recognised for *risk weighting* purposes must be assigned a *risk weight* according to the table in ■ BIPRU 3.4.9 R.

[**Note**: *BCD* Annex VI Part 1 point 7]

Table: Exposure for which a credit assessment by an export credit agency is recognised

3.4.9 R This table belongs to ■ BIPRU 3.4.8 R.

MEIP	0	1	2	3	4	5	6	7
Risk weight	0%	0%	20%	50%	100%	100%	100%	150%

Exposures to regional governments or local authorities: General

3.4.10 R Without prejudice to ■ BIPRU 3.4.15 R to ■ BIPRU 3.4.19 R:

(1) a *firm* must *risk weight exposures* to regional governments and local authorities in accordance with ■ BIPRU 3.4.11 R to ■ BIPRU 3.4.14 R; and

(2) the preferential treatment for short-term *exposures* specified in ■ BIPRU 3.4.37 R, ■ BIPRU 3.4.39 R and ■ BIPRU 3.4.44 R must not be applied.

[**Note**: *BCD* Annex VI Part 1 point 8]

Exposures to regional governments or local authorities: Central government risk weight based method

3.4.11 R

(1) *Exposures* to regional governments and local authorities must be assigned a *risk weight* according to the *credit quality step* to which *exposures* to the central government of the jurisdiction in which the regional government or local authority is established are assigned in accordance with the table in ■ BIPRU 3.4.12 R.

(2) *Exposures* to an unrated regional government or local authority must not be assigned a *risk weight* lower than that applied to *exposures* to its central government.

[**Note**: *BCD* Annex VI Part 1 points 25 and 26]

Table: Central government risk weight based method

3.4.12 R

This table belongs to ■ BIPRU 3.4.11 R.

Credit quality step to which central government is assigned	1	2	3	4	5	6
Risk weight of *exposure*	20%	50%	100%	100%	100%	150%

3.4.13 R

For *exposures* to regional governments and local authorities established in countries where the central government is unrated, the *risk weight* must be not more than 100%.

[**Note**: *BCD* Annex VI Part 1 point 27]

3.4.14 R

For *exposures* to regional governments and local authorities with an original effective maturity of three months or less, the *risk weight* must be 20%.

[**Note**: *BCD* Annex VI Part 1 point 28]

3.4.15 R

A *firm* must treat an *exposure* to a regional government or local authority of the *United Kingdom* listed in ■ BIPRU 3 Annex 2 R as an *exposure* to the central government of the *United Kingdom*.

[**Note**: *BCD* Annex VI Part 1 point 9]

3.4.16 G

The *appropriate regulator* will include a regional government or local authority in the list in ■ BIPRU 3 Annex 2 R where there is no difference in risk between *exposures* to that body and *exposures* to the central government of the *United Kingdom* because of the specific revenue-raising powers of the regional government or local authority, and the existence of specific institutional arrangements the effect of which is to reduce the risk of default.

[**Note**: *BCD* Annex VI Part 1 point 9]

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3.4.17 R [deleted]

3.4.18 R *Exposures* to churches or religious communities constituted in the form of a legal *person* under public law must, in so far as they raise taxes in accordance with legislation conferring on them the right to do so, be treated as *exposures* to regional governments and local authorities, except that ■ BIPRU 3.4.15 R does not apply.

[**Note**: *BCD* Annex VI Part 1 point 10]

3.4.19 R When competent authorities of a third country jurisdiction which apply supervisory and regulatory arrangements at least equivalent to those applied in the UK treat *exposures* to regional governments and local authorities as *exposures* to their central government, a *firm* may *risk weight exposures* to such regional governments and local authorities in the same manner.

[**Note**: *BCD* Annex VI Part 1 point 11]

3.4.19A R [deleted]

Exposures to administrative bodies and non-commercial undertakings

3.4.20 R ■ BIPRU 3.4.21 R to ■ BIPRU 3.4.26 R set out the provisions applying to *exposures* to administrative bodies and non-commercial *undertakings*.

Treatment

3.4.21 R Without prejudice to ■ BIPRU 3.4.22 R to ■ BIPRU 3.4.26 R, *exposures* to administrative bodies and non-commercial *undertakings* must be assigned a 100% *risk weight*.

[**Note:** *BCD* Annex VI Part 1 point 12]

Public sector entities

3.4.22 R Without prejudice to ■ BIPRU 3.4.23 R to ■ BIPRU 3.4.26 R, *exposures* to *public sector entities* must be assigned a 100% *risk weight*.

[**Note**: *BCD* Annex VI Part 1 point 13]

3.4.23 R A *firm* may treat an *exposure* to a *public sector entity* as an *exposure* to a regional government or local authority in accordance with ■ BIPRU 3.4.11 R to ■ BIPRU 3.4.14 R.

[**Note**: *BCD* Annex VI Part 1 point 14]

3.4.24 R In exceptional circumstances a *firm* may treat an *exposure* to a *public sector entity* established in the *United Kingdom* as an *exposure* to the central government of the *United Kingdom* if there is no difference in risk between *exposures* to that body and *exposures* to the central government of the *United Kingdom* because of the existence of an appropriate guarantee by the central government.

[**Note**: *BCD* Annex VI Part 1 point 15]

3.4.25 R [deleted]

3.4.26 R When *competent authorities* of a third country jurisdiction, which apply supervisory and regulatory arrangements at least equivalent to those applied in the *UK*, treat *exposures* to *public sector entities* as *exposures* to *institutions*, a *firm* may *risk weight exposures* to the relevant *public sector entities* in the same manner.

[**Note**: *BCD* Annex VI Part 1 point 17]

Exposures to multilateral development banks: Treatment

3.4.27 R Without prejudice to ■ BIPRU 3.4.28 R to ■ BIPRU 3.4.29 R:

(1) a *firm* must treat *exposures* to *multilateral development banks* in the same manner as *exposures* to *institutions* in accordance with ■ BIPRU 3.4.34 R to ■ BIPRU 3.4.39 R (Exposures to institutions: credit assessment based method); and

(2) the preferential treatment for short-term *exposures* specified in ■ BIPRU 3.4.37 R, ■ BIPRU 3.4.39 R and ■ BIPRU 3.4.44 R must not be applied.

[**Note**: *BCD* Annex VI Part 1 point 19]

3.4.28 R An *exposure* to a *multilateral development bank* listed in point (a) of the definition in the *Glossary* must be assigned a 0% *risk weight*.

[**Note**: *BCD* Annex VI Part 1 point 20]

3.4.29 R [deleted]

Exposures to international organisations

3.4.30 R *Exposures* to the following *international organisations* must be assigned a 0% *risk weight*:

(1) the *EU;*

(2) the International Monetary Fund; and

(3) the Bank for International Settlements.

[**Note**: *BCD* Annex VI Part 1 point 22]

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Exposures to institutions: General

3.4.31 R ■ BIPRU 3.4.32 R to ■ BIPRU 3.4.47R set out the treatment to be accorded to *exposures* to *institutions*.

Exposures to institutions: Treatment

3.4.32 R Without prejudice to ■ BIPRU 3.4.33 R to ■ BIPRU 3.4.47 R, *exposures* to *financial institutions* authorised and supervised by the *PRA* and *FCA* and subject to prudential requirements equivalent to those applied to credit *institutions* must be *risk weighted* as *exposures* to *institutions*.

[**Note**: *BCD* Annex VI Part 1 point 24]

Exposures to institutions: Risk weight floor on exposures to unrated institutions

3.4.33 R *Exposures* to an unrated *institution* must not be assigned a *risk weight* lower than that applied to *exposures* to its central government.

[**Note**: *BCD* Annex VI Part 1 point 25]

Exposures to institutions: Credit assessment based method

3.4.34 R *Exposures* to *institutions* with a residual maturity of more than three months for which a credit assessment by a *nominated ECAI* is available must be assigned a *risk weight* according to the table in ■ BIPRU 3.4.35 R in accordance with the assignment by the *appropriate regulator* in accordance with the *Capital Requirements Regulations 2006* of the credit assessments of *eligible ECAI*s to six steps in a *credit quality assessment scale*.

[**Note**: *BCD* Annex VI Part 1 point 29]

Table: Exposures to institutions with a residual maturity of more than three months for which a credit assessment by a nominated ECAI is available

3.4.35 R This table belongs to ■ BIPRU 3.4.34 R.

Credit quality step	1	2	3	4	5	6
Risk weight	20%	50%	50%	100%	100%	150%

3.4.36 R Without prejudice to ■ BIPRU 3.4.33 R, *exposures* to unrated *institutions* must be assigned a *risk weight* of 50%.

[**Note**: *BCD* Annex VI Part 1 point 30]

3.4.37 R *Exposures* to an *institution* with a residual maturity of three months or less for which a credit assessment by a *nominated ECAI* is available must be assigned a *risk weight* according to the table in ■ BIPRU 3.4.38 R in accordance with the assignment by the *appropriate regulator* in accordance with the *Capital Requirements Regulations 2006* of the credit assessments of *eligible ECAIs* to six steps in a *credit quality assessment scale*.

[**Note**: *BCD* Annex VI Part 1 point 31]

Table: Exposures to an institution with a residual maturity of three months or less for which a credit assessment by a nominated ECAI is available

3.4.38 R This table belongs to ■ BIPRU 3.4.37 R.

Credit quality step	1	2	3	4	5	6
Risk weight	20%	20%	20%	50%	50%	150%

3.4.39 R Without prejudice to ■ BIPRU 3.4.33 R, *exposures* to unrated *institutions* having an original effective maturity of three months or less must be assigned a 20% *risk weight*

[**Note**: *BCD* Annex VI Part 1 point 32]

Exposures to institutions: Interaction with short-term credit assessments

3.4.40 R If there is no short-term credit assessment as set out in ■ BIPRU 3.4.112 R, the general preferential treatment for short-term *exposures* as specified in ■ BIPRU 3.4.37 R applies to all *exposures* to *institutions* of up to three months residual maturity.

[**Note**: *BCD* Annex VI Part 1 point 34]

3.4.41 R If there is a short-term credit assessment as set out in ■ BIPRU 3.4.112 R and such an assessment determines the application of a more favourable or identical *risk weight* than the use of the general preferential treatment for short-term *exposures*, as specified in ■ BIPRU 3.4.37 R, then the short-term assessment and *risk weighting* specified in ■ BIPRU 3.4.112 R must be used for that specific *exposure* only. Other short-term *exposures* must follow the general preferential treatment for short-term *exposures*, as specified in ■ BIPRU 3.4.37 R.

[**Note**: *BCD* Annex VI Part 1 point 35]

3.4.42 R If there is a short-term credit assessment as set out in ■ BIPRU 3.4.112 R and such an assessment determines a less favourable *risk weight* than the use of the general preferential treatment for short-term *exposures*, as specified in ■ BIPRU 3.4.37 R, then the general preferential treatment for short-term

exposures must not be used and all unrated short-term claims must be assigned the same *risk weight* as that applied by the specific short-term assessment.

[**Note**: *BCD* Annex VI Part 1 point 36]

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3.4.43 G ■ BIPRU 3 Annex 4 G contains a flow diagram guide to determining the *risk weight* to be applied to short-term *exposures* to *institutions* according to whether a short-term credit assessment is available.

Exposures to institutions: Short-term exposures in the national currency of the borrower

3.4.44 R A *firm* may assign to an *exposure* to an *institution* formed under the law of the *United Kingdom* of a residual maturity of 3 months or less denominated and funded in pounds sterling a *risk weight* that is one category less favourable than the preferential *risk weight*, as described in ■ BIPRU 3.4.5 R (Exposures in the national currency of the borrower), assigned to *exposures* to the central government of the *United Kingdom*.

[**Note**: *BCD* Annex VI Part 1 point 37]

3.4.45 R

(1) [deleted]

(2) When the *competent authority* of a third country which applies supervisory and regulatory arrangements at least equivalent to those applied in the *EEA* assigns to an *exposure* to an *institution* formed under the law of that third country of a residual maturity of 3 months or less denominated and funded in the national currency a *risk weight* that is one category less favourable than the preferential *risk weight*, as described in ■ BIPRU 3.4.6 R (Exposures in the national currency of the borrower), assigned to *exposures* to the central government of that third country, a *firm* may *risk weight* such *exposures* in the same manner.

[**Note**: *BCD* Annex VI Part 1 point 37]

3.4.46 R No *exposures* of a residual maturity of 3 months or less denominated and funded in the national currency of the borrower may be assigned a *risk weight* less than 20%.

[**Note**: *BCD* Annex VI Part 1 point 38]

Exposures to institutions: Investments in regulatory capital instruments

3.4.47 R Investments in *equity* or regulatory capital instruments issued by *institutions* must be *risk weighted* at 100%, unless deducted from *capital resources*.

[**Note**: *BCD* Annex VI Part 1 point 39]

3.4.48 R [deleted]

Exposures to corporates: General

3.4.49 G ■ BIPRU 3.4.50 R to ■ BIPRU 3.4.52 R set out the treatment to be accorded to *exposures* to *corporates*.

Exposures to corporates: Treatment

3.4.50 R *Exposures* for which a credit assessment by a *nominated ECAI* is available must be assigned a *risk weight* according to the table in ■ BIPRU 3.4.51 R in accordance with the assignment by the *appropriate regulator* in accordance with the *Capital Requirements Regulations 2006* of the credit assessments of *eligible ECAIs* to six steps in a *credit quality assessment scale*.

[**Note**: *BCD* Annex VI Part 1 point 41]

Table: Exposures for which a credit assessment by a nominated ECAI is available

3.4.51 R This table belongs to ■ BIPRU 3.4.50 R.

Credit quality step	1	2	3	4	5	6
Risk weight	20%	50%	100%	100%	150%	150%

3.4.52 R Unrated *exposures* must be assigned a 100% *risk weight* or the *risk weight* of its central government, whichever is the higher.

[**Note**: *BCD* Annex VI Part 1 point 42]

Retail exposures

3.4.53 R *Exposures* that comply with the criteria listed in ■ BIPRU 3.2.10 R must be assigned a *risk weight* of 75%. However a *firm* may treat such an *exposure* under ■ BIPRU 3.2.24 R (100% *risk weight*).

[**Note**: *BCD* Annex VI Part 1 point 43]

Exposures secured by real estate property

3.4.54 R ■ BIPRU 3.4.55 R to ■ BIPRU 3.4.89R set out the treatment to be accorded to *exposures* secured by real estate property.

3.4.55 R Without prejudice to ■ BIPRU 3.4.56 R to ■ BIPRU 3.4.94 R, *exposures* fully secured by real estate property must be assigned a *risk weight* of 100%.

[**Note**: *BCD* Annex VI Part 1 point 44]

Exposures secured by mortgages on residential property

3.4.56 R Without prejudice to ■ BIPRU 3.4.85 R, an *exposure* or any part of an *exposure* fully and completely secured, to the satisfaction of the *firm*, by mortgages on residential property which is or shall be occupied or let by the owner or the

beneficial owner in the case of personal investment companies must be assigned a *risk weight* of 35%.

[**Note**: *BCD* Annex VI Part 1 point 45]

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3.4.56A R

(1) A *firm* must not treat a *lifetime mortgage* as an *exposure* fully and completely secured on residential property for the purposes of BIPRU 3.4.56 R unless the amount of the *exposure* is calculated according to the following formula:

exposure amount =

$$\frac{P(1+i)^T}{(1+d)^T}$$

where:

(a) *P* is the current outstanding balance on the *lifetime mortgage*;

(b) *i* is the interest rate charged on the *lifetime mortgage*, which for the purposes of this calculation must not be lower than the discount rate referred to in (c);

(c) *d* is the discount rate which is the risk-free rate as represented by the yield on 10-year *UK* government bonds; and

(d) *T* is the projected number of years to maturity of the *exposure*.

(2) Notwithstanding (1)(c), a *firm* may calculate an annual average discount rate provided there is no obvious bias in its calculation and it is consistent in its approach.

3.4.56B G

(1) This paragraph provides *guidance* on ■ BIPRU 3.4.56A R.

(2) For the purposes of ■ BIPRU 3.4.56A R (2), a *firm* may use the FTSE *UK* gilt 10-year yield index which the Council of Mortgage Lenders makes available to its members.

(3) If a *firm* offers a variable interest rate on a *lifetime mortgage*, it should calculate an average interest rate in a way which is consistent with the calculation of the discount rate.

(4) To determine the projected number of years to maturity of the *exposure*, a *firm* may use the standard mortality tables published by the Institute of Actuaries or the Faculty of Actuaries. For internal risk management purposes, the *firm* should use factual data or seek actuarial advice to determine how the information in these tables may be adjusted to take account of regional and other relevant variations.

3.4.57 R

[deleted]

3.4.58 R

Without prejudice to ■ BIPRU 3.4.85 R, an *exposure* or any part of an *exposure* to a tenant under a property leasing transaction concerning residential property under which the *firm* is the lessor and the tenant has an option to purchase, must be assigned a *risk weight* of 35% provided that the *firm* is satisfied that the *exposure* of the *firm* is fully and completely secured by its ownership of the property.

[**Note**: *BCD* Annex VI Part 1 point 47]

3.4.59 G

An Ijara mortgage is an example of an *exposure* described in ■ BIPRU 3.4.58 R.

3.4.60 R

(1) In the exercise of its judgement for the purposes of ■ BIPRU 3.4.56 R to ■ BIPRU 3.4.58 R, a *firm* may be satisfied only if the conditions in (2) to (6) are met.

(2) The value of the property does not materially depend upon the credit quality of the obligor. This requirement does not preclude situations where purely macroeconomic factors affect both the value of the property and the performance of the borrower.

(3) The risk of the borrower does not materially depend upon the performance of the underlying property or project, but rather on the underlying capacity of the borrower to repay the debt from other sources. As such, repayment of the facility does not materially depend on any cash flow generated by the underlying property serving as collateral.

(4) The minimum requirements about:

(a) legal certainty in ■ BIPRU 3.4.64 R;

(b) monitoring of property values in ■ BIPRU 3.4.66 R;

(c) documentation in ■ BIPRU 3.4.72 R; and

(d) insurance in ■ BIPRU 3.4.73 R;

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are met.

(5) The valuation *rules* set out in ■ BIPRU 3.4.77 R to ■ BIPRU 3.4.80 R are met.

(6) The value of the property exceeds the *exposures* by a substantial margin as set out in ■ BIPRU 3.4.81 R, ■ BIPRU 3.4.84 R or ■ BIPRU 3.4.85 R (as applicable).

[**Note**: *BCD* Annex VI Part 1 point 48]

3.4.61 R ■ BIPRU 3.4.60 R (3) does not apply to *exposures* fully and completely secured by mortgages on residential property which is situated within the *United Kingdom*.

[**Note**: *BCD* Annex VI Part 1 point 49]

3.4.62 G The *FCA* may disapply the condition in ■ BIPRU 3.4.60 R (3), if it has evidence that a well-developed and long-established residential real estate market is present in the *UK* with loss rates which are sufficiently low to justify disapplying the condition in ■ BIPRU 3.4.60R(3). ■ BIPRU 3.4.61 R implements that option. However, if the evidence changes so that these conditions are no longer satisfied, the *appropriate regulator* may revoke ■ BIPRU 3.4.61 R.

3.4.63 R [deleted]

3.4.64 R The requirements about legal certainty referred to in ■ BIPRU 3.4.60 R (4)(a) are as follows:

(1) the mortgage or charge must be enforceable in all relevant jurisdictions which are relevant at the time of conclusion of the credit agreement, and the mortgage or charge must be properly filed on a timely basis;

(2) the arrangements must reflect a perfected lien (i.e. all legal requirements for establishing the pledge shall have been fulfilled); and

(3) the protection agreement and the legal process underpinning it must enable the *firm* to realise the value of the protection within a reasonable timeframe.

[**Note**: *BCD* Annex VIII Part 2 point 8(a)]

3.4.65 G The term protection agreement in ■ BIPRU 3.4.64 R (3) refers to the contract or deed by which the mortgage or charge is established.

3.4.66 R (1) The requirements about monitoring of property values referred to in ■ BIPRU 3.4.60 R (4)(b) are as follows:

(a) the value of the property must be monitored on a frequent basis and at a minimum once every three years for residential real estate;

(b) more frequent monitoring must be carried out where the market is subject to significant changes in conditions;

(c) statistical methods may be used to monitor the value of the property and to identify property that needs revaluation;

(d) the property valuation must be reviewed by an independent valuer when information indicates that the value of the property may have declined materially relative to general market prices; and

(e) for loans exceeding €3 million or 5% of the *capital resources* of the *firm*, the property valuation must be reviewed by an independent valuer at least every three years.

(2) For the purposes of (1), 'independent valuer' means a person who possesses the necessary qualifications, ability and experience to execute a valuation and who is independent from the credit decision process.

[**Note**: *BCD* Annex VIII Part 2 point 8(b)]

3.4.67 G A property will need to be revalued over time to ensure that the original purchase price does not overstate the degree of security provided by the property. Ijara providers should undertake revaluations in the same way as providers of conventional mortgages.

3.4.68 G For the purposes of ■ BIPRU 3.4.66 R (1)(a), the monitoring of property values should be an inherent part of risk managing and tracking the portfolio. The requirement to monitor property values does not include the physical assessment of each property in the portfolio.

3.4.69 G For the purposes of ■ BIPRU 3.4.66 R (1)(d) and ■ (e), the review of a property valuation is more in-depth than the normal monitoring process required by ■ BIPRU 3.4.66 R (1)(a). This requirement is likely to include a review of the property value on an individual *exposure* basis. Where an *exposure* is secured by multiple properties, the review can be undertaken at the level of the *exposure*, rather than at the level of each individual property.

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3.4.70 G The review of property values required by ■ BIPRU 3.4.66 R (1)(e) may lead to an amendment of the value assigned to the property under by ■ BIPRU 3.4.80 R.

3.4.71 G For the purposes of ■ BIPRU 3.4.66 R (2), necessary qualifications need not be professional qualifications but the firm should be able to demonstrate that he or she has the necessary ability and experience to undertake the review.

3.4.72 R The requirements about documentation referred to in ■ BIPRU 3.4.60 R (4)(c) are that the types of residential real estate accepted by the *firm* and its lending policies in this regard must be clearly documented.

[**Note**: *BCD* Annex VIII Part 2 point 8(c)]

3.4.73 R The requirements about insurance referred to in ■ BIPRU 3.4.60 R (4)(d) are that the *firm* must have procedures to monitor that the property taken as protection is adequately insured against damage.

[**Note**: *BCD* Annex VIII Part 2 point 8(d)]

3.4.74 G For the purposes of ■ BIPRU 3.4.73 R a *firm* should, as a minimum, ensure that it is a requirement of each loan that the property taken as collateral must have adequate buildings insurance at all times, which should be reviewed when any new loan is extended against the property.

3.4.75 G A *firm* may deal with the risk that insurance on properties taken as protection may be inadequate by taking out insurance at the level of the portfolio.

3.4.76 R The valuation *rules* referred to in ■ BIPRU 3.4.60 R (5) are set out in ■ BIPRU 3.4.77 R to ■ BIPRU 3.4.80 R.

3.4.77 R The property must be valued by an independent valuer at or less than the market value. In the *UK* where rigorous criteria for the assessment of the mortgage lending value exist in statutory or regulatory provisions property may instead be valued by an independent valuer at or less than the mortgage lending value.

[**Note**: *BCD* Annex VIII Part 3 point 62]

3.4.78 R Market value means the estimated amount for which the property should exchange on the date of valuation between a willing buyer and a willing seller in an arm's length transaction after proper marketing wherein the parties had each acted knowledgeably, prudently and without compulsion. The market value must be documented in a transparent and clear manner.

[**Note**: *BCD* Annex VIII Part 3 point 63]

3.4.79 R Mortgage lending value means the value of the property as determined by a prudent assessment of the future marketability of the property taking into account long-term sustainable aspects of the property, the normal and local

market conditions, the current use and alternative appropriate uses of the property. Speculative elements must not be taken into account in the assessment of the mortgage lending value. The mortgage lending value must be documented in a transparent and clear manner.

[**Note**: *BCD* Annex VIII Part 3 point 64]

3.4.80 R The value of the collateral must be the market value or mortgage lending value reduced as appropriate to reflect the results of the monitoring required under ■ BIPRU 3.4.60 R (4)(b) and ■ BIPRU 3.4.66 R and to take account of any prior claims on the property.

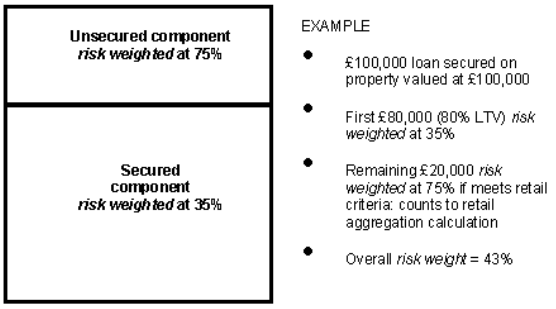
[**Note**: *BCD* Annex VIII Part 3 point 65]

3.4.81 R A *firm* may not treat an *exposure* as fully and completely secured by residential property located in the *United Kingdom* for the purpose of ■ BIPRU 3.4.56 R or ■ BIPRU 3.4.58 R unless the amount of the *exposure* or of the secured part of the *exposure* referred to in ■ BIPRU 3.4.56 R or ■ BIPRU 3.4.58 R, as the case may be, is 80% or less of the value of the residential property on which it is secured.

3.4.82 G

(1) The application of ■ BIPRU 3.4.81 R may be illustrated by an example. If a *firm* has a mortgage *exposure* of £100,000 secured on residential property in the *United Kingdom* that satisfies the criteria listed in ■ BIPRU 3.4.56 R to ■ BIPRU 3.4.80 R and the value of that property is £100,000, then £80,000 of that *exposure* may be treated as fully and completely secured and *risk weighted* at 35%. The remaining £20,000 may be *risk weighted* at 75% provided the *exposure* meets the criteria in ■ BIPRU 3.2.10 R. The portion *risk weighted* at 75% should be treated as a *retail exposure* for the purposes of the aggregation calculations specified in ■ BIPRU 3.2.10 R (3). A diagrammatic illustration of this example is in (2).

(2)



(3) The same approach applies to *exposures* described in ■ BIPRU 3.4.58 R. On initiation a 35% *risk weight* should be applied to the first 80% of the principal/"purchase price" outstanding, with a 75% *risk weight* being applied to the remainder of the principal (assuming that the *exposure* meets the requirements in ■ BIPRU 3.2 to be treated as a *retail exposure*).

3.4.83 R [deleted]

3

3.4.84 R For the purposes of ■ BIPRU 3.4.56 R or ■ BIPRU 3.4.58 R, a *firm* may only treat an *exposure* as fully and completely secured by residential property situated in the territory of a *third-country competent authority* that is listed as equivalent for credit risk in ■ BIPRU 8 Annex 6 R if it would be treated as fully and completely secured under the applicable requirements of that *third-country competent authority* (including any applicable loan-to-value ceiling).

3.4.85 R For the purposes of ■ BIPRU 3.4.56 R or ■ BIPRU 3.4.58 R, where the residential property in question is situated in the territory of a *third-country competent authority* that is not listed as equivalent for credit risk in ■ BIPRU 8 Annex 3 R:

(1) a *firm* must not treat an *exposure* as fully and completely secured by the residential property in question unless the value of the property exceeds the *exposures* by a substantial margin, which must be at least 20%;

(2) the *firm* must apply a *risk weight* of 50% to the *exposure*.

3.4.86 G For the purposes of ■ BIPRU 3.4.85 R (1) and in order to satisfy itself that an *exposure* is fully and completely secured by the relevant property, a *firm* should make its own assessment of the appropriate margin in each case, using its knowledge of the market in the relevant country and of its own portfolio.

3.4.87 G If a *firm* has more than one *exposure* secured on the same property they should be aggregated and treated as if they were a single *exposure* secured on the property for the purposes of ■ BIPRU 3.4.56 R and ■ BIPRU 3.4.58 R and ■ BIPRU 3.4.81 R and ■ BIPRU 3.4.84 R.

3.4.88 G If an *exposure* is secured on property that is used in part for residential purposes in accordance with ■ BIPRU 3.4.56 R and partly for commercial purposes (such as a farm, public house, guest house or shop) it may be treated as secured by residential real estate if the *firm* can demonstrate that the property's main use is, or will be, residential and that the value of the property is not significantly affected by its commercial use.

Exposures secured by mortgages on commercial real estate

3.4.89 R *Exposures* or any part of an *exposure* secured by mortgages on offices or other commercial premises which cannot properly be considered to fall within any other *standardised credit risk exposure class* or to qualify for a lower *risk weight* under ■ BIPRU 3 must be assigned a *risk weight* of 100%.

[**Note**: *BCD* Annex VI Part 1 point 51]

3.4.90 R [deleted]

3.4.91 R [deleted]

3.4.92 R [deleted]

3.4.93 R [deleted]

3.4.94 R [deleted]

Past due items

3.4.95 G ■ BIPRU 3.4.96 R to ■ BIPRU 3.4.101 R set out the treatment to be accorded to past due items.

3.4.96 R Without prejudice to the provisions contained in ■ BIPRU 3.4.97 R to ■ BIPRU 3.4.101 R, the unsecured part of any item that is past due for more than 90 days (irrespective of the amount of that item or of the unsecured portion of that item) must be assigned a *risk weight* of:

(1) 150% if value adjustments are less than 20% of the unsecured part of the *exposure* gross of value adjustments; and

(2) 100% if value adjustments are no less than 20% of the unsecured part of the *exposure* gross of value adjustments.

[**Note**: *BCD* Annex VI Part 1 point 61]

3.4.97 R For the purpose of defining the secured portion of the past due item, eligible collateral and guarantees must be those eligible for *credit risk mitigation* purposes under ■ BIPRU 5.

[**Note**: *BCD* Annex VI Part 1 point 62]

3.4.98 G For the purposes of ■ BIPRU 3.4.97 R, the secured portion of a past due item is dealt with under ■ BIPRU 5 (Credit risk mitigation). A *firm* may treat the secured portion of an *exposure* covered by a mortgage indemnity product that meets the relevant CRM eligibility criteria as secured for the purposes of ■ BIPRU 3.4.97 R. The *risk weight* to be applied to the secured portion is determined under ■ BIPRU 5.7.21 R to ■ BIPRU 5.7.24 R. The *risk weight* of the unsecured portion is determined in accordance with ■ BIPRU 3.4.96 R.

3.4.99 R *Exposures* indicated in ■ BIPRU 3.4.56 R to ■ BIPRU 3.4.61R (Exposures secured by mortgages on residential property) must be assigned a *risk weight* of 100% net of value adjustments if they are past due for more than 90 days. If value adjustments are no less than 20% of the *exposure* gross of value adjustments, the *risk weight* to be assigned to the remainder of the *exposure* is 50%.

[**Note**: *BCD* Annex VI Part 1 point 64]

3.4.100 G The application of ■ BIPRU 3.4.96 R and ■ BIPRU 3.4.99 R may be illustrated on the basis of a £110,000 loan on a property valued at £100,000, where £80,000 of the loan is secured and £30,000 of the exposure is unsecured and provisions of £20,000 are taken:

(1) Option 1 (application of ■ BIPRU 3.4.96 R):

(a) provision of £20,000 taken on £80,000 secured *exposure*;

(b) provision exceeds 20%, so the *firm* should *risk weight* the remaining £60,000 secured *exposure* at 50%;

(c) the *risk weight* to be applied to the unsecured *exposure* of £30,000 is 150%;

(d) the average *risk weight* to be assigned to the net *exposure* of £90,000 is 83%.

(2) Option 2 (application of ■ BIPRU 3.4.99 R):

(a) provision of £20,000 taken on £30,000 unsecured *exposure*;

(b) provision exceeds 20%, so the *firm* should *risk weight* the remaining £10,000 unsecured *exposure* at 100%;

(c) the *risk weight* to be applied to the secured *exposure* of £80,000 is 100%;

(d) the average *risk weight* to be assigned to the net *exposure* of £90,000 is 100%.

3.4.101 R *Exposures* indicated in ■ BIPRU 3.4.89 R (Exposures secured by mortgages on commercial real estate) must be assigned a *risk weight* of 100% if they are past due for more than 90 days.

[**Note**: *BCD* Annex VI Part 1 point 65]

3.4.102 R Non past due items to be assigned a 150% *risk weight* under ■ BIPRU 3.4 and for which value adjustments have been established may be assigned a *risk weight* of:

(1) 100% if value adjustments are no less than 20% of the *exposure* value gross of value adjustments; and

(2) 50%, if value adjustments are no less than 50% of the *exposure* value gross of value adjustments.

[**Note**: *BCD* Annex VI Part 1 point 67]

Items belonging to regulatory high-risk categories

3.4.103 R ■ BIPRU 3.4.104 R sets out the treatment to be accorded to items belonging to regulatory high-risk categories.

3.4.104 R *Exposures* listed in ■ BIPRU 3 Annex 3 R must be assigned a *risk weight* of 150%.

[**Note**: *BCD* Annex VI Part 1 point 66]

3.4.105 G The *exposures* listed in ■ BIPRU 3 Annex 3 R are in the view of the *appropriate regulator* associated with particularly high risk.

[**Note:** *BCD* Annex VI Part 1 point 66]

Exposures in the form of covered bonds

3.4.106 R ■ BIPRU 3.4.107 R to ■ BIPRU 3.4.110 R set out the treatment to be accorded to *exposures* in the form of *covered bonds*.

3.4.107 R (1) *Covered bonds* means covered bonds as defined in the definition in the *Glossary* and collateralised by any of the following eligible assets:

(a) *exposures* to or guaranteed by the *UK* central government, the Bank of England, *public sector entities*, regional governments and local authorities in the *UK*;

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(b) (i) *exposures* to or guaranteed by non-*UK* central governments, non-*UK central banks*, *multilateral development banks*, *international organisations* that qualify for the *credit quality step* 1;

(ii) *exposures* to or guaranteed by non-*UK public sector entities*, non-*UK* regional governments and non-*UK* local authorities that are *risk weighted* as *exposures* to *institutions* or central governments and *central banks* according to ■ BIPRU 3.4.23 R, ■ BIPRU 3.4.24 R, ■ BIPRU 3.4.10 R or ■ BIPRU 3.4.16 G respectively and that qualify for the *credit quality step* 1; and

(iii) *exposures* in the sense of this point (b) that qualify as a minimum for the *credit quality step* 2, provided that they do not exceed 20% of the nominal amount of outstanding *covered bonds* of issuing *institutions*;

(c) *exposures* to *institutions* that qualify for the *credit quality step* 1 but so that:

(i) the total exposure of this kind must not exceed 15% of the nominal amount of the outstanding *covered bonds* of the issuing *credit institution*;

(ii) *exposures* caused by transmission and management of payments of the obligors of, or liquidation proceeds in respect of, loans secured by real estate to the holders of *covered bonds* must not be comprised by the 15% limit; and

(iii) *exposures* to *institutions* in the *EEA* with a maturity not exceeding 100 days are not comprised by the step 1 requirement but those *institutions* must as a minimum qualify for *credit quality step* 2;

(d) [deleted]

(e) (i) [deleted]

(ii) [deleted]

(iii) a *firm* may recognise loans secured by commercial real estate as eligible where the loan to value ratio of 60% is exceeded up to a maximum level of 70% if the value of the total assets pledged as collateral for the *covered bonds* exceed the nominal amount outstanding on the *covered bond* by at least 10%, and the bondholders' claim meets the legal certainty requirements set out in ■ BIPRU 3 and ■ BIPRU 5; the bondholders' claim must take priority over all other claims on the collateral;

(f) loans secured by ships where only liens that are combined with any prior liens within 60% of the value of the pledged ship.

(2) [deleted]

(3) For the purposes of ■ BIPRU 3.4.107 R to ■ BIPRU 3.4.110 R "collateralised" includes situations where the assets described in subpoints (1)(a) to (1)(f) are exclusively dedicated in law to the protection of the bond-holders against losses.

(4) [deleted]

(4A) [deleted]

(5) [deleted]

[**Note**: *BCD* Annex VI Part 1 point 68]

3.4.108 R A *firm* must for real estate collateralising *covered bonds* meet the minimum requirements set out in ■ BIPRU 3.4.64 R to ■ BIPRU 3.4.73 R and the valuation rules set out in ■ BIPRU 3.4.77 R to ■ BIPRU 3.4.80 R.

[**Note**: *BCD* Annex VI Part 1 point 69]

3.4.109 R Notwithstanding ■ BIPRU 3.4.107 R to ■ BIPRU 3.4.108 R, *covered bonds* meeting the definition in the *Glossary* and issued before 31 December 2007 are also eligible for the preferential treatment until their maturity.

[**Note**: *BCD* Annex VI Part 1 point 70]

3.4.110 R *Covered bonds* must be assigned a *risk weight* on the basis of the *risk weight* assigned to senior unsecured *exposures* to the *credit institution* which issues them. The following correspondence between *risk weights* applies:

(1) if the *exposures* to the *institution* are assigned a *risk weight* of 20%, the *covered bond* must be assigned a *risk weight* of 10%;

(2) if the *exposures* to the *institution* are assigned a *risk weight* of 50%, the *covered bond* must be assigned a *risk weight* of 20%;

(3) if the *exposures* to the *institution* are assigned a *risk weight* of 100%, the *covered bond* must be assigned a *risk weight* of 50%; and

(4) if the *exposures* to the *institution* are assigned a *risk weight* of 150%, the *covered bond* must be assigned a *risk weight* of 100%.

[**Note**: *BCD* Annex VI Part 1 point 71]

Items representing securitisation positions

3.4.111 R *Risk weighted exposure* amounts for *securitisation* positions must be determined in accordance with ■ BIPRU 9.

[**Note**: *BCD* Annex VI Part 1 point 72]

Exposures to institutions and corporates with a short-term credit assessment

3.4.112 R *Exposures* to *institutions* where ■ BIPRU 3.4.34 R to ■ BIPRU 3.4.39 R apply, and *exposures* to *corporates* for which a short-term credit assessment by a *nominated ECAI* is available must be assigned a *risk weight* according to the table in ■ BIPRU 3.4.113 R in accordance with the mapping by the *appropriate regulator* in accordance with the *Capital Requirements Regulations 2006* of the credit assessments of *eligible ECAIs* to six steps in a *credit quality assessment scale*.

[**Note**: *BCD* Annex VI Part 1 point 73]

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Table: Exposures to institutions where BIPRU 3.4.34 R to BIPRU 3.4.39 R apply, and exposures to corporates for which a short-term credit assessment by a nominated ECAI is available

3.4.113 R This table belongs to ■ BIPRU 3.4.112 R.

Credit quality step	1	2	3	4	5	6
Risk weight	20%	50%	100%	150%	150%	150%

Exposures in the form of collective investment undertakings (CIUs)

3.4.114 R ■ BIPRU 3.4.115 R to ■ BIPRU 3.4.125 R set out the treatment to be accorded to *exposures* in the form of *CIUs*.

3.4.115 R Without prejudice to ■ BIPRU 3.4.116 R to ■ BIPRU 3.4.125 R, *exposures* in *CIUs* must be assigned a *risk weight* of 100%.

[**Note**: *BCD* Annex VI Part 1 point 74]

3.4.116 R *Exposures* in the form of *CIUs* for which a credit assessment by a *nominated ECAI* is available must be assigned a *risk weight* according to the table in ■ BIPRU 3.4.117 R in accordance with the assignment by the *appropriate regulator* in accordance with the *Capital Requirements Regulations 2006* of the credit assessments of *eligible ECAIs* to six steps in a *credit quality assessment scale*.

[**Note**: *BCD* Annex VI Part 1 point 75]

3.4.117 R Table: Exposures in the form of CIUs for which a credit assessment by a nominated ECAI is available

This table belongs to ■ BIPRU 3.4.116 R.

Credit quality step	1	2	3	4	5	6
Risk weight	20%	50%	100%	100%	150%	150%

3.4.118 R Where a *firm* considers that a position in a *CIU* is associated with particularly high risks it must assign that position a *risk weight* of 150%.

[**Note**: *BCD* Annex VI Part 1 point 76]

3.4.119 G A *firm* should consider a *CIU* as being high risk where there is no external credit assessment from an *eligible ECAI* and where the *CIU* has specific features (such as high levels of leverage or lack of transparency) that prevent it from meeting the eligibility criteria laid out in ■ BIPRU 3.4.121 R.

3.4.120 G Other examples of high risk *CIUs* are: one in which a substantial element of the *CIU's* property is made up of items that would attract a *risk weight* of over 100%; or one whose mandate (as referred to in ■ BIPRU 3.4.124 R) would permit it to invest in a substantial amount of such items.

3.4.121 R Where ■ BIPRU 3.4.116 R does not apply, a *firm* may determine the *risk weight* for a *CIU* as set out in ■ BIPRU 3.4.123 R to ■ BIPRU 3.4.125 R, if the following eligibility criteria are met:

(1) one of the following conditions is satisfied:

(a) the *CIU* is managed by a company which is subject to supervision in the *UK*; or

(b) the following conditions are satisfied:

(i) the *CIU* is managed by a company which is subject to supervision that is equivalent to that laid down in UK law; and

(ii) cooperation between *competent authorities* and *third country competent authorities* is sufficiently ensured; and

(2) the *CIU's* prospectus or equivalent document includes:

(a) the categories of assets in which the *CIU* is authorised to invest; and

(b) if investment limits apply, the relative limits and the methodologies to calculate them; and

(3) the business of the *CIU* is reported on at least an annual basis to enable an assessment to be made of the assets and liabilities, income and operations over the reporting period.

[**Note**: *BCD* Annex VI Part 1 point 77]

3.4.122 R [deleted]

3.4.123 R Where a *firm* is aware of the underlying *exposures* of a *CIU*, it may look through to those underlying *exposures* in order to calculate an average *risk weight* for the *CIU* in accordance with the *standardised approach*.

[**Note**: *BCD* Annex VI Part 1 point 79]

3.4.124 R Where a *firm* is not aware of the underlying *exposures* of a *CIU*, it may calculate an average *risk weight* for the *CIU* in accordance with the *standardised approach* subject to the following rules: it will be assumed that the *CIU* first invests, to the maximum extent allowed under its mandate, in the *standardised credit risk exposure classes* attracting the highest capital requirement, and then continues making investments in descending order until the maximum total investment limit is reached.

[**Note**: *BCD* Annex VI Part 1 point 80]

3.4.125 R A *firm* may rely on a third party to calculate and report, in accordance with the methods set out in ■ BIPRU 3.4.123 R to ■ BIPRU 3.4.124 R, a *risk weight* for the *CIU* provided that the correctness of the calculation and report is adequately ensured.

[**Note**: *BCD* Annex VI Part 1 point 81]

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Other items

3.4.126 R ■ BIPRU 3.4.127 R to ■ BIPRU 3.4.133 R set out the treatment to be accorded to other items as referred to in ■ BIPRU 3.2.9 R (16).

Treatment

3.4.127 R Tangible assets within the meaning of Article 4(10) of the *Bank Accounts Directive* must be assigned a *risk weight* of 100%.

[**Note**: *BCD* Annex VI Part 1 point 82]

3.4.128 R Prepayments and accrued income for which a *firm* is unable to determine the counterparty in accordance with the *Bank Accounts Directive*, must be assigned a *risk weight* of 100%.

[**Note**: *BCD* Annex VI Part 1 point 83]

3.4.129 R Cash items in the process of collection must be assigned a 20% *risk weight*. Cash in hand and equivalent cash items must be assigned a 0% *risk weight*.

[**Note**: *BCD* Annex VI Part 1 point 84]

3.4.130 R Holdings of equity and other participations except where deducted from *capital resources* must be assigned a *risk weight* of at least 100%.

[**Note**: *BCD* Annex VI Part 1 point 86]

3.4.131 R Gold bullion held in own vaults or on an allocated basis to the extent backed by bullion liabilities must be assigned a 0% *risk weight*.

[**Note**: *BCD* Annex VI Part 1 point 87]

3.4.132 R In the case of asset sale and *repurchase agreements* and outright forward purchases, the *risk weight* must be that assigned to the assets in question and not to the counterparties to the transactions.

[**Note**: *BCD* Annex VI Part 1 point 88]

3.4.133 R Where a *firm* provides credit protection for a number of *exposures* under terms that the nth default among the *exposures* triggers payment and that this credit event terminates the contract, and where the product has an external credit assessment from an *eligible ECAI* the *risk weights* prescribed in ■ BIPRU 9 must be assigned. If the product is not rated by an *eligible ECAI*, the *risk weights* of the *exposures* included in the basket must be aggregated, excluding n-1 *exposures*, up to a maximum of 1250% and multiplied by the nominal amount of the protection provided by the credit derivative to obtain the *risk weighted* asset amount. The n-1 *exposures* to be excluded from the aggregation must be determined on the basis that they include those *exposures* each of which produces a lower *risk weighted exposure amount* than the *risk weighted exposure amount* of any of the *exposures* included in the aggregation.

[**Note**: *BCD* Annex VI Part 1 point 89]

3.4.134 R The *exposure* value for leases must be the discounted minimum lease payments. Minimum lease payments are the payments over the lease term that the lessee is or can be required to make and any bargain option (i.e. an option the exercise of which is reasonably certain). Any guaranteed residual value fulfilling the set of conditions in ■ BIPRU 5.7.1 R (Eligibility), regarding the eligibility of protection providers as well as the minimum requirements for recognising other types of guarantees provided in ■ BIPRU 5.7.6 R (Minimum requirements: General) to ■ BIPRU 5.7.12 R(Additional requirements for guarantees) must also be included in the minimum lease payments. These *exposures* must be assigned to the relevant *exposure* class in accordance with ■ BIPRU 3.2.9 R, ■ BIPRU 3.2.10 R, ■ BIPRU 3.2.11 R, ■ BIPRU 3.2.12 R, ■ BIPRU 3.2.13 R and ■ BIPRU 3.2.14 G. When the *exposure* is a residual value of leased properties, the *risk weighted exposure amounts* must be calculated as follows:

1/t * 100% * *exposure* value;

where t is the greater of 1 and the nearest number of whole years of the lease term remaining.

[**Note:** *BCD* Annex VI Part 1, point 90]

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3.5 Simplified method of calculating risk weights

3.5.1 G This section (■ BIPRU 3.5) sets out a simplified approach to calculating *risk weights*. This approach is only relevant to an *exposure* class for which *risk weights* are determined by the ratings of a *nominated ECAI* or an export credit agency. For other *exposure* classes a *firm* should use the normal approach under the *standardised approach*.

3.5.2 G The approach in this section is only likely to be relevant for a *limited licence firm* or a *limited activity firm* that has only incidental credit *exposures* and for whom it would be prohibitively costly to establish the systems needed to include the credit assessments of *ECAIs* and export credit agencies in its regulatory capital calculations. However the approach may be used by other *firms* if appropriate. A *firm* should notify the *appropriate regulator* if it adopts the approach in this section.

3.5.3 G Rather than *risk weighting exposures* individually, a *firm* eligible to apply the simplified approach should apply a single *risk weight* to all *exposures* in each *exposure* class. The simplified *risk weight* for *exposures* in a particular class will be the *risk weighting* for unrated entities for each *exposure* class in which the external credit assessments influence *risk weights*.

3.5.4 G The table in ■ BIPRU 3.5.5 G has a summary of the *risk weights* that a *firm* should use if it uses the simplified method of calculating *risk weights* referred to in ■ BIPRU 3.5.1 G.

3.5.5 G Table : Simplified method of calculating risk weights

This table belongs to ■ BIPRU 3.5.4 G.

Exposure class	Exposure sub-class	Risk weights	Comments
Central government	*Exposures* to *United Kingdom* government or Bank of England in sterling	0%	

Exposure class	Exposure sub-class	Risk weights	Comments
	Exposures to central governments or *central banks* of certain countries outside the *UK* in currency of that country	See next column	The *risk weight* is whatever it is under local law. See BIPRU 3.4.6 R for precise details.
	Other *exposures*	100%	
Regional/local governments	*Exposures* to the Scottish Parliament, National Assembly for Wales and Northern Ireland Assembly in sterling	0%	
	Exposures to local or regional governments of certain countries outside the *UK* in currency of that country	0%	See BIPRU 3.4.19 R for details of type of local/regional government covered. See Note.
	Exposures to *United Kingdom* local/regional government in sterling if the *exposure* has original effective maturity of 3 months or less	20%	
	Exposures to local or regional governments of countries outside the *UK* in currency of that country if the *exposure* has original effective maturity of 3 months or less	20%	See Note.
	Other *exposures*	100%	
PSE	*Exposures* to a *PSE* of the *United Kingdom* if that *PSE* is guaranteed by central government and if the *exposure* is in sterling.	0%	BIPRU 3.4.24 R describes the *United Kingdom PSEs* covered.

Exposure class	Exposure sub-class	Risk weights	Comments
	Exposures to *PSE* of a country outside the *UK* if that *PSE* is guaranteed by the country's central government and if the *exposure* is in currency of that country.	0%	See BIPRU 3.4.26 R and Note.
	Exposures to a *PSE* of the *United Kingdom* in sterling if the *exposure* has original effective maturity of 3 months or less	20%	
	Exposures to *PSE* of a country outside the *UK* in currency of that country if the *exposure* has original effective maturity of 3 months or less	20%	See Note.
	Other *exposures*	100%	
Multilateral development banks	*Exposures* to *multilateral development banks* listed in paragraph (1) of the *Glossary* definition	0%	Simplified approach does not apply. Normal *rules* apply.
	Other *exposures*	Various	Treated as an *institution*
EU, The International Monetary Fund and the Bank for International Settlements		0%	Simplified approach does not apply. Normal *rules* apply.
Institutions	*Exposures* to *United Kingdom institution* in sterling with original effective maturity of three months or less	20%	

Exposure class	Exposure sub-class	Risk weights	Comments
	Exposures to *institution* with a head office in a country outside the *UK* in the currency of that country with original effective maturity of three months or less	20%	See Note.
	Exposures to *United Kingdom institution* in sterling with original effective maturity of over three months	50%	
	Exposures to *institution* with a head office in a country outside the *UK* in the currency of that country with original effective maturity of over three months	50%	See Note.
	Other *exposures*	100%	
Corporates		100%	
Retail exposures		75%	Simplified approach does not apply. Normal *rules* apply.
Mortgages on residential or commercial property		Various	Simplified approach does not apply. Normal *rules* apply.
Past due items		Various	Simplified approach does not apply. Normal *rules* apply.
High risk items		150%	Simplified approach does not apply. Normal *rules* apply.
Covered bonds		Various	*Risk weights* are based on the *risk weight* of issuer as described in BIPRU 3.4.110 R. The *risk weight* of the issuer for this purpose should

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Exposure class	Exposure sub-class	Risk weights	Comments
			be calculated under the simplified approach.
Securitisation exposures		Generally 1250%. May look through to underlying *exposures* if BIPRU 9 allows.	Use the BIPRU 9 *rules* for unrated *exposures* under the *standardised approach*
Short term *exposures* with rating			See BIPRU 3.4.112 R. Not applicable as uses *ECAI* ratings.
CIUs	May look through to underlying under BIPRU 3.4.123 R	Various	Simplified approach does not apply. Normal *rules* apply. May use simplified approach to underlying if simplified approach applies to underlying.
	May use average *risk weight* under BIPRU 3.4.124 R	Various	Simplified approach does not apply. Normal *rules* apply. May use simplified approach to underlyings if simplified approach applies to underlying.
	High risk under BIPRU 3.4.118 R	150%	Simplified approach does not apply. Normal *rules* apply.
	Others	100%	
Other items under BIPRU 3.2.9 R (16)		Various	Simplified approach does not apply. Normal *rules* apply.

Note: The *risk weight* should not be lower than the *risk weight* that applies for national currency *exposures* of the central government of the third country in question under BIPRU 3.5. That means that this *risk weight* only applies if the third country is one of those to which BIPRU 3.4.6 R (Preferential *risk weight* for *exposures* of the central government of countries outside the *UK* that apply equivalent prudential standards) applies.

3.5.6 G If an *exposure* is guaranteed and if under ■ BIPRU 5 the *firm* may treat the *exposure* as being to the guarantor, the simplified approach may be used for the guarantor. The key provisions are ■ BIPRU 5.7.23 R to ■ BIPRU 5.7.25 R.

3.5.7 G If an *exposure* is collateralised and if under ■ BIPRU 5 the *firm* may recognise the collateral, the simplified approach may be used to determine the *risk weight* to be applied to the collateralised *exposure*. The key provisions are ■ BIPRU 5.4.18 R to ■ BIPRU 5.4.21 R.

3.5.8 R If a *firm* does not nominate one or more *eligible ECAIs* as referred to in ■ BIPRU 3.6.4 R the *firm* must not use the *financial collateral comprehensive method*.

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3.6 Use of rating agencies' credit assessments for the determination of risk weights under the standardised approach to credit risk

3.6.1 R The use of *ECAI* credit assessments for the calculation of a *firm's risk weighted exposure amounts* must be consistent and in accordance with BIPRU 3.6. Credit assessments must not be used selectively.

[**Note**: *BCD* Article 83(1)]

3.6.2 R Where the *appropriate regulator's* recognition of an *ECAI* is not limited to its solicited credit assessments, a *firm* may use an unsolicited credit assessment of an *eligible ECAI* for the calculation of a *firm's risk weighted exposure amounts*.

[**Note**: *BCD* Article 83(2)]

3.6.3 G The *appropriate regulator's* recognition of an *ECAI* may be limited to its solicited credit assessments. Where this is the case a *firm* should not use unsolicited assessments. The *appropriate regulator* may indicate that the unsolicited ratings of an *eligible ECAI* are not to be used for the purposes of BIPRU 3 if those assessments are considered to be inferior in quality to the general quality of solicited assessments or if it considers that the *ECAI's* strategy in relation to the issuing of unsolicited assessments is founded in the placing of undue pressure on the rated entity to pay for a rating.

Treatment

3.6.4 R A *firm* may nominate one or more *eligible ECAIs* to be used for the determination of *risk weights* to be assigned to asset and off-balance sheet items.

[**Note**: *BCD* Annex VI Part 3 point 1]

3.6.5 R A *firm* which decides to use the credit assessments produced by an *eligible ECAI* for a certain class of items must use those credit assessments consistently for all *exposures* belonging to that class.

[**Note**: *BCD* Annex VI Part 3 point 2]

3.6.6 R A *firm* which decides to use the credit assessments produced by an *eligible ECAI* must use them in a continuous and consistent way over time.

[**Note**: *BCD* Annex VI Part 3 point 3]

3.6.7 R A *firm* can only use *ECAIs*' credit assessments that take into account all amounts both in principal and in interest owed to it.

[**Note**: *BCD* Annex VI Part 3 point 4]

3.6.8 R If only one credit assessment is available from a *nominated ECAI* for a rated item, that credit assessment must be used to determine the *risk weight* for that item.

[**Note**: *BCD* Annex VI Part 3 point 5]

3.6.9 R If two credit assessments are available from *nominated ECAIs* and the two correspond to different *risk weights* for a rated item, the higher *risk weight* must be applied.

[**Note**: *BCD* Annex VI Part 3 point 6]

3.6.10 R If more than two credit assessments are available from *nominated ECAIs* for a rated item, the two assessments generating the two lowest *risk weights* must be referred to. If the two lowest *risk weights* are different, the higher *risk weight* must be assigned. If the two lowest *risk weights* are the same, that *risk weight* must be assigned.

[**Note**: *BCD* Annex VI Part 3 point 7]

3.6.11 R

(1) If a *firm* has decided to make use of the credit assessments of export credit agencies, when *risk weighting exposures* to central governments or *central banks*, if two or more credit assessments are available to a *firm* from export credit agencies or if credit assessments are available to a *firm* from both *nominated ECAIs* and export credit agencies, the *firm* must adopt the approach in this *rule*.

(2) If two credit assessments are available and correspond to different *risk weights* for a rated item, the higher *risk weight* must be applied.

(3) If more than two credit assessments are available for a rated item, the assessments generating the two lowest *risk weights* must be referred to:

(a) if the two lowest *risk weights* are the same, that *risk weight* must be applied; or

(b) if the two lowest *risk weights* are different, the higher of the two must be applied.

(4) If a *firm* does not for the purposes of ■ BIPRU 3 make any use of the consensus risk scores referred to in ■ BIPRU 3.4.7 R (1) it may treat those scores as not being available to it for the purpose of this *rule*. Likewise, if a *firm* does not for the purposes of ■ BIPRU 3 make any use of the credit assessments of a particular export credit agency as

referred to in ■ BIPRU 3.4.7 R (2) it may treat those assessments as not being available to it for the purpose of this *rule*.

Issuer and issue credit assessment

3

3.6.12 R Where a credit assessment exists for a specific issuing program or facility to which the item constituting the *exposure* belongs, this credit assessment must be used to determine the *risk weight* to be assigned to that item.

[**Note**: *BCD* Annex VI Part 3 point 8]

3.6.13 R Where no directly applicable credit assessment exists for a certain item, but a credit assessment exists for a specific issuing program or facility to which the item constituting the *exposure* does not belong or a general credit assessment exists for the issuer, then that credit assessment must be used if it produces a higher *risk weight* than would otherwise be the case or if it produces a lower *risk weight* and the *exposure* in question ranks pari passu or senior in all respects to the specific issuing program or facility or to senior unsecured *exposures* of that issuer as relevant.

[**Note**: *BCD* Annex VI Part 3 point 9]

3.6.14 R ■ BIPRU 3.6.12 R and ■ BIPRU 3.6.13 R are not to prevent the application of ■ BIPRU 3.4.107 R to ■ BIPRU 3.4.110 R (Exposures in the form of covered bonds).

[**Note**:*BCD* Annex VI Part 3 point 10]

3.6.15 R Credit assessments for issuers within a corporate group cannot be used as credit assessment of another issuer within the same corporate group.

[**Note**: *BCD* Annex VI Part 3 point 11]

Long-term and short-term credit assessments

3.6.16 R Short-term credit assessments may only be used for short-term asset and off-balance sheet items constituting *exposures* to *institutions* and *corporates*.

[**Note**: *BCD* Annex VI Part 3 point 12]

3.6.17 R Any short-term credit assessment may only apply to the item the short-term credit assessment refers to, and it must not be used to derive *risk weights* for any other item.

[**Note**: *BCD* Annex VI Part 3 point 13]

3.6.18 R Notwithstanding ■ BIPRU 3.6.17 R, if a short-term rated facility is assigned a 150% *risk weight*, then all unrated unsecured *exposures* on that obligor whether short-term or long-term must also be assigned a 150% *risk weight*.

[**Note**: *BCD* Annex VI Part 3 point 14]

3.6.19 R Notwithstanding ■ BIPRU 3.6.17 R, if a short-term rated facility is assigned a 50% *risk weight*, no unrated short-term *exposure* may be assigned a *risk weight* lower than 100%.

[**Note**: *BCD* Annex VI Part 3 point 15]

Domestic and foreign currency items

3.6.20 R A credit assessment that refers to an item denominated in the obligor's domestic currency cannot be used to derive a *risk weight* for another *exposure* on that same obligor that is denominated in a foreign currency.

[**Note**: *BCD* Annex VI Part 3 point 16]

3.6.21 R Notwithstanding ■ BIPRU 3.6.20 R, when an *exposure* arises through a *firm's* participation in a loan that has been extended by a *multilateral development bank* whose preferred creditor status is recognised in the market, the credit assessment on the obligors' domestic currency item may be used for *risk weighting* purposes.

[**Note**: *BCD* Annex VI Part 3 point 17]

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3.7 Classification of off-balance-sheet items

3.7.1 R In accordance with ■ BIPRU 3.2.1 R (2) and ■ BIPRU 3.2.2 R, a *firm* must:

(1) assign an off-balance sheet item listed in the table in ■ BIPRU 3.7.2 R to the risk category indicated in column 1 of that table; and

(2) determine the *exposure* value of that item as the percentage of its value for the appropriate risk category as set out in column 3 of the table in ■ BIPRU 3.7.2 R.

Table: Classification of off-balance-sheet items

3.7.2 R This table belongs to ■ BIPRU 3.7.1 R

[**Note**: *BCD* Annex II]

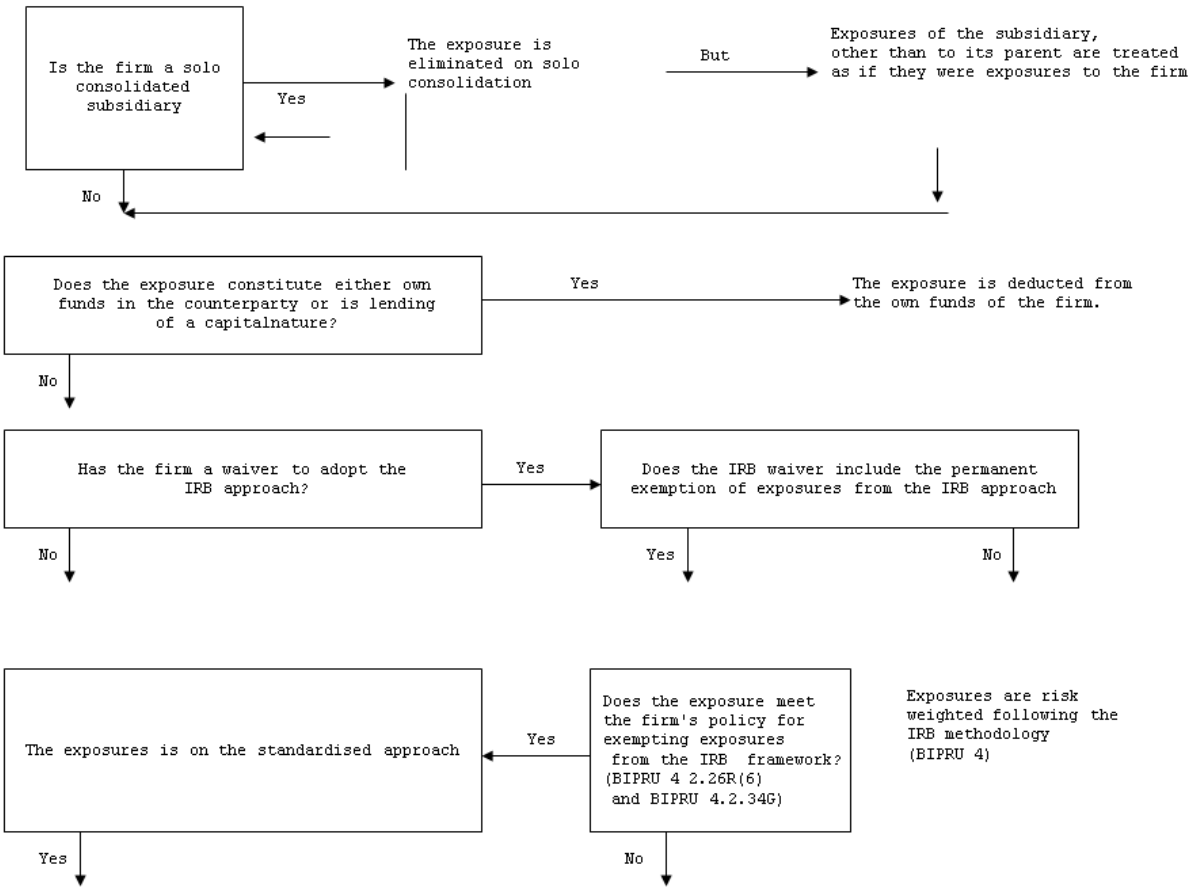
Category	Item	Percentage
Full risk	Guarantees having the character of credit substitutes	100%
	Credit derivatives	
	Acceptances	
	Endorsements on bills not bearing the name of another *credit institution*	
	Transactions with recourse	
	Irrevocable standby letters of credit having the character of credit substitutes	
	Assets purchased under outright forward purchase agreements	
	Forward deposits	
	The unpaid portion of partly-paid *shares* and *securities*	
	Asset sale and repurchase agreements as defined in Article 12(3) and (5) of the *Bank Accounts Directive*	
	Other items also carrying full risk	
Medium risk	Documentary credits issued and confirmed (see also medium/low risk).	50%
	Warranties and indemnities (including tender, performance, customs and tax	

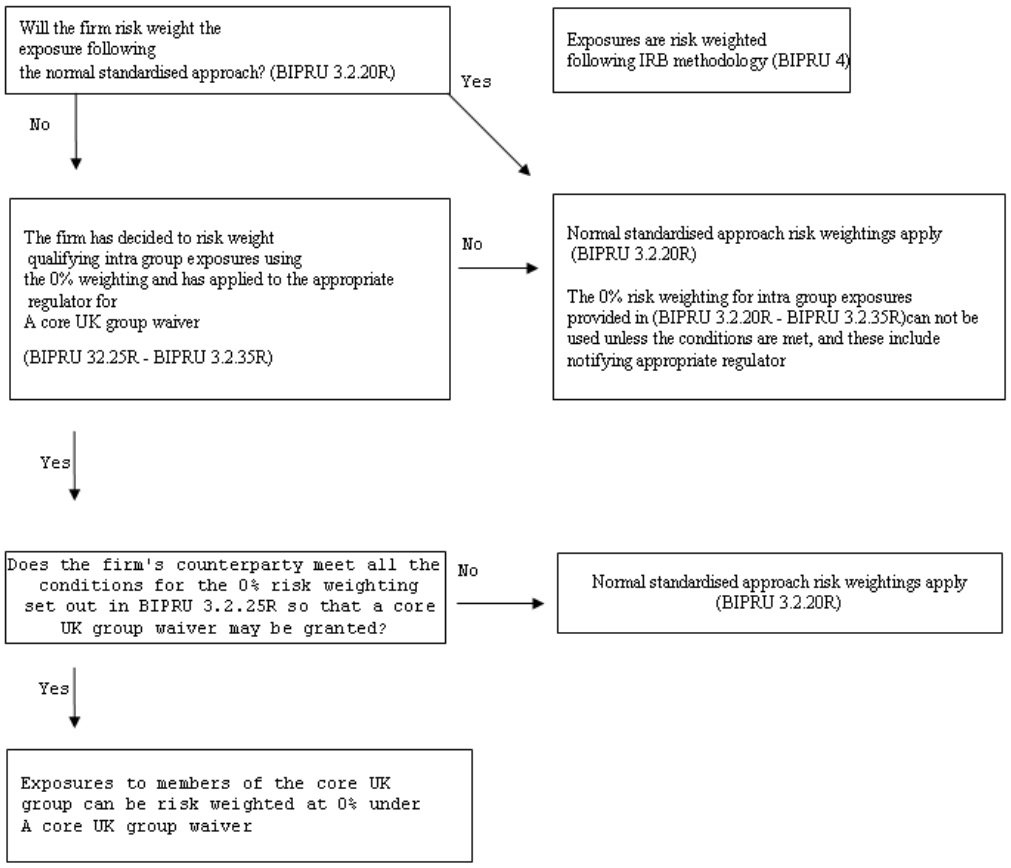
Category	Item	Percentage
	bonds) and guarantees not having the character of credit substitutes.	
	Irrevocable standby letters of credit not having the character of credit substitutes.	
	Undrawn credit facilities (agreements to lend, purchase *securities*, provide guarantees or acceptance facilities) with an original maturity of more than one year.	
	Note issuance facilities (NIFs) and revolving underwriting facilities (RUFs).	
Medium/low risk	Documentary credits in which underlying shipment acts as collateral and other self-liquidating transactions.	20%
	Undrawn credit facilities (agreements to lend, purchase *securities*, provide guarantees or acceptance facilities) with an original maturity of up to and including one year which may not be cancelled unconditionally at any time without notice or that do not effectively provide for automatic cancellation due to deterioration in a borrower's creditworthiness.	
Low risk	Undrawn credit facilities (agreements to lend, purchase *securities*, provide guarantees or acceptance facilities) which may be cancelled unconditionally at any time without notice, or that do effectively provide for automatic cancellation due to deterioration in a borrower's creditworthiness. Retail credit lines may be considered as unconditionally cancellable if the terms permit the *firm* to cancel them to the full extent allowable under consumer protection and related legislation.	0%

Guidance on the standardised approach zero risk weighting for intra-group exposures

This flow chart belongs to ■ BIPRU 3.2.25 R - ■ BIPRU 3.2.35 R.

Flowchart - zero risk weighting for intra-group exposures




Will the firm risk weight the exposure following the normal standardised approach? (BIPRU 3.2.20R)
Yes
Exposures are risk weighted following IRB methodology (BIPRU 4)
No
The firm has decided to risk weight qualifying intra group exposures using the 0% weighting and has applied to the appropriate regulator for A core UK group waiver
(BIPRU 32.25R - BIPRU 3.2.35R)
No
Normal standardised approach risk weightings apply (BIPRU 3.2.20R)
The 0% risk weighting for intra group exposures provided in (BIPRU 3.2.20R - BIPRU 3.2.35R)can not be used unless the conditions are met, and these include notifying appropriate regulator
Yes
Does the firm's counterparty meet all the conditions for the 0% risk weighting set out in BIPRU 3.2.25R so that a core UK group waiver may be granted?
No
Normal standardised approach risk weightings apply (BIPRU 3.2.20R)
Yes
Exposures to members of the core UK group can be risk weighted at 0% under A core UK group waiver

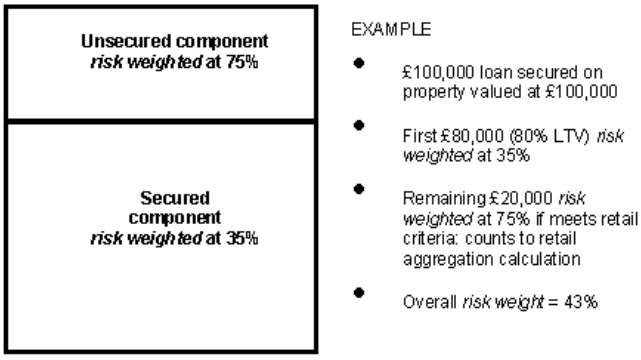
Regional governments and local authorities eligible for the treatment in BIPRU 3.4.15R

(1)	The Scottish Parliament
(2)	National Assembly for Wales
(3)	Northern Ireland Assembly

High risk exposures

(1)	*Exposures* arising out of *venture capital business* (whether or not the *firm* itself carries on the *venture capital business*).
(2)	Any *exposure* of the type referred to in BIPRU 3.4.118 R (High risk position in a *CIU*) that is illiquid and held with a view to long-term sale or realisation.

Exposures to institutions: Interaction with short-term credit assessments in BIPRU 3.4.40R



Chapter 4

The IRB approach

4

4.1 The IRB approach: Application, purpose and overview

Application

4.1.1 R ■ BIPRU 4 applies to a*BIPRU firm* with an *IRB permission*.

Purpose

4.1.2 G Pursuant to the third paragraph of article 95(2) of the *UK CRR*, ■ BIPRU 4 applies requirements that correspond to the following provisions of the *Banking Consolidation Directive*:

(1) Articles 84 - 89; and

(2) Annex VII.

4.1.3 G Pursuant to the third paragraph of article 95(2) of the *UK CRR*, ■ BIPRU 4 also applies requirements that correspond to Annex VIII of the *Banking Consolidation Directive* so far as it applies to the *IRB approach*. In particular, it applies requirements corresponding to (in part):

(1) from Part 1 of that Annex, points 12-16, 19-22, 26(g)(ii) and 27;

(2) from Part 2 of that Annex, points 8-11; and

(3) from Part 3 of that Annex, points 1, 11, 20, 23-24, 58(h), 61, 64-79 and 90-93.

4.1.4 G Similarly, ■ BIPRU 4 also applies requirements that correspond to article 40 of the *Capital Adequacy Directive* as it applies to the *IRB approach*.

4.1.5 G Other material on the *IRB approach* can be found in ■ BIPRU 8 (Group risk), ■ BIPRU 9 (Securitisation), ■ BIPRU 13 (The calculation of exposure values for financial derivatives, securities financing transactions and long settlement transactions) and ■ BIPRU 14 (Capital requirements for settlement and counterparty risk). ■ BIPRU 5 (Credit risk mitigation) also contains material applicable to the *IRB approach*.

Overview

4.1.6 G The *IRB approach* is an alternative to the *standardised approach* for calculating a *firm's* credit risk capital requirements. It may be applied to all a *firm's exposures* or to some of them, subject to various limitations on partial use as set out in ■ BIPRU 4.2. Under the *IRB approach* capital requirements are

based on a *firm's* own estimates of certain parameters together with other parameters set out in ■ BIPRU 4.

4.1.7 G *Exposures* are divided into a number of distinct *exposure* classes. These are listed in ■ BIPRU 4.3.2 R. There is a special treatment for purchased receivables, although they do not form an *exposure* class on their own.

4.1.8 G For *exposures* in the *sovereign, institution and corporate IRB exposure class*, there is a *foundation IRB approach* under which a *firm* provides its own estimates of *PD* and an *advanced IRB approach* under which a *firm* additionally provides its own estimates of *LGD* and *conversion factors*. The distinction between the *foundation IRB approach* and the *advanced IRB approach* only applies to this *IRB exposure class*.

4.1.9 G For *retail exposures*, a *firm* provides its own estimates of *PD*, *LGD* and *conversion factors*.

4.1.10 G For the *corporate exposure* class there is a separate sub-class of *specialised lending exposure*. A *firm* may calculate *risk weights* for these *exposures*, where it is able to do so, in the same way as it does for the rest of its *corporate exposure* class, i.e. using the *foundation IRB approach* or the *advanced IRB approach*. Where a *firm* is not able to use this approach it may calculate *risk weights* for *specialised lending exposures* by slotting them into predetermined *risk weights*.

4.1.11 G For *equity exposures* there are two approaches based on market based measures and a third under which a *firm* uses its own estimates of *PD* only.

IRB permissions: general

4.1.12 G The *rules* in *GENPRU* and *BIPRU* do not allow a *firm* to use the *IRB approach*. A *firm* that wishes to use the *IRB approach* should therefore apply for permission to use the *IRB approach* using the application procedure explained in ■ BIPRU 1.3. If a *firm's* application is granted, its terms will be set out in an *IRB permission*.

4.1.13 G The *appropriate regulator* recognises that the nature of *IRB approaches* will vary between *firms*. The scope of and the requirements and conditions set out in an *IRB permission* may therefore differ in substance or detail from ■ BIPRU 4 in order to address individual circumstances adequately. The *FCA* will consider any differences by having regard to the *Banking Consolidation Directive*. An *IRB permission* will implement any such variation by modifying the relevant provisions of *GENPRU* and *BIPRU*. An *IRB permission* may also include additional conditions to meet the particular circumstances of the *firm*.

4.1.14 G (1) The *appropriate regulator* will only grant an *IRB permission* if it is satisfied that the *firm's* systems for the management and rating of credit risk *exposures* are sound and implemented with integrity and,

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in particular, that they meet the standards in ■ BIPRU 4.2.2 R in accordance with the *minimum IRB standards*.

(2) Under ■ BIPRU 4.2.11 R, a *firm* applying for an *IRB permission* is required to demonstrate that it has been using for the *IRB exposure classes* in question *rating systems* that were broadly in line with the *minimum IRB standards* for internal risk measurement and management purposes for at least three years prior to the date of its *IRB permission*.

(3) Under ■ BIPRU 4.2.13 R, a *firm* applying for the use of own estimates of *LGDs* and/or *conversion factors* should demonstrate that it has been estimating and employing own estimates of *LGDs* and/or *conversion factors* in a manner that was broadly consistent with the *minimum IRB standards* for use of own estimates for at least three years prior to the date of its *IRB permission* or of a variation of its *IRB permission* that, in either case, entitles the *firm* to use own estimates of *LGDs* and/or *conversion factors*.

Link to standard rules: Incorporation of the IRB output into the capital calculation

4.1.15 G An *IRB permission* will modify ■ GENPRU 2.1.51 R (Calculation of the credit risk capital requirement) by amending, to the extent set out in the *IRB permission*, the calculation of the *credit risk capital requirement* in accordance with ■ BIPRU 4 and the other provisions of the *Handbook* relating to the *IRB approach*.

4.1.16 R A *firm* must calculate its *credit risk capital component* as the sum of:

(1) (for *exposures* to which the *standardised approach* is applied) the *credit risk capital component* as calculated under ■ BIPRU 3.1.5 R; and

(2) (for *exposures* to which the *IRB approach* is applied to which the *standardised approach* would otherwise apply in accordance with ■ BIPRU 3.1.5 R (Credit risk capital component)), 8% of the total of the *firm's risk weighted exposure amounts* calculated in accordance with the *IRB approach*.

4.1.17 G For *exposures* covered by an *IRB permission*, ■ BIPRU 5 (Credit risk mitigation) is modified by ■ BIPRU 4.10.

4.1.18 G Under ■ BIPRU 4.9, a *firm* is required to deal with *securitisation positions* under those provisions of ■ BIPRU 9 applicable to a *firm* using the *IRB approach*.

4.1.19 G *Exposures* treated under ■ BIPRU 13 are required to be dealt with in accordance with the *IRB approach* to the extent set out in ■ BIPRU 13.

4.1.20 G By modifying ■ GENPRU 2.1.51 R to allow the *firm* to use the *IRB approach* to calculate all or part of its *risk weighted exposure amounts*, the *appropriate regulator* is treating it like an application *rule*. The modification means that

the provisions of *BIPRU* relating to the *IRB approach* supersede the *rules* relating to the *standardised approach* for *exposures* coming within the scope of the *IRB permission*.

4.1.21 R A reference in the *Handbook* to a provision of the *IRB approach*, in the case of a *firm*:

(1) excludes any provision of the *IRB approach* set out in the *Handbook* that is not applied to that *firm* by its *IRB permission*;

(2) includes any additional provision contained in the *firm's IRB permission*; and

(3) takes into account any other amendments made to the provisions in the *Handbook* relating to the *IRB approach* made by the *firm's IRB permission*.

4.1.22 R To the extent that a *firm's IRB permission* does not allow it to use a particular approach in the *Handbook* relating to the *IRB approach* the *Handbook* provision in question does not apply to the *firm*.

4.1.23 R If a provision of the *Handbook* relating to the *IRB approach* says that a *firm* may do something if its *IRB permission* allows it, a *firm* may do that thing unless its *IRB permission* expressly says that it may not do so except that:

(1) ■ BIPRU 4.2.18 R - ■ BIPRU 4.2.19 R (Sequential implementation of IRB approach) and ■ BIPRU 4.2.26 R (1)-■ BIPRU 4.2.26R (5) (Combined use of standardised approach with IRB approach) only apply if expressly permitted by a *firm's IRB permission*;

(2) a *firm* may not use the *advanced IRB approach* for the *sovereign, institution and corporate IRB exposure class* except to the extent expressly permitted by the *firm's IRB permission*;

(3) if a *firm* uses its own estimates of *LGD* and *conversion factors* it may only take into account *unfunded credit protection* to reduce *LGD* in the manner set out in its *IRB permission*;

(4) if a *firm* uses its own estimates of *LGD* and *conversion factors* it may only recognise the effects of financial collateral in the manner set out in its *IRB permission*;

(5) a *firm* must deal with *equity exposures* in the manner set out in its *IRB permission*; and

(6) a *firm* may not recognise as eligible collateral an item of a type referred to in ■ BIPRU 4.10.16 R (Other physical collateral) unless that item is of a type specified as permitted in its *IRB permission*.

[**Note:** *BCD* Annex VIII Part 1 point 21]

4.1.24 G An *IRB permission* will set out *firm*-specific material. This will generally include:

(1) details about the *firm's* methodology for carrying out the *IRB approach*, including the models and *rating systems* that a *firm* should use;

(2) reporting requirements; and

(3) requirements about internal control structure.

Compliance

4.1.25 R If a *firm* ceases to comply with the requirements of the *IRB approach*, it must either present to the *appropriate regulator* a plan for a timely return to compliance or demonstrate that the effect of non-compliance is immaterial.

[**Note**: *BCD* Article 84(5)]

4.1.26 G If a *firm* ceases to comply with the requirements of the *IRB approach*, the *appropriate regulator* may revoke the *IRB permission* or take other appropriate supervisory action.

4.1.27 G For the purposes of ■ BIPRU 4.1.25 R, the *appropriate regulator* will expect a *firm* to demonstrate that, taking into account all instances where the *firm* has not complied with the requirements of the *IRB approach*, the effect of non-compliance is immaterial.

4.2 The IRB approach: High level material

Application

4.2.1 R This section applies to all *exposures* treated under the *IRB approach*.

General approach to granting an IRB permission

4.2.2 R A *firm's* systems for the management and rating of credit risk *exposures* must be sound and implemented with integrity and, in particular, they must meet the following standards in accordance with the *minimum IRB standards*:

(1) the *firm's rating systems* provide for a meaningful assessment of obligor and transaction characteristics, a meaningful differentiation of risk and accurate and consistent quantitative estimates of risk;

(2) internal ratings and *default* and *loss* estimates used in the calculation of capital requirements and associated systems and processes play an essential role in the risk management and decision-making process, and in the credit approval, internal capital allocation and corporate governance functions of the *firm*;

(3) the *firm* has a credit risk control unit responsible for its *rating systems* that is appropriately independent and free from undue influence;

(4) the *firm* collects and stores all relevant data to provide effective support to its credit risk measurement and management process; and

(5) the *firm* documents its *rating systems*, the rationale for their design and validates its rating systems.

[**Note:** *BCD* Article 84(2) (part)]

4.2.3 R Where a *parent institution in the UK* and its *subsidiary undertakings* or a *parent financial holding company in the UK* and its *subsidiary undertakings* or a *parent mixed financial holding company in the UK* and its *subsidiary undertakings* use the *IRB approach* on a unified basis, the question whether the *minimum IRB standards* are met is answered by considering the *parent undertaking* and its *subsidiary undertakings* together, unless the *firm's IRB permission* specifies otherwise.

[**Note**: *BCD* Article 84(2) (part)]

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Outsourcing

4.2.4 G

(1) This *guidance* sets out the basis on which a *firm* may rely upon a *rating system* or data provided by another member of its *group*.

(2) A *firm* may rely upon a *rating system* or data provided by another member of its *group* if the following conditions are satisfied:

(a) the *firm* only does so to the extent that it is appropriate, given the nature and scale of the *firm's* business and portfolios and the *firm's* position within the *group*;

(b) the *group* is an *banking and investment group*;

(c) the integrity of the *firm's* systems and controls is not adversely affected;

(d) the outsourcing of these functions meets the requirements of *SYSC*; and

(e) (if the provision of the *rating system* or data is not carried out in the *United Kingdom*) the *firm* can demonstrate to the *appropriate regulator* that the ability of the *appropriate regulator* to carry out their responsibilities under the *Handbook* is not adversely affected.

(3) If a *firm* does use a *rating system* or data provided by another member of its *group*, the requirements in ■ BIPRU 4 continue to apply to that *firm* in respect of that *rating system* and data. A *firm* cannot absolve itself of the responsibility for complying with those requirements by claiming that any breach is caused by the actions of a third party to which the *firm* has delegated tasks. The *rating system* and data provision are still those of the *firm*, even though personnel elsewhere in the *firm's* group are carrying out these functions on its behalf. So any references in *BIPRU* to what a *firm*, its personnel and its management should and should not do still apply.

(4) If a *firm* does use a *rating system* or data provided by another *group* member, the *firm's governing body* should formally delegate those functions to the *persons* or bodies that are to carry them out.

(5) Before delegating the provision of a *rating system* or data to another *group* member, the firm's *governing body* should have explicitly considered the arrangement and decided that it is appropriate and that it enables the *firm* to meet the conditions in (2).

Assessment and estimation

4.2.5 G

(1) This paragraph provides *guidance* on ■ BIPRU 4.2.2 R and in particular ■ BIPRU 4.2.2 R (1).

(2) The information that a *firm* produces or uses for the purpose of the *IRB approach* should be reliable and take proper account of the different users of the information produced (customers, shareholders, regulators and other market participants).

(3) A *firm* should establish quantified and documented targets and standards, against which it should test the accuracy of data used in its *rating systems*.

(4) Tests under (3) might include:

(a) report and accounts reconciliation, including completeness in relation to (b);

(b) whether every *exposure* has a *PD*, *LGD* and, if applicable, *conversion factor* for reporting purposes;

(c) whether the *firm's* risk control environment has key risk indicators for the purpose of monitoring and ensuring data accuracy;

(d) whether the *firm* has an adequate business and information technology infrastructure with fully documented processes;

(e) whether the *firm* has clear and documented standards on ownership of data (including inputs and manipulation) and timeliness of current data (daily, monthly, real time); and

(f) whether the *firm* has a comprehensive quantitative audit programme.

(5) The reconciliation referred to in 4(a) should be reasonably fit for purpose. In particular it should meet the standards in (6) and (7).

(6) For data inputs, testing for accuracy of data, including the reconciliation referred to in 4(a), should be sufficiently detailed so that, together with other available evidence, it gives reasonable assurance that data input into the *rating system* is accurate, complete and appropriate. Input data fails the required standard if it gives rise to a serious risk of material misstatement in the capital requirement either immediately or subsequently.

(7) For data outputs, the *firm*, as part of the reconciliation referred to in 4(a), should be able to identify and explain material differences between the outputs produced under accounting standards and those produced under the requirements of the *IRB approach*, including in relation to areas that address similar concepts in different ways (for example *expected loss* on the one hand and accounting provisions on the other).

(8) A *firm* should have clear and documented standards and policies about the use of data in practice (including information technology standards) which should in particular cover the *firm's* approach to the following:

(a) data access and security;

(b) data integrity, including the accuracy, completeness, appropriateness and testing of data; and

(c) data availability.

Further requirements concerning the use test

4.2.6 R If a *firm* uses separate models for the purpose of the *IRB approach* and for its internal purposes as referred to in ■ BIPRU 4.2.2 R (2) it must be able to demonstrate the reasonableness of any differences between those models.

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4.2.7 G

(1) This paragraph provides *guidance* on ■ BIPRU 4.2.2 R and in particular ■ BIPRU 4.2.2 R (2).

(2) The *IRB approach* as applicable to a *firm* should be an integral part of its business and risk management processes and procedures to the extent that credit risk is relevant to them. It should also have a substantial influence on its decision-making and actions.

(a) particular regard should be had to the use of the *IRB approach* in:

(i) credit approval;

(ii) individual and portfolio limit setting;

(iii) reporting of credit risk information; and

(iv) provisioning;

(b) other relevant aspects include:

(i) assessment of economic capital;

(ii) internal capital allocation so far as related to credit risk;

(iii) risk appetite;

(iv) strategy and acquisitions;

(v) profitability and performance; and

(vi) performance-related remuneration;

(c) the carrying out of the *firm's* obligations under the *overall Pillar 2 rule*; and

(d) matters relating to the *firm's* infrastructure, including information technology, skills and resources and organisational culture.

4.2.8 G

This paragraph provides further *guidance* on ■ BIPRU 4.2.2 R and in particular ■ BIPRU 4.2.2 R (2). In the *appropriate regulator's* view risk management has an essential role in informing risk decisions. However, an essential role does not necessarily mean an exclusive role or even always a primary role. There may be justifiable differences between the *IRB approach* and the *firm's* use of *rating systems* for its internal purposes as referred to in ■ BIPRU 4.2.2 R (2). For example, internal standards and policies may refer to estimates of *PD* and *LGD* for the length of the asset rather than to estimates based on a one-year period (in the case of *PD* estimates) or on an economic downturn (in the case of LGD estimates) required by the *IRB approach*.

4.2.9 G

If a *firm* uses scorecards for its internal credit approval process and the models it uses for the purpose of the *IRB approach* are fundamentally different from those scorecards, a *firm's* demonstration of how this is compatible with ■ BIPRU 4.2.2 R (2) might include demonstrating that estimates calculated under the *IRB approach* are used to change sanctioning decisions at an individual or portfolio level. Examples of this might include amending cut-offs, the application of policy rules, the revision of an existing scorecard or the introduction of a new one or taking strategic decisions on which segments of the market to target.

4.2.10 G To the extent that a *firm* uses *LGD* estimates in its internal risk management processes that differ from the downturn *LGDs* used in the calculation of *risk weighted* assets (see ■ BIPRU 4.3.103 R), the reasons for the difference should be documented in accordance with ■ BIPRU 4.3.109 R.

Requirements concerning the experience requirement

4.2.11 R A *firm* must be able to demonstrate that it has been using for the *IRB exposure classes* in question *rating systems* that were broadly in line with the *minimum IRB standards* for internal risk measurement and management purposes for at least three years prior to the date of its *IRB permission*.

[**Note:** *BCD* Article 84(3)]

4.2.12 G In meeting the experience requirement under ■ BIPRU 4.2.11 R, the *appropriate regulator* would expect a *firm* to be able to demonstrate that it has been:

(1) operating an internal *rating system* with estimates of *PD*;

(2) meeting the standards in ■ BIPRU 4 for senior management knowledge and reporting; and

(3) meeting the standards in ■ BIPRU 4 relating to the use of *rating systems* in its business;

for the required minimum 3 year period.

4.2.13 R A *firm* that has applied for the use of own estimates of *LGDs* and/or *conversion factors* must be able to demonstrate to the *appropriate regulator* that it has been estimating and employing own estimates of *LGDs* and/or *conversion factors* in a manner that was broadly consistent with the *minimum IRB standards* for use of own estimates of those parameters for at least three years prior to the date of its *IRB permission* or of a variation of its *IRB permission* that, in either case, entitled the *firm* to use own estimates of *LGDs* and/or *conversion factors*.

[**Note:** *BCD* Article 84(4)]

4.2.14 G In meeting the experience requirement under ■ BIPRU 4.2.13 R, the *appropriate regulator* would expect a *firm* to be able to demonstrate that it has been:

(1) operating an internal *rating system* with estimates of *LGD* and with *conversion factors*; and

(2) compliant with ■ BIPRU 4.2.11 R as applied to the *advanced IRB approach*.

for the required minimum 3 year period.

4.2.15 G In the *appropriate regulator's* view the standard required by ■ BIPRU 4.2.11 R and ■ BIPRU 4.2.13 R is for a *rating system* to be improved in the light of experience during the three year period so that it meets the minimum

requirements more fully for the last year than for the two prior years, provided that the *rating system* has not changed so profoundly that experience from the first or second years becomes of marginal relevance in assessing the reliability of the changed *rating system*.

Implementation of the internal ratings based approach

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4.2.16 R A *firm* must comply with any requirements in its *IRB permission* relating to the matters described in ■ BIPRU 4.2.17 R - ■ BIPRU 4.2.35 G.

4.2.17 R Without prejudice to ■ BIPRU 4.2.26 R, a *firm* and any *parent undertaking* and its *subsidiary undertakings* must implement the *IRB approach* for all *exposures*.

[**Note**: *BCD* Article 85(1) (part)]

4.2.18 R To the extent that a *firm's IRB permission* permits this, implementation may be carried out sequentially across the different *IRB exposure classes* within the same business unit, across different business units in the same group or for the use of own estimates of *LGDs* or *conversion factors* for the calculation of *risk weights* for the *sovereign, institution and corporate IRB exposure class*.

[**Note:** *BCD* Article 85(1) (part)]

4.2.19 R In the case of the *retail exposures*, implementation may (but only to the extent provided for in the *firm's IRB permission*) be carried out sequentially across the categories of *exposures* to which the different correlations in ■ BIPRU 4.6.41 R-■ BIPRU 4.6.44 R correspond.

[**Note:** *BCD* Article 85(1) (part)]

4.2.20 R

(1) Implementation of the *IRB approach* as referred to in ■ BIPRU 4.2.18 R must be carried out within a reasonable period of time as set out in the *IRB permission*.

(2) The implementation must be carried out subject to strict conditions determined by the *appropriate regulator* and set out in the *IRB permission*.

(3) A *firm* must not use the flexibility under ■ BIPRU 4.2.18 R selectively with the purpose of achieving reduced minimum capital requirements in respect of those *IRB exposure classes* or business units that are yet to be included in the *IRB approach* or in the use of own estimates of *LGDs* and *conversion factors*.

[**Note:** *BCD* Article 85(2)]

4.2.21 G

(1) A *firm* should achieve full roll-out of the *IRB approach* to all its *exposures*, subject to the exemptions outlined in ■ BIPRU 4.2.26 R, within the period specified in its *IRB permission*. A *firm* should not retain a permanent mix of portfolios on the *standardised approach* and the *IRB approach*, on the *foundation IRB approach* and the

advanced IRB approach or on a mixture of all approaches with the exception of portfolios covered by those exemptions.

(2) This applies to a move:

(a) from the *standardised approach* to the *IRB approach*;

(b) from the *foundation IRB approach* to the *advanced IRB approach*; and

(c) from the transitional *rules* and *guidance* for *BIPRU* to the *IRB approach*.

(3) The period referred to in ■ BIPRU 4.2.20 R (1) will generally be not more than three years of starting use of the *IRB approach* or the *advanced IRB approach* as applicable.

4.2.22 R A *firm* using the *IRB approach* for any *IRB exposure class* must at the same time use the *IRB approach* for the *equity exposure* class.

[**Note:** *BCD* Article 85(3)]

4.2.23 R Subject to ■ BIPRU 4.2.17 R - ■ BIPRU 4.2.20 R, ■ BIPRU 4.2.22 R and ■ BIPRU 4.2.26 R, a *firm* that has an *IRB permission* must not use the *standardised approach* for the calculation of *risk weighted exposure amounts* for the *exposures* to which the *IRB approach* applies under the *IRB permission*.

[**Note:** *BCD* Article 85(4)]

4.2.24 R Subject to ■ BIPRU 4.2.17 R - ■ BIPRU 4.2.22 R and ■ BIPRU 4.2.26 R, a *firm* whose *IRB permission* provides for the use of the *advanced IRB approach* for the calculation of *LGDs* and *conversion factors* for the *sovereign, institution and corporate IRB exposure class* must not use the *LGD* values and *conversion factors* applicable to the *foundation IRB approach* for the *exposures* to which the *advanced IRB approach* applies under the *IRB permission*.

[**Note:** *BCD* Article 85(5)]

4.2.25 G The *appropriate regulator* will not agree to a *firm's* request to revoke or vary its *IRB permission* so as to permit the *firm* to revert to the *standardised approach* except for demonstrated good cause. Likewise, the *appropriate regulator* will not agree to a *firm's* request to revoke or vary its *IRB permission* so as to permit the *firm* to revert to the *foundation IRB approach* if the *IRB permission* provides for it to use the *advanced IRB approach*, except for demonstrated good cause.

Combined use of methodologies: Basic provisions

4.2.26 R (1) To the extent that its *IRB permission* permits this, a *firm* permitted to use the *IRB approach* in the calculation of *risk weighted exposure amounts* and *expected loss* amounts for one or more *IRB exposure classes* may apply the *standardised approach* in accordance with this *rule*.

(2) A *firm* may apply the *standardised approach* to the *IRB exposure class* referred to in ■ BIPRU 4.3.2 R (1) (Sovereigns) where the number of material counterparties is limited and it would be unduly burdensome for the *firm* to implement a *rating system* for these counterparties. A firm may include in this treatment an *exposure* of the type described in ■ BIPRU 3.4.18 R (Exposures to churches or religious communities) that would fall within ■ BIPRU 3.4.15 R (Exposure to a regional government or local authority) if that provision had not been excluded by ■ BIPRU 3.4.18 R.

(3) A *firm* may apply the *standardised approach* to the *IRB exposure class* referred to in ■ BIPRU 4.3.2 R (2) (Institutions), where the number of material counterparties is limited and it would be unduly burdensome for the *firm* to implement a *rating system* for these counterparties.

(4) A *firm* may apply the *standardised approach* to *exposures* in non-significant business units as well as *IRB exposure classes* that are immaterial in terms of size and perceived risk profile.

(5) A *firm* may apply the *standardised approach* to *exposures* to the *UK*'s central and regional governments, local authorities and administrative bodies, provided that:

(a) there is no difference in risk between the *exposures* to the central government and those other *exposures* because of specific public arrangements; and

(b) *exposures* to the central government are assigned a 0% *risk weight* under the *standardised approach*.

(6) A *firm* may apply the *standardised approach* to *exposures* of a *firm* to a counterparty which is its *parent undertaking*, its *subsidiary undertaking* or a *subsidiary undertaking* of its *parent undertaking* provided that the counterparty is an *institution*, a *financial holding company*, a *mixed financial holding company*, a *financial institution*, an *asset management company* or an *ancillary services undertaking* subject to appropriate prudential requirements.

(7) A *firm* may apply the *standardised approach* to *equity exposures* to entities whose credit obligations qualify for a 0% *risk weight* under the *standardised approach* (including those publicly sponsored entities where a zero *risk weight* can be applied).

(8) A *firm* may apply the *standardised approach* to *equity exposures* incurred under legislative programmes to promote specified sectors of the economy that provide significant subsidies for the investment to the *firm* and involve some form of government oversight and restrictions on the *equity* investments. This exclusion is limited to an aggregate of 10% of *capital resources*.

(9) [deleted]

(10) A *firm* may apply the *standardised approach* to state and state-reinsured guarantees pursuant to ■ BIPRU 5.7.12 R (Conditions for state and state-reinsured guarantees).

[**Note:** *BCD* Article 89(1)]

Combined use of methodologies: Documentation

4.2.27 G As part of the application for an *IRB permission*, a *firm* should have a well documented policy explaining the basis on which *exposures* are to be selected for permanent exemption from the *IRB approach* and for treatment under the *standardised approach*. The *firm's* roll out plan should also contain provisions for the continuing application of that policy on a consistent basis over time.

Combined use of methodologies: Sovereign and institutional, exposures

4.2.28 G A *firm* intending to make use of ■ BIPRU 4.2.26 R (2) or ■ BIPRU 4.2.26 R (3) should demonstrate to the *appropriate regulator* when applying for an *IRB permission* that it meets the requirements of those provisions with respect to its sovereign or, as the case may be, institutional, *exposures*.

Combined use of methodologies: Meaning of non-significance and immateriality

4.2.29 R For the purposes of ■ BIPRU 4.2.26 R (4), the *equity exposure IRB exposure class* of a *firm* must be considered material if its aggregate value, excluding *equity exposures* incurred under legislative programmes as referred to in ■ BIPRU 4.2.26 R (8) but including *exposures* in a *CIU* treated as *equity exposures* in accordance with ■ BIPRU 4.9.11 R to ■ BIPRU 4.9.15 R, exceeds, on average over the preceding year, 10% of the *firm's capital resources*. If the number of those *equity exposures* is less than 10 individual holdings, that threshold is 5% of the *firm's capital resources*.

[**Note:** *BCD* Article 89(2)]

4.2.30 R

(1) This *rule* sets out what must be treated as being non-significant business or immaterial for the purposes of ■ BIPRU 4.2.26 R (4), for *exposures* that do not fall within the *equity exposure IRB exposure class*.

(2) A *firm* may elect permanently to exclude *exposures* from the *IRB approach* and apply the *standardised approach*. However a *firm* may only make use of this exemption to the extent that:

(a) the *consolidated credit risk requirement* (adjusted under (6)) so far as it is attributable to the excluded *exposures*;

would be no more than 15% of:

(b) the *consolidated credit risk requirement* (adjusted under (6)) with respect to all *exposures* (including the ones dealt with under (a)).

(3) *Exposures* excluded under ■ BIPRU 4.2.29 R or ■ BIPRU 4.2.26 R (2), ■ BIPRU 4.2.26 R (3) and ■ BIPRU 4.2.26 R (5)-■ BIPRU 4.2.26 R (7) must not be included in (a) or (b).

(4) The calculation in (2)(a) is based on the *standardised approach*.

(5) The calculation in (2)(b) is based on whichever of the *standardised approach* and the *IRB approach* would apply to the *exposures* referred to in (2)(b) at the time when the calculation is being made.

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(6) The *consolidated credit risk requirement* is adjusted for the purposes of this *rule* as follows:

(a) only the elements based on the *credit risk capital component* and the *counterparty risk capital component* are being taken into account; and

(b) the calculation is carried out with respect to the group of *undertakings* referred to in ■ BIPRU 4.2.17 R.

(7) If a group with respect to which the calculation in this *rule* is being carried out is not required to calculate the *consolidated credit risk requirement*, the calculations in this *rule* must be carried out as if it were.

4.2.31 R If a *firm* applies to use the *advanced IRB approach* for the *sovereign, institution and corporate IRB exposure class*, ■ BIPRU 4.2.26 R (4) also applies with respect to *exposures* in that class. For these purposes, to the extent permitted in the *firm's IRB permission*, a *firm* may:

(1) exclude some *exposures* from the *IRB approach* and apply the *standardised approach* to those *exposures*; and

(2) exclude other *exposures* from the *advanced IRB approach* and apply the *foundation IRB approach* to those *exposures*.

4.2.32 G Where ■ BIPRU 4.2.31 R applies:

(1) the 15% limit in ■ BIPRU 4.2.30 R (2) is a combined limit for excluded *exposures* remaining on the *standardised approach* and excluded *exposures* remaining on the *foundation IRB approach*; and

(2) the calculation in ■ BIPRU 4.2.30 R (2)(a) is carried out under whichever method of calculation would be applicable to the *exposure* in question.

Combined use of methodologies: Territorial aspects

4.2.33 G

(1) [deleted]

(2) [deleted]

(3) [deleted]

(4) [deleted]

(5) [deleted]

(6) [deleted]

Combined use of methodologies: Intra-group exposures

4.2.34 G

(1) Generally, the *appropriate regulator* will consider excluding, through a *firm's IRB permission*, *exposures* falling into ■ BIPRU 4.2.26 R (6) from the *IRB approach*. The degree to which this exclusion applies will be set out in the *firm's IRB permission*.

(2) *Exposures* excluded under (1) will be eligible for a 0% *risk weight* under the *standardised approach* if they satisfy the conditions in ■ BIPRU 3.2.25 R to ■ BIPRU 3.2.27A R (Zero risk weight for certain intra-group exposures).

(3) *Exposures* to or holdings in any non-financial *undertakings* in a *firm's group* are not eligible for permanent exemption from the *IRB approach* under ■ BIPRU 4.2.26 R (6), as they are not subject to consolidated supervision. It is also the *appropriate regulator's* policy that *exposures* to or holdings in any *insurance undertaking* are ineligible. Such *exposures* should remain on the *IRB approach* unless excluded under another part of ■ BIPRU 4.2.26 R.

(4) If a *firm* uses the exemption in (1) it should have a policy that:

(a) provides for the identification of connected counterparties excluded under (1);

(b) identifies *exposures* that would be permanently exempted from the *IRB approach* under (1); and

(c) identifies the connected counterparty *exposures* that are not permitted to be permanently exempted from the *IRB approach* under (1).

(5) The policy in (4) should be applied consistently to all *exposures* excluded under (1).

Combined use of methodologies: Purchase of a new businesses

4.2.35 G

(1) This *guidance* deals with some possible effects of acquiring a major new business after the grant of an *IRB permission*.

(2) A *firm* should if possible ensure that the *exposures* arising through the acquisition are dealt with in accordance with the *firm's IRB permission*.

(3) If the acquisition is made during the currency of a roll out plan under ■ BIPRU 4.2.18 R, a *firm* should ensure that the *exposures* arising through the acquisition are dealt with in accordance with that plan. For these purposes the existing and the acquired business should be considered together. The whole of the *firm's* business, including the newly acquired business, should be included in both the denominator and numerator of the fraction in ■ BIPRU 4.2.30 R.

(4) If a *firm* cannot comply with (2) the *appropriate regulator* will consider an application to vary the *firm's IRB permission* in order to deal with the acquisition. For example the *appropriate regulator* may agree to extend the time by which the roll out should be completed (see ■ BIPRU 4.2.20 R). However any such variation should be consistent with the provisions of ■ BIPRU 4.2 that would have applied if the

acquisition had been included in the *firm's* original application for an *IRB permission*.

(5) If the acquisition is made after a *firm* has completed its roll out under ■ BIPRU 4.2.18 R the *appropriate regulator* will not in general agree to an application to treat an *exposure*:

(a) under the *standardised approach* if it would otherwise be treated under the *IRB approach* under the *firm's IRB permission*; or

(b) under the *foundation IRB approach* if it would otherwise be treated under the *advanced IRB approach* under the *firm's IRB permission*.

(6) Any application to disapply the policy in (5) will be treated in accordance with the approach set out in ■ BIPRU 4.2.25 G.

(7) The *appropriate regulator* will also adopt the approach in (5) while a roll out plan is in progress if, in relation to an *exposure* of a particular type, the period for completion of the roll out for those *exposures* under that plan has ended.

4.3 The IRB approach: Provisions common to different exposure classes

Application

4.3.1 R This section applies to all *exposures* treated under the *IRB approach*.

Exposure classes

4.3.2 R Each *exposure* must be assigned to one of the following *exposure* classes:

(1) claims or contingent claims on central governments and *central banks*;

(2) claims or contingent claims on *institutions*;

(3) claims or contingent claims on corporates;

(4) retail claims or contingent retail claims;

(5) equity claims;

(6) securitisation positions; and

(7) non credit-obligation assets.

[**Note**: *BCD* Article 86(1)]

4.3.3 R The methodology used by a *firm* for assigning *exposures* to different *IRB exposure classes* must be appropriate and consistent over time.

[**Note**: *BCD* Article 86(9)]

Calculation of risk weighted exposure amounts

4.3.4 R The *risk weighted exposure amounts* for credit risk for *exposures* belonging to one of the *exposure* classes referred to in (1) to (4) must, unless deducted from *capital resources*, be calculated in accordance with the following provisions:

(1) for *exposures* in the *sovereign, institution and corporate IRB exposure class*, ■ BIPRU 4.4.57 R to ■ BIPRU 4.4.60 R, ■ BIPRU 4.4.79 R, ■ BIPRU 4.5.8 R to ■ BIPRU 4.5.10 R (for *specialised lending exposures*), ■ BIPRU 4.9.3 R

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and ■ BIPRU 4.8.16 R to ■ BIPRU 4.8.17 R (for purchased *corporate exposure* receivables);

(2) for *exposures* in the *retail exposure class*, ■ BIPRU 4.6.41 R to ■ BIPRU 4.6.44 R, ■ BIPRU 4.6.57 R and ■ BIPRU 4.8.18 R to ■ BIPRU 4.8.20 R (for purchased *retail exposure* receivables);

(3) for *exposures* in the *equity exposure class*, ■ BIPRU 4.7.5 R to ■ BIPRU 4.7.6 R, ■ BIPRU 4.7.9 R to ■ BIPRU 4.7.11 R, ■ BIPRU 4.7.14 R to ■ BIPRU 4.7.16 R and ■ BIPRU 4.7.24 R to ■ BIPRU 4.7.25 R; and

(4) for *exposures* in the *non credit-obligation assets exposure class*, ■ BIPRU 4.9.6 R.

[**Note**: *BCD* Article 87(1)]

4.3.5 R The calculation of *risk weighted exposure amounts* for credit risk and *dilution risk* must be based on the relevant parameters associated with the *exposure* in question. These include *probability of default* (*PD*), *loss given default* (*LGD*), maturity (M) and the *exposure* value of the *exposure*. *PD* and *LGD* may be considered separately or jointly, in accordance with the provisions relating to *PD* and *LGD* in ■ BIPRU 4.4, ■ BIPRU 4.6, ■ BIPRU 4.7 and ■ BIPRU 4.8 at:

(1) for *exposures* in the *sovereign, institution and corporate IRB exposure class*, ■ BIPRU 4.4.34 R - ■ BIPRU 4.4.35 R, ■ BIPRU 4.4.42 R to ■ BIPRU 4.4.43 R, ■ BIPRU 4.4.63 R - ■ BIPRU 4.4.66 R, ■ BIPRU 4.4.80 R and, for *PD* and *LGD* for *dilution risk* of purchased *corporate exposure* receivables, ■ BIPRU 4.8.23 Rand ■ BIPRU 4.8.26 R;

(2) for *exposures* in the *retail exposure class*, ■ BIPRU 4.6.50 R - ■ BIPRU 4.6.54 R, ■ BIPRU 4.6.58 R, and, for *PD* and *LGD* for *dilution risk* of purchased *retail exposure* receivables, ■ BIPRU 4.8.24 R and ■ BIPRU 4.8.27 R; and

(3) for *exposures* in the *equity exposure class*, ■ BIPRU 4.7.18 R and ■ BIPRU 4.7.20 R - ■ BIPRU 4.7.21 R.

[**Note**: *BCD* Article 87(3)]

Calculation of expected loss amounts

4.3.6 R The *expected loss* amounts for *exposures* belonging to one of the *IRB exposure classes* referred to in (1) to (3) must be calculated in accordance with the methods set out in the following provisions:

(1) for *exposures* in the *sovereign, institution and corporate IRB exposure class*, ■ BIPRU 4.4.61 R to ■ BIPRU 4.4.62 R and (for *specialised lending exposures*) ■ BIPRU 4.5.13 R to BIPRU 4.5.15R;

(2) for *exposures* in the *retail exposure class*, ■ BIPRU 4.6.47 R to ■ BIPRU 4.6.48 R;

(3) for *exposures* in the *equity exposure class*, ■ BIPRU 4.7.12 R, ■ BIPRU 4.7.17 R and ■ BIPRU 4.7.26 R; and

(4) (for purchased receivables falling into one of the *IRB exposure classes* in (1) to (3)) ■ BIPRU 4.8.30 R.

[**Note:** *BCD* Article 88(1)]

4.3.7 R The calculation of *expected loss* amounts in accordance with ■ BIPRU 4.3.6 R must be based on the same input figures of *PD*, *LGD* and the *exposure* value for each *exposure* as being used for the calculation of *risk weighted exposure amounts* in accordance with ■ BIPRU 4. For *defaulted exposures*,where a *firm* uses its own estimate of *LGDs*, *EL* must be the *firm's* best estimate of expected loss (EL_{BE}), for the *defaulted exposure* in accordance with ■ BIPRU 4.3.122 R.

[**Note:** *BCD* Article 88(2)]

Treatment of expected loss amounts

4.3.8 R The *expected loss* amounts calculated in accordance with ■ BIPRU 4.3.6 R (1), ■ BIPRU 4.3.6 R (2) and ■ BIPRU 4.3.6 R (4) must be subtracted from the sum of value adjustments and provisions related to these *exposures*. Discounts on balance sheet *exposures* purchased when in *default* according to ■ BIPRU 4.4.71 R must be treated in the same manner as value adjustments. *Expected loss* amounts for *securitised exposures* and value adjustments and provisions related to these *exposures* must not be included in this calculation.

[**Note:** *BCD* Annex VII Part 1 point 36]

Corporate governance

4.3.9 R All material aspects of the rating and estimation processes must be approved by the *firm's governing body* or a designated committee thereof and senior management. These parties must possess a general understanding of the *firm's rating systems* and detailed comprehension of its associated management reports.

[**Note**: *BCD* Annex VII Part 4 point 124]

4.3.10 G

(1) A *firm's governing body* or *designated committee* may choose to approve only material aspects of the *firm's rating systems* and material changes to the *firm's rating systems*.

(2) Where a *firm's governing body* or *designated committee* chooses to approve only material aspects of the *firm's rating systems* and material changes to the *firm's rating systems*:

(a) the *firm's governing body* or *designated committee* should define the *firm's* overall approach to material aspects of rating and estimation processes for all *rating systems*, including non-material *rating systems* and approve a policy statement defining that approach; and

(b) the *firm* should define and document the process for approval of non-material aspects of the *firm's rating systems*.

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4.3.11 R Senior management must provide notice to the *governing body* or a designated committee thereof of material changes or exceptions from established policies that will materially impact the operations of the *firm's rating systems*.

[**Note:** *BCD* Annex VII Part 4 point 125]

4.3.12 G Where the *firm's rating systems* are used on a unified basis for the *parent undertaking* and its *subsidiary undertakings* under ■ BIPRU 4.2.3 R, and approval and reporting of the *ratings systems* are carried out at the group level, the governance requirements in ■ BIPRU 4.3.9 R and ■ BIPRU 4.3.11 R may be met if:

(1) the *subsidiary undertakings* have delegated to the *governing body* or *designated committee* of the *parent institution in the UK* or *parent financial holding company in the UK* responsibility for approval of the *firm's rating systems*;

(2) the *governing body* or *designated committee* of the *parent institution in the UK* or *parent financial holding company in the UK* approves either:

(a) all aspects of the *firm's rating systems*, and material changes; or

(b) all aspects of the *firm's rating systems* that are material in the context of the group, and material changes to those, and a policy statement defining the overall approach to material aspects of rating and estimation processes for all *rating systems*, including non-material *rating systems*.

4.3.13 R Senior management must have a good understanding of the *rating system's* designs and operations. Senior management must ensure on an ongoing basis that the *rating systems* are operating properly. Senior management must be regularly informed by the credit risk control units about the performance of the rating process, areas needing improvement, and the status of efforts to improve previously identified deficiencies.

[**Note:** *BCD* Annex VII Part 4 point 126]

4.3.14 R Internal ratings-based analysis of the *firm's* credit risk profile must be an essential part of the management reporting required under ■ BIPRU 4.3.9 R, ■ BIPRU 4.3.11 R and ■ BIPRU 4.3.13 R. Reporting must include at least risk profile by grade, migration across grades, estimation of the relevant parameters per grade, and comparison of realised *default* rates and, to the extent that own estimates are used, of realised *LGDs* and realised *conversion factors* against expectations and stress-test results. Reporting frequencies must depend on the significance and type of information and the level of the recipient.

[**Note:** *BCD* Annex VII Part 4 point 127]

Credit risk control

4.3.15 R The credit risk control unit must be independent from the personnel and management functions responsible for originating or renewing *exposures* and report directly to senior management. The unit must be responsible for the design or selection, implementation, oversight and performance of the

rating systems. It must regularly produce and analyse reports on the output of the *rating systems*.

[**Note:** *BCD* Annex VII Part 4 point 128]

4.3.16 R The areas of responsibility for the credit risk control unit(s) must include the following:

(1) testing and monitoring grades and pools;

(2) production and analysis of summary reports from the *firm's rating systems*;

(3) implementing procedures to verify that grade and pool definitions are consistently applied across departments and geographic areas;

(4) reviewing and documenting any changes to the rating process, including the reasons for the changes;

(5) reviewing the rating criteria to evaluate if they remain predictive of risk (and changes to the rating process, criteria or individual rating parameters must be documented and retained);

(6) active participation in the design or selection, implementation and validation of models used in the rating process;

(7) oversight and supervision of models used in the rating process; and

(8) ongoing review and alterations to models used in the rating process.

[**Note:** *BCD* Annex VII Part 4 point 129]

4.3.17 R Notwithstanding ■ BIPRU 4.3.16 R, a *firm* using pooled data according to ■ BIPRU 4.3.92 R - ■ BIPRU 4.3.94 R (Overall requirements for estimation) may outsource the following tasks:

(1) production of information relevant to testing and monitoring grades and pools;

(2) production of summary reports from the *firm's rating systems*;

(3) production of information relevant to review of the rating criteria to evaluate if they remain predictive of risk;

(4) documentation of changes to the rating process, criteria or individual rating parameters; and

(5) production of information relevant to ongoing review and alterations to models used in the rating process.

[**Note:** *BCD* Annex VII Part 4 point 130 (part)]

4.3.18 R A *firm* making use of ■ BIPRU 4.3.17 R must ensure that the *appropriate regulator* has access to all relevant information from the third party that is necessary for examining compliance with the *minimum IRB standards* and

the *firm's IRB permission* and that the *appropriate regulator* may perform on-site examinations to the same extent as within the *firm*.

[**Note:** *BCD* Annex VII Part 4 point 130 (part)]

Documentation of rating systems

4.3.19 R A *firm* must document the design and operational details of its *rating systems*. The documentation must evidence compliance with the *minimum IRB standards* and the *firm's IRB permission*, and address topics including portfolio differentiation, rating criteria, responsibilities of parties that rate obligors and *exposures*, frequency of assignment reviews, and management oversight of the rating process.

[**Note:** *BCD* Annex VII Part 4 point 31]

4.3.20 R A *firm* must ensure that all documentation relating to its *rating systems* or otherwise required by the *rules* governing the *IRB approach* are stored, arranged and indexed in such a way that the *firm* would be able to make them all available to the *appropriate regulator*, or to make any class or description of them specified by the *appropriate regulator* available to the *appropriate regulator*, immediately on demand or within a short time thereafter.

4.3.21 R A *firm* must document the rationale for and analysis supporting its choice of rating criteria. A *firm* must document all major changes in the risk rating process, and such documentation must support identification of changes made to the risk rating process subsequent to the last review by the *appropriate regulator*. The organisation of rating assignment including the rating assignment process and the internal control structure must also be documented.

[**Note:** *BCD* Annex VII Part 4 point 32]

4.3.22 R A *firm* must document the specific definitions of default and loss used internally and demonstrate consistency with the definitions of *default* and *loss* set out in the *glossary* and ■ BIPRU 4.

[**Note:** *BCD* Annex VII Part 4 point 33]

4.3.23 G A *firm's* documentation relating to data should include clear identification of responsibility for data quality. A *firm* should set standards for data quality and aim to improve them over time. A *firm* should measure its performance against those standards. A *firm* should ensure that its data is of high enough quality to support its risk management processes and the calculation of its capital requirements.

4.3.24 R Where a *firm* employs statistical models in the rating process, the *firm* must document its methodologies. This material must:

(1) provide a detailed outline of the theory, assumptions and/or mathematical and empirical basis of the assignment of estimates to grades, individual obligors, *exposures*, or pools, and the data source(s) used to estimate the model;

(2) establish a rigorous statistical process (including out-of-time and out-of-sample performance tests) for validating the model; and

(3) indicate any circumstances under which the model does not work effectively.

[**Note:** *BCD* Annex VII Part 4 point 34]

Rating systems

4.3.25 R A *rating system* comprises all of the methods, processes, controls, data collection and IT systems that support the assessment of credit risk, the assignment of *exposures* to grades or pools (rating), and the quantification of *default* and *loss* estimates for a certain type of *exposure*.

[**Note:** *BCD* Annex VII Part 4 point 1]

4.3.26 R If a *firm* uses multiple *rating systems*, the rationale for assigning an obligor or a transaction to a *rating system* must be documented and applied in a manner that appropriately reflects the level of risk.

[**Note:** *BCD* Annex VII Part 4 point 2]

4.3.27 R Assignment criteria and processes must be periodically reviewed to determine whether they remain appropriate for the current portfolio and external conditions.

[**Note:** *BCD* Annex VII Part 4 point 3]

4.3.28 R Where a *firm* uses direct estimates of risk parameters these may be seen as the outputs of grades on a continuous rating scale.

[**Note:** *BCD* Annex VII Part 4 point 4]

Validation of internal estimates

4.3.29 R A *firm* must have robust systems in place to validate the accuracy and consistency of *rating systems*, processes, and the estimation of all relevant risk parameters (*PD*, *LGD*, *conversion factors* and *EL*). A *firm* must be able to demonstrate to the *appropriate regulator* that the internal validation process enables it to assess the performance of internal rating and risk estimation systems consistently and meaningfully.

[**Note:** *BCD* Annex VII Part 4 point 110]

4.3.30 R

(1) A *firm* must validate its *rating systems*. Its validation process must include, as a minimum, the elements set out in (2) - (8).

(2) A *firm* must establish and define standards of objectivity, accuracy, stability and conservatism that it designs its *ratings systems* to meet. It must have processes that establish whether its *rating systems* meet those standards.

(3) A *firm* must establish and define standards of accuracy of calibration (i.e. whether outcomes are consistent with estimate) and

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discriminative power (i.e. the ability to rank-order risk) that it designs its *rating systems* to meet. It must have processes that establish whether its *rating systems* meet those standards.

(4) A *firm* must have polices and standards that specify the actions to be taken when a *rating system* fails to meet the standards of accuracy and discriminative power referred to in (2) and (3).

(5) A *firm's* validation process must include a mix of developmental evidence, benchmarking and process verification. A *firm's* validation process must include policies on how this mixture varies between different *rating systems*.

(6) A *firm's* validation process must include the use of both quantitative and qualitative techniques.

(7) A *firm's* validation process must include policies on how validation procedures are expected to vary over time.

(8) A *firm's* validation process must include independent input into and review of its *rating systems*.

(9) The standards set under (2) and (3) must meet the *minimum IRB standards*.

(10) For the purpose of (5):

(a) developmental evidence means evidence that substantiates whether the logic and quality of a *rating system* (including the quantification process) adequately discriminates between different levels of, and delivers accurate estimates of *PD*, *EL*, *LGD* and *conversion factors* (as applicable); and

(b) process verification means the process of establishing whether the methods used in a *rating system* to discriminate between different levels of risk and to quantify *PD*, *EL*, *LGD* and *conversion factors* are being used, monitored and updated in the way intended in the design of the *rating system*.

4.3.31 G A *firm* should have regard to the involvement of management at an appropriately senior level in the validation process.

4.3.32 G The approach to validation may vary with the significance of the *exposures* covered by a *rating system*.

4.3.33 R A *firm* must regularly compare realised *default* rates with estimated *PDs* for each grade and where realised *default* rates are outside the expected range for that grade a *firm* must specifically analyse the reasons for the deviation. A *firm*using its own estimates of *LGDs* and/or *conversion factors* must also perform analogous analysis for own estimates of *LGDs* and *conversion factors*. Such comparisons must make use of historical data that cover as long a period as possible. A *firm* must document the methods and data used in such comparisons. This analysis and documentation must be updated at least annually.

[**Note:** *BCD* Annex VII Part 4 point 111]

4.3.34 G

(1) This paragraph sets out *guidance* on assessing the adequacy of a *rating system's* discriminative power (see ■ BIPRU 4.3.30 R (3) on the meaning of discriminative power).

(2) A *firm* should be able to explain the performance of its *rating systems* against its chosen measure (or measures) of discriminative power. In making this comparison a *firm* should rely primarily on actual historic *default* experience where this is available. In particular, a *firm* should be able to explain:

(a) the extent of any potential inaccuracy in these measures, caused in particular by small sample size; and

(b) the potential for divergence in the future, whether caused by changing economic conditions or other factors.

(3) The assessment of discriminative power should include appropriate use of external benchmarks where available.

(4) The *appropriate regulator* will, in assessing the *firm's* performance, take into consideration the sophistication of the measure of discrimination chosen.

(5) In the case of a portfolio for which there is insufficient *default* experience to provide any confidence in statistical measures of discriminative power a *firm* need not carry out the procedure in (2) and may instead use other methods. For example, it may make use of comparison with an external measurement approach by analysing whether the *firm's rating systems* and the external approach rank common obligors in broadly similar ways. A *firm* should be able to explain the methodology it uses and the rationale for its use.

4.3.35 R

A *firm* must also use other appropriate quantitative validation tools and comparisons with relevant external data sources. The analysis must be based on data that is appropriate to the portfolio, is updated regularly, and covers a relevant observation period. A *firm's* internal assessments of the performance of its *rating systems* must be based on as long a period as possible.

[**Note:** *BCD* Annex VII Part 4 point 112]

4.3.36 R

The methods and data used for quantitative validation must be consistent through time. Changes in estimation and validation methods and data (both data sources and periods covered) must be documented.

[**Note:** *BCD* Annex VII Part 4 point 113

4.3.37 R

A *firm* must have sound internal standards for situations where deviations in realised *PDs*, *LGDs*, *conversion factors* and, where *EL* is used, total *losses*, from expectations become significant enough to call the validity of the estimates into question. These standards must take account of business cycles and similar systematic variability in *default* and *loss* experience. Where realised values continue to be higher than expected values, a *firm* must revise estimates upward to reflect its *default* and *loss* experience.

[**Note:** *BCD* Annex VII Part 4 point 114]

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Internal audit

4.3.38 R Internal audit or another comparable independent auditing unit must review at least annually the *firm's rating systems* and its operations, including the operations of the *firm* and the estimation of *PDs*, *LGDs*, *ELs* and *conversion factors*. Areas of review must include adherence to all applicable minimum requirements.

[**Note:** *BCD* Annex VII Part 4 point 131]

Stress tests used in assessment of capital adequacy

4.3.39 R A *firm* must have in place sound stress testing processes for use in the assessment of its capital adequacy. Stress testing must involve identifying possible events or future changes in economic conditions that could have unfavourable effects on the firm's credit *exposures* and assessment of the *firm's* ability to withstand such changes.

[**Note:** *BCD* Annex VII Part 4 point 40]

4.3.39A G The *appropriate regulator* expects that *firms* will routinely make use of stress testing and scenario analysis as a tool in the calibration and/or validation of their *IRB approach* parameters in order to increase the accuracy or, at least, the conservatism of the estimates. Stress testing should include a thorough exploration of various outturns different to the *firm's* normal expectations in order to give the *firm* a clear view of the potential for the forward-looking estimate to be different from that indicated by the primary data source(s). *Firms* should consider this as an integral part of their quantification process, and should have clear standards for how the results of the stress tests affect the final estimates used for the *IRB approach* parameters.

4.3.40 R

(1) A *firm* must regularly perform a credit risk stress test to assess the effect of certain specific conditions on its total capital requirements for credit risk. The test to be employed must be one chosen by the *firm*. The test to be employed must be meaningful and reasonably conservative. Stressed portfolios must contain the vast majority of a *firm's* total *exposures* covered by the *IRB approach*.

(2) The stress test must be designed to assess the *firm's* ability to meet its capital requirements for credit risk under ■ GENPRU 2.1 during all stages of the economic cycle and during an economic downturn scenario based on forward looking hypothetical events calibrated against the most adverse movements in individual risk drivers experienced over a long historical period.

(3) In particular the stress test must address the impact (including by ratings migration) of changes in the credit quality of its credit risk counterparties including its protection providers. A *firm* using the treatment set out in ■ BIPRU 4.4.79 R must in particular consider the impact of protection providers falling outside the eligibility criteria.

(4) The stress test must be conducted on the basis of the *firm's exposures* (on- and off-balance sheet) as they stand at the time of the stress test.

(5) The stress test must be carried out at least annually and also in the event of a significant change in the state of the economy.

(6) A *firm* need not assume that the recession referred to in (2) will occur in the 12 months immediately following the stress test. Instead, the stress test must incorporate a plausible time horizon for the occurrence of the cyclical deterioration of the severity tested for. A *firm* need not assume that the downturn will occur for all portfolios in all jurisdictions simultaneously.

[**Note:** *BCD* Annex VII Part 4 points 41 and 42]

4.3.41 G To the extent that the economic conditions assumed in the stress tests required under ■ BIPRU 4.3.39 R or ■ BIPRU 4.3.40 R coincide with the conditions assumed in the production of economic downturn *LGDs* (see ■ BIPRU 4.3.103 R), the *LGDs* to be used might be expected to be similar.

4.3.42 G The requirement in ■ BIPRU 4.3.40 R (2) is to identify, in a forward-looking manner, severe but plausible downturn conditions relevant to business lines and jurisdictions and to determine the likely impact of those conditions on a *firm's* credit risk regulatory capital requirements. The description of the economic recession contained in ■ BIPRU 4.3.40 R (2) should not be taken as stipulating one approach (e.g. statistical) over other approaches (e.g. scenario analysis) in the identification of the relevant recessionary circumstances.

Rating systems: Assignment to grades or pools

4.3.43 R A *firm* must have specific definitions, processes and criteria for assigning *exposures* to grades or pools within a *rating system*.

[**Note:** *BCD* Annex VII Part 4 point 17 (part)]

4.3.44 R The grade or pool definitions and criteria must be sufficiently detailed to allow those charged with assigning ratings consistently to assign obligors or facilities posing similar risk to the same grade or pool. This consistency must exist across lines of business, departments and geographic locations within each *rating system*.

[**Note:** *BCD* Annex VII Part 4 point 17 (part)]

4.3.45 G In meeting ■ BIPRU 4.3.44 R a *firm* should have regard to its application to each *rating system*.

4.3.46 R The documentation of the rating process must allow third parties to understand the assignments of *exposures* to grades or pools, to replicate grade and pool assignments and to evaluate the appropriateness of the assignments to a grade or a pool.

[**Note:** *BCD* Annex VII Part 4 point 17 (part)]

4.3.47 R The criteria referred to in ■ BIPRU 4.3.43 R must also be consistent with the *firm's* internal lending standards and its policies for handling troubled obligors and facilities.

[**Note:** *BCD* Annex VII Part 4 point 17 (part)]

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4.3.48 R A *firm* must take all relevant information into account in assigning obligors and facilities to grades or pools. Information must be current and must enable the *firm* to forecast the future performance of the *exposure*. The less information a *firm* has, the more conservative must be its assignments of *exposures* to obligor and *facility grades* or pools. If a *firm* uses an external rating as a primary factor determining an internal rating assignment, the *firm* must ensure that it considers other relevant information.

[**Note:** *BCD* Annex VII Part 4 point 18]

Rating systems: General governance

4.3.49 G

(1) This paragraph contains *guidance* on ■ BIPRU 4.3.43 R and more general *guidance* about the governance of *rating systems*.

(2) In determining the assignment referred to in ■ BIPRU 4.3.43 R, a *firm* should have regard to the sensitivity of the rating to movements in fundamental risk drivers.

(3) A *firm* should, for any *rating system*, be able to demonstrate that it acts appropriately or has an appropriate policy, as applicable, with respect to:

(a) any deficiencies caused by its not being sensitive to movements in fundamental risk drivers or for any other reason;

(b) periodic review and action in the light of such review;

(c) provision of appropriate internal guidance to staff to ensure consistency in the use of the *rating system*, including the assignment of *exposures* or facilities to pools or grades;

(d) dealing with potential weaknesses of the *rating system*;

(e) identifying appropriate and inappropriate uses of the *rating system* and acting on that identification;

(f) novel or narrow rating approaches; and

(g) ensuring the appropriate level of stability over time of the *rating system*.

Rating systems: Overrides

4.3.50 R For grade and pool assignments a *firm* must document the situations in which human judgement may override the inputs or outputs of the assignment process and the personnel responsible for approving these overrides. A *firm* must document these overrides and the personnel responsible. A *firm* must analyse the performance of the *exposures* whose assignments have been overridden. This analysis must include assessment of the performance of *exposures* whose rating has been overridden by a particular *person*, accounting for all the responsible personnel.

[**Note:** *BCD* Annex VII Part 4 point 25]

Rating systems: Use of models

4.3.51 R

(1) This paragraph applies to the use of statistical models and/or other mechanical methods to assign *exposures* to *obligor grades*, obligor pools, *facility grades* or facility pools.

(2) A *firm* must be able to demonstrate to the *appropriate regulator* that the model has good predictive power and that capital requirements are not distorted as a result of its use.

(3) The input variables to the model must form a reasonable and effective basis for the resulting predictions. The model must not have material biases.

(4) A *firm* must have in place a process for vetting data inputs into the model, which includes an assessment of the accuracy, completeness and appropriateness of the data.

(5) A *firm* must be able to demonstrate to the *appropriate regulator* that the data used to build the model is representative of the population of the *firm's* actual obligors or *exposures*.

(6) A *firm* must have a regular cycle of model validation that includes monitoring of model performance and stability, review of model specification and testing of model outputs against outcomes.

(7) A *firm* must complement the statistical model by human judgement and human oversight to review model-based assignments and to ensure that the models are used appropriately. Review procedures must aim at finding and limiting errors associated with model weaknesses. Human judgements must take into account all relevant information not considered by the model. A *firm* must document how human judgement and model results are to be combined.

(8) Use of a model obtained from a third-party vendor that claims proprietary technology is not a justification for exemption from documentation or any other of the requirements in ■ BIPRU 4 or a *firm's IRB permission* for *rating systems*. A *firm* must be able to satisfy the *appropriate regulator* that all those requirements are satisfied if it uses such a model.

[**Note:** *BCD* Annex VII Part 4 points 30 and 35 (part)]

4.3.52 G

(1) This paragraph contains guidance on ■ BIPRU 4.3.51 R (7).

(2) ■ BIPRU 4.3.51 R (7) does not require that each individual assignment of an *exposure* to a pool or grade should be the subject of an open-ended review by reference to factors not covered by the model if:

(a) that is not necessary in order to meet the requirements of ■ BIPRU 4 about the ability of the *rating system* to predict and to discriminate (as referred to in ■ BIPRU 4.3.29 R to ■ BIPRU 4.3.30 R (Validation of internal estimates)); and

(b) the outputs of the model are not designed to be supplemented by such a review.

4.3.53 G

(1) This paragraph contains *guidance* on ■ BIPRU 4.3.51 R for the use of external models.

(2) ■ BIPRU 4.3.51 R (2) - ■ BIPRU 4.3.51 R (8) also apply to mechanical methods to assign *exposures* or obligors to facility grades or pools and to a combination of models and mechanical methods.

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(3) The standards which a *firm* applies to an external model should not be lower than those for internal models.

(4) The *appropriate regulator* will not accredit any individual model or vendor. The burden is on a *firm* to satisfy itself that external models are fit for purpose and meet the relevant requirements of the *IRB approach*.

(5) Notwithstanding that commercial confidentiality may limit the willingness of vendors of external models to disclose all details, a *firm* should ensure that it is able to obtain sufficiently detailed information to be able to satisfy the requirements of the *IRB approach*.

(6) A *firm* should have a clear understanding of responsibilities for support and maintenance of external models. This should include how new developments will be brought in and what entitlement the *firm* has to receive and/or request specific enhancements. A *firm* should ensure that the requirements of ■ BIPRU 4.3.51 R and other provisions of the *IRB approach* are complied with on an ongoing basis.

(7) If a *firm* uses an external model it should have regard to the following:

(a) the adequacy of the information it has about the population on which the model is built;

(b) the comparability of the population referred to in (a) to the *exposures* with respect to which it is using that model;

(c) what the drivers of the model are and their relevance to the *exposures* with respect to which it is using the model; and

(d) how the *firm* satisfies itself that the standards required by the *IRB approach* for an internal model are met by the external model.

Rating systems: Data maintenance

4.3.54 R A *firm* must collect and store data on aspects of its internal ratings as required under ■ BIPRU 11 (Disclosure).

[**Note:** *BCD* Annex VII Part 4 point 36]

Rating systems: IT systems

4.3.55 G A *firm* should ensure that IT systems relevant to the operation of its *rating systems* are sound and robust. A *firm's* IT systems should provide rapid availability of databases and appropriate archiving. Adequate controls should be in place to prevent unauthorised changes to data being made. Contingency processes and plans should be in place to deal with events of system failure. A *firm* should document work-flows and procedures related to data collection and storage.

Definition of default: Main provisions

4.3.56 R A *default* must be considered to have occurred with regard to a particular obligor when either or both of the two following events has taken place:

(1) the *firm* considers that the obligor is unlikely to pay its credit obligations to the *firm*, the *parent undertaking* or any of its *subsidiary undertakings* in full, without recourse by the *firm* to actions such as realising security (if held); and

(2) the obligor is past due more than 90 days on any material credit obligation to the *firm*, the *parent undertaking* or any of its *subsidiary undertakings*.

[**Note:** *BCD* Annex VII Part 4 point 44 (part)]

4.3.57 R The following provisions also apply with respect to the definition of *default*:

(1) for overdrafts, days past due commence once an obligor has breached an advised limit, has been advised a limit smaller than current outstandings, or has drawn credit without authorisation and the underlying amount is material;

(2) an advised limit means a limit which has been brought to the knowledge of the obligor;

(3) days past due for credit cards commence on the minimum payment due date;

(4) in the case of *retail exposures* and *exposures* to *public sector entities* the number of days past due is as set out in BIPRU 4.4.22 R and BIPRU 4.6.20 R; and

(5) in all cases for the purposes of the definition of *default*, a credit obligation or, for overdrafts, the underlying amount, is material if, when added to the other *exposures* of the obligor, the total exceeds the amount which the *firm* treats as a material default for its internal risk measurement and management purposes.

[**Note:** *BCD* Annex VII Part 4 point 44 (part)]

Definition of default: Materiality

4.3.58 R Where a *firm* applies the definition of *default* at facility level in accordance with BIPRU 4.6.21 R, it should define materiality for the purposes of BIPRU 4.3.57 R (5) by reference to the facility amount only, disregarding other *exposures* of the obligor.

4.3.59 R A *firm* must have a policy which sets out how it will determine whether a credit obligation or, for overdrafts, the underlying amount, is material for the purposes of the definition of *default* in BIPRU 4.3.56 R (2) and BIPRU 4.3.57 R (5).

Definition of default: Identification of obligor

4.3.60 G (1) This paragraph contains *guidance* on the definition of *default*.

(2) If:

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(a) a *firm* ordinarily assigns *exposures* in the *sovereign, institution and corporate IRB exposure class* to a member of a group substantially on the basis of membership of that group and a common group rating; and

(b) the *firm* does so in the case of a particular group;

(3) the *firm* should consider whether members of that group should be treated as a single obligor for the purpose of the definition of *default*.

(4) The *appropriate regulator* would not expect a *firm* to treat an obligor as part of a single obligor under (2) if the *firm* rates its *exposures* on a stand alone basis or if its rating is notched. A rating is notched if it takes into account individual risk factors or otherwise reflects risk factors that are not applied on a common group basis.

(5) Accordingly if a group has two members who are separately rated the *default* of one does not necessarily imply the *default* of the other.

Definition of default: Days past due

4.3.61 G

(1) This paragraph contains *guidance* on the meaning of days past due for the purposes of the definition of *default*.

(2) If an amount is overdue by the relevant number of days past due because of administrative oversight on the part of the obligor or the *firm*, a *firm* with sufficient information may, retrospectively if necessary, treat that as not involving a *default* if:

(a) that failure is not associated with any increase in the risk referred to in ■ BIPRU 4.3.56 R (1); and

(b) treating it as not being in *default* is consistent with the way that the *firm* treated the failure in its relationship with the obligor.

(3) If a *firm* takes advantage of this provision it should have a policy about the circumstances in which it can apply the treatment in (2). That policy should be documented and consistently applied.

4.3.62 G

Days past due is only one part of the definition of *default* and should be treated as a back-stop. A *firm* should not rely solely on the number of days past due set by ■ BIPRU 4 but should also consider all other indicators of unlikeliness to pay when assessing whether a *default* has occurred.

Definition of default: Unlikeliness to pay

4.3.63 R

(1) Elements to be taken as indications of unlikeliness to pay must include the items set out in this *rule*.

(2) The *firm* putting the credit obligation on non-accrued status must be taken as an indication of unlikeliness to pay.

(3) The *firm* making a value adjustment resulting from a significant perceived decline in credit quality subsequent to the *firm* taking on the *exposure* must be taken as an indication of unlikeliness to pay.

(4) The *firm* selling the credit obligation at a material credit-related economic loss must be taken as an indication of unlikeliness to pay.

(5) The *firm* consenting to a distressed restructuring of the credit obligation must be taken as an indication of unlikeliness to pay where this is likely to result in a diminished financial obligation caused by the material forgiveness, or postponement, of principal, interest or (where relevant) fees. This includes in the case of *equity exposures* assessed under a *PD/LGD approach*, distressed restructuring of the equity itself.

(6) The *firm* having filed for the obligor's bankruptcy or a similar order in respect of an obligor's credit obligation to the *firm*, the *parent undertaking* or any of its *subsidiary undertakings* must be taken as an indication of unlikeliness to pay.

(7) The obligor seeking or having been placed in bankruptcy or similar protection where this would avoid or delay repayment of a credit obligation to the *firm*, the *parent undertaking* or any of its *subsidiary undertakings* must be taken as an indication of unlikeliness to pay.

[**Note:** *BCD* Annex VII Part 4 point 45]

4.3.64 G A *firm* may use the amount overdue as an additional indication of unlikeliness to pay. If a *firm* uses this approach, the days past due element of the definition of *default* continues to apply, including the provisions relating to the fixed number of days past due referred to in ■ BIPRU 4.3.57 R (4). A *firm* might make the use of a definition of *default* that takes into account the amount overdue consistent with the days past due element of the definition by setting the amount overdue at such a level that, taking into account:

(1) the order in which payments are applied against overdue payments; and

(2) the number of payment dates, the time between them, the amount of the overdue payments that results in a *default* under the definition used by the *firm* and other relevant factors;

it is not possible for any payment to be past due by a number of days exceeding the maximum amount specified in *BIPRU* for the purposes of the definition of *default* without there being a *default* under the part of the definition of *default* based on the amount overdue.

4.3.65 G In the case of a *retail exposure*, a value adjustment resulting from significant perceived decline in credit quality falling within ■ BIPRU 4.3.63 R (3) need not necessarily be taken as an indication of unlikeliness to pay if a *firm* employs formulaic portfolio provisioning based on a number of days overdue for its *retail exposures*. However, if such an *exposure* reaches the compulsory days past due indicator for the purposes of the definition of *default* it should automatically be deemed to be in *default*, regardless of the provisioning situation.

4.3.66 G An obligation should be considered a distressed restructuring under ■ BIPRU 4.3.63 R (5) if an independent third party, with expertise in the

relevant area, would not be prepared to provide financing on substantially the same terms and conditions.

4.3.67 G

(1) The realisation or forfeiture of collateral may be taken as an indication of unlikeliness to pay for the purposes of the definition of *default*.

(2) However, the realisation or forfeiture of collateral may not indicate unlikeliness to pay:

(a) in the case of an *exposure* in a market (such as one that involves *retail exposures* involving margin lending) in which it is established practice for collateral to be sold if its value falls below a certain percentage of the *exposure* and the obligor does not restore the margin (but this exception does not apply if the value of the collateral has fallen below the amount outstanding); or

(b) if the *firm* is able to demonstrate that for some other reason the realisation or forfeiture of collateral is not a meaningful indication of unlikeliness to pay.

4.3.68 G

(1) If an obligor approach is being taken with respect to *retail exposures* (that is, the application of the definition of *default* at an obligor level rather than at a facility level as set out in ■ BIPRU 4.6.21 R,) a *firm* should ensure that the *PD* associated with unsecured *exposures* is not understated as a result of the presence of any collateralised *exposures*. A *firm* should be able to explain to the *appropriate regulator*, if asked, how it has ensured that its estimate of *PD* is appropriate for both secured and unsecured *exposures* covered by an obligor rating approach.

(2) In the view of the *appropriate regulator*, *firms* typically find that the *PD* of a residential mortgage is lower than the *PD* of an unsecured loan to the same borrower.

4.3.69 G

A *firm* may, but without prejudice to ■ BIPRU 4.4.22 R and ■ BIPRU 4.6.20 R (Fixed numbers of days past due), use additional, or stricter, indicators of unlikeliness to pay if it uses these indicators for internal purposes in accordance with ■ BIPRU 4.2.2 R (2) (Use tests) and if the disclosures under ■ BIPRU 11 (Disclosure) are on this basis.

Risk quantification: Definition of default: Other provisions

4.3.70 R

A *firm* must (if it uses external data that is not itself consistent with the definition of *default*) be able to demonstrate to the *appropriate regulator* that appropriate adjustments have been made that achieve broad equivalence with the definition of *default*.

[**Note:** *BCD* Annex VII Part 4 point 46]

4.3.71 R

If a *firm* considers that a previously *defaulted exposure* is such that no trigger of *default* continues to apply, the *firm* must rate the obligor or facility as it would for a non-*defaulted exposure*. Should the definition of

default subsequently be triggered, another *default* must be deemed to have occurred.

[**Note:** *BCD* Annex VII Part 4 point 47]

4.3.72 G A *firm* should have a clear and documented policy for determining whether an *exposure* that has been in *default* should subsequently be returned to performing status.

Risk quantification: Overall requirements for estimation: General

4.3.73 R ■ BIPRU 4.3.74 R to ■ BIPRU 4.3.131 R apply to a *firm's* own estimates of risk parameters used in the *IRB approach*.

[**Note:** *BCD* Annex VII Part 4 point 43]

4.3.74 R A *firm's* own estimates of the risk parameters *PD*, *LGD*, *conversion factor* and *EL* must incorporate all relevant data, information and methods. The estimates must be derived using both historical experience and empirical evidence, and must not be based purely on judgemental considerations. The estimates must be plausible and intuitive and must be based on the material drivers of the respective risk parameters. The less data a *firm* has, the more conservative it must be in its estimation.

[**Note:** *BCD* Annex VII Part 4 point 49]

4.3.75 G

(1) This paragraph provides guidance on ■ BIPRU 4.3.73 R.

(2) Relevant data and information under ■ BIPRU 4.3.73 R includes external data.

(3) Where internal *default* and *loss* experience is scarce, a *firm* should consider using material relevant external information. When using external information such as industry averages when determining *LGD* or *conversion factors*, a *firm* should consider whether this data is appropriate to its own experience and whether adjustments are necessary.

4.3.76 R

(1) In calculating estimates of *PD*, *LGD* and *conversion factors* a *firm* must adjust the averages of historical experience referred to in the historical averages rules in order to ensure that those estimates are accurate estimates of the *default* rate, *loss* rate or *conversion factor* over the long-run.

(2) The historical average rules means the requirements in ■ BIPRU 4 relating to the calculation of *PD*, *LGD* and *conversion factors* using historical averages (and in particular ■ BIPRU 4.4.24 R, ■ BIPRU 4.4.30 R, ■ BIPRU 4.8.7 R, ■ BIPRU 4.8.8 R, ■ BIPRU 4.6.24 R, ■ BIPRU 4.6.27 R, ■ BIPRU 4.3.99 R and ■ BIPRU 4.3.125 R).

4.3.77 G Where a *firm* is able to demonstrate that the effect is immaterial in accordance with ■ BIPRU 4.1.25 R (Compliance), it may estimate average *LGDs* and *conversion factors* under the historical average rules in a way that does

not strictly comply with ■ BIPRU 4.3.94 R (Default weighted average), provided the final estimates of *LGD* and *conversion factors* following the adjustments to averages of historical experience are made on the basis of *default* weighted averages for the *facility grade* or pool in question.

4

4.3.78 G A *firm* may carry out the adjustments under ■ BIPRU 4.3.76 R (Adjustments to averages of historical experience) by adjusting the data from which estimates are made rather than by adjusting the estimates themselves if it can demonstrate that capital requirements are not underestimated as a result.

4.3.79 G While the qualitative requirements in ■ BIPRU 4 are important for all portfolios, they are of even greater importance in those cases where a *firm* lacks sufficient historical data to calibrate or validate its estimates of *PD*, *LGD* or *conversion factors* on the basis of proven statistical significance, sometimes referred to as low default portfolios.

4.3.80 R

(1) A *firm* must collect data on what it considers to be the main drivers of the risk parameters *PD*, *LGD*, *conversion factor* and *EL* for each group of obligors or facilities.

(2) A *firm* must document its identification of the main drivers of risk parameters.

(3) A *firm* must be able to demonstrate that its process of identification is reasonable and appropriate.

4.3.81 R In its processes for identifying the main drivers of risk parameters, a *firm* must set out its reasons for concluding that the data sources chosen provide in themselves sufficient discriminative power and accuracy and why additional potential data sources do not provide relevant and reliable information that would be expected materially to improve the discriminative power and accuracy of its estimates of the risk parameter in question. This does not require an intensive analysis of all factors.

4.3.82 G If a *firm* uses a rating model to assign exposures to the borrower or facility grades, it may reflect the data on main drivers of risk parameters by its inclusion in the model as a risk driver or as part of a subsequent process that adjusts the output of that model to calculate the risk parameters *PD*, *LGD*, *conversion factor* and *EL*.

4.3.83 R A *firm* must be able to provide a breakdown of its loss experience in terms of *default* frequency, *LGD*, *conversion factor*, or *loss* where *EL* estimates are used, by the factors it sees as the drivers of the respective risk parameters. A *firm* must be able to demonstrate to the *appropriate regulator* that its estimates are representative of long-run experience.

[**Note:** *BCD* Annex VII Part 4 point 50]

4.3.84 R Any changes in lending practice or the process for pursuing recoveries over the observation periods referred to in ■ BIPRU 4.4.31 R (Observation period for sovereigns, institutions and corporates for PDs), ■ BIPRU 4.6.28 R (Observation

period for retail exposures for PDs), ■ BIPRU 4.4.54 R (Observation period for sovereigns, institutions and corporates for LGDs), ■ BIPRU 4.6.33 R (Observation period for retail exposures for LGDs), ■ BIPRU 4.4.55 R (Observation period for sovereigns, institutions and corporates for conversion factors) and ■ BIPRU 4.6.38 R (Observation period for retail exposures for conversion factors) must be taken into account. A *firm's* estimates must reflect the implications of technical advances and new data and other information, as it becomes available. A *firm* must review its estimates when new information comes to light but at least on an annual basis.

[**Note:** *BCD* Annex VII Part 4 point 51]

4.3.85 R The population of *exposures* represented in the data used for estimation, the lending standards used when the data was generated and other relevant characteristics must be comparable with those of a *firm's exposures* and standards. A *firm* must also be able to demonstrate to the *appropriate regulator* that the economic or market conditions that underlie the data are relevant to current and foreseeable conditions. The number of *exposures* in the sample and the data period used for quantification must be sufficient to provide a *firm* with confidence in the accuracy and robustness of its estimates.

[**Note:** *BCD* Annex VII Part 4 point 52]

4.3.86 G It may be reasonable for a *firm* to treat foreseeable in ■ BIPRU 4.3.85 R as referring to the most distant date to which it carries out detailed capital planning.

4.3.87 G A *firm* should be able to demonstrate to the *appropriate regulator*:

(1) how, with respect to each *rating system*, both assignment of ratings and estimates of *PD*, *LGD* and *conversion factors* are affected by:

(a) movements in the economic cycle; and

(b) other cyclical effects which are material to levels of *default*, *loss* or the amount of *exposures* at *default* for the *exposures* covered by the *rating system*; and

(2) the level of conservatism inherent in its ratings, as provided for by *BIPRU*.

4.3.88 R A *firm* must add to its estimates a margin of conservatism that is related to the expected range of estimation errors. Where methods and data are less satisfactory and the expected range of errors is larger, the margin of conservatism must be larger.

[**Note:** *BCD* Annex VII Part 4 point 54]

4.3.89 G Estimation of *PD* through the use of a technique set out in *BIPRU* does not remove the need to make conservative adjustments, where necessary, related to the expected range of estimation errors so that capital requirements produced by the relevant model or other *rating system* are not understated.

4

4.3.90 R If a *firm* uses different estimates for the calculation of *risk weights* and internal purposes it must be documented. The *firm* must be able to demonstrate to the *appropriate regulator* the reasonableness of such estimates.

[**Note:** *BCD* Annex VII Part 4 point 55]

4.3.91 G If a *firm* can demonstrate to the *appropriate regulator* that for data that has been collected prior to 31 December 2006, appropriate adjustments have been made to achieve broad equivalence with the definitions of *default* or *loss*, the *appropriate regulator* may in the *IRB permission* allow the *firm* some flexibility in the application of the required standards for data.

[**Note:** *BCD* Annex VII Part 4 point 56]

Risk quantification: Overall requirements for estimation: Pooled data

4.3.92 R If a *firm* uses data that is pooled across *institutions* it must be able to demonstrate to the *appropriate regulator* that:

(1) the *rating systems* and criteria of other firms in the pool are similar to its own;

(2) the pool is representative of the portfolio for which the pooled data is used; and

(3) the pooled data is used consistently over time by the *firm* for its permanent estimates.

[**Note:** *BCD* Annex VII Part 4 point 57]

4.3.93 G ■ BIPRU 4.3.92 R (1) is intended to ensure that data entering a pool is consistent and does not contain distortions as a result of different contributors' practices. It is not intended to constrain the use of pooled data by one *firm* that is contributed by a second *firm* where the differences do not affect the data being contributed.

4.3.94 R If a *firm* uses data that is pooled across *institutions* it remains responsible for the integrity of its *rating systems*. If a *firm* uses such data it must be able to demonstrate to the *appropriate regulator* that it has sufficient in-house understanding of its *rating systems*, including effective ability to monitor and audit the rating process.

[**Note:** *BCD* Annex VII Part 4 point 58]

Risk quantification: Overall requirements for estimation: Requirements specific to PD estimates

4.3.95 R (1) If:

(a) a *firm's* internal experience of *exposures* of a type covered by a model or other *rating system* is 20 *defaults* or fewer; and

(b) in the *firm's* view, reliable estimates of *PD* cannot be derived from external sources of *default* data, including the use of

market price related data, for all the *exposures* covered by the *rating system*;

the *firm* must estimate *PD* for *exposures* covered by that *rating system* in accordance with this *rule*.

(2) A *firm* must use a statistical technique to derive the distribution of *defaults* implied by the *firm's* experience, estimating *PDs* (the "statistical PD") from the upper bound of a confidence interval set by the *firm* in order to produce conservative estimates of *PDs* in accordance with ■ BIPRU 4.3.88 R.

(3) The techniques chosen for the purposes of (2) must take account, as a minimum, of the following modelling issues:

(a) the number of *defaults* and number of obligor years in the sample;

(b) the number of years from which the sample was drawn;

(c) the interdependence between *default* events for individual obligors;

(d) the interdependence between *default* rates for different years; and

(e) the choice of the statistical estimators and the associated distributions and confidence intervals.

(4) The *firm* must further adjust the statistical PD to the extent necessary to take account of the following:

(a) any likely differences between the observed *default* rates over the period covered by the *firm's default* experience and the long-run *PD* for each grade in accordance with ■ BIPRU 4.4.24 R and ■ BIPRU 4.6.24 R; and

(b) any other information that indicates (taking into account the robustness and cogency of that information) that the statistical PD is likely to be an inaccurate estimate of *PD*.

(5) This *rule* is in addition to the other requirements in *BIPRU* about the calculation of *PD*.

(6) When a *firm* calculates whether it has 20 *defaults* or fewer under the calculation in (1)(a), it must only take into account *defaults* that occurred during periods that are relevant to the validation under ■ BIPRU 4 of the model or other *rating system* in question.

4.3.96 G A *firm* may if appropriate also choose to use the approach in ■ BIPRU 4.3.91 G if the internal experience on *exposures* covered by a *rating system* is greater than 20 *defaults*.

4.3.97 G If a *firm* excludes *defaulted exposures* that have been cured (as referred to in ■ BIPRU 4.3.71 R) or restructured (as referred to in ■ BIPRU 4.3.63 R (5)) from estimates of *LGD* in accordance with ■ BIPRU 4.3.110 G, it may also exclude cures from estimates of *PD* for these *exposures*.

4

Risk quantification: Overall requirements for estimation: Requirements specific to own-LGD estimates

4.3.98 R ■ BIPRU 4.3.98 R to ■ BIPRU 4.3.123 R set out requirements specific to own-*LGD* estimates.

4.3.99 R A *firm* must estimate *LGDs* by *facility grade* or pool on the basis of the average realised *LGDs* by *facility grade* or pool using all observed *defaults* within the data sources (*default* weighted average).

[**Note:** *BCD* Annex VII Part 4 point 73]

4.3.100 R A *firm* must calculate the *default* weighted average on the basis of the number of *defaults* included in the calculations made under the historical average rules so far as they relate to the calculation of *PDs* and must not be weighted by the size of *exposures*.

4.3.101 R

(1) A *firm's* estimates of *LGDs* must take into account:

(a) data in respect of relevant incomplete workouts; and

(b) the possibility that the proportion of *defaulted exposures* which are cured (as referred to in ■ BIPRU 4.3.71 R) or restructured (as referred to in ■ BIPRU 4.3.63 R (5)) or the length of the period over which a *firm* makes recoveries under a *defaulted exposure* may be different from the *firm's* observed historic experience.

(2) An incomplete workout as referred to in (1)(a) means a *defaulted exposure* included in the data set on which the *firm's LGD* estimates are based, but for which the recovery process is still in progress, with the result that the final realised *losses* in respect of that *exposure* are not yet certain.

4.3.102 G The changes referred to in ■ BIPRU 4.3.101 R (1)(b) may be caused by external factors, such as the economic environment, as well as factors specific to the obligor, the transaction or the policies of the *firm*.

4.3.103 R A *firm* must use *LGD* estimates that are appropriate for an economic downturn if those are more conservative than the long-run average. To the extent a *rating system* is expected to deliver constant realised *LGDs* by grade or pool over time, a *firm* must make adjustments to its estimates of risk parameters by grade or pool to limit the capital impact of an economic downturn.

[**Note:** *BCD* Annex VII Part 4 point 74]

4.3.104 R

(1) A *firm* must have a rigorous and well documented process for:

(a) assessing the effects, if any, of economic downturn conditions on recovery rates; and

(b) producing *LGD* estimates consistent with downturn conditions as referred to in ■ BIPRU 4.3.103 R.

(2) That process must include the following, which may be included in an integrated manner:

(a) identification of appropriate downturn conditions for each *IRB exposure class* within each jurisdiction;

(b) identification of adverse dependencies, if any, between *default* rates and recovery rates; and

(c) incorporation of adverse dependencies, if identified, between *default* rates and recovery rates in the *firm's* estimates of *LGD* in a manner that meets the requirements in ■ BIPRU 4.3.103 R relating to an economic downturn.

4.3.105 G A *firm* may derive the *LGD* in accordance with ■ BIPRU 4.3.104 R (2)(c) either by directly assigning to the *facility grade* or pool an estimate of *LGD* appropriate for downturn conditions, or alternatively by estimating a *default* weighted average *LGD* in accordance with ■ BIPRU 4.3.99 R and ■ BIPRU 4.3.76 R and converting it into an *LGD* appropriate for downturn conditions by the use of a formula. It should be able to demonstrate that that formula produces well-founded estimates of *LGDs* consistent with downturn conditions for the *exposures* in question.

4.3.106 G A *firm* may combine *IRB exposure classes*, jurisdictions or both for the purpose of ■ BIPRU 4.3.104 R (2)(a) if it can demonstrate that the downturn conditions to which the portfolios are subject will be similar.

4.3.107 G The adverse dependencies referred to in ■ BIPRU 4.3.104 R (2)(b) will not always exist. However, if a *firm* uses *LGDs* that do not allow for such adverse dependencies, it should be able to justify its decision.

4.3.108 G Data relating to economic downturn conditions is likely to be scarce. Accordingly, a *firm* should use internal data, external data or a combination of data sources in order to produce appropriate downturn *LGD* estimates in accordance with ■ BIPRU 4.3.103 R.

4.3.109 R A *firm* must retain sufficient data on both *LGDs* calculated on a economic downturn basis and calculated on a long-run average basis (as referred to in ■ BIPRU 4.3.103 R) to be able to demonstrate to the *appropriate regulator* (if asked) that its estimates based on an economic downturn are no less conservative than the long-run average as referred to in that *rule*.

4.3.110 G Where a *firm* is able to demonstrate that the effect is immaterial in accordance with ■ BIPRU 4.1.25 R (Compliance), it may exclude *defaulted exposures* that have been cured (as referred to in ■ BIPRU 4.3.67 G (1)) or restructured (as referred to in ■ BIPRU 4.3.63 R (5)) from the data about *default* and *loss* experience on which *LGDs* are calculated provided it can demonstrate that its calculation of capital requirements (including capital requirements resulting from the application of capital floors under the transitional *rules* and *guidance* in *BIPRU*) are not reduced as a result of this approximation.

4

4.3.111 R Irrespective of whether calculated on an economic downturn or long-run average basis, each *LGD* estimate must be at least zero.

4.3.112 G In order to support an *LGD* estimate which is very low or zero, a *firm* should be able to demonstrate that the estimate adequately reflects the expected experience on a *default* weighted average basis or in a downturn as appropriate, taking into account the costs and discount rate associated with realisations and the operation of ■ BIPRU 4.3.118 R.

4.3.113 R The methods that a *firm* uses for discounting cash flows for the purposes of estimating *LGDs* must take account of the uncertainties associated with the receipt of recoveries with respect to a *defaulted exposure*. If a *firm* intends to use a discount rate that does not take full account of the uncertainty in recoveries, it must be able to explain by what other process it has taken into account that uncertainty for the purposes of calculating *LGDs*.

4.3.114 G The uncertainty referred to in ■ BIPRU 4.3.113 R can be addressed by adjusting cash flows to certainty-equivalents or by using a discount rate that embodies an appropriate risk premium; or by a combination of the two.

4.3.115 G A *firm* may exclude from its calculation of *loss* indirect costs that it incurs for the purpose of making recoveries with respect to a *defaulted exposure* if it would also have incurred those costs if there had not been a *default*.

4.3.116 R A *firm* must consider the extent of any dependence between the risk of the obligor with that of the collateral or collateral provider. Cases where there is a significant degree of dependence must be addressed in a conservative manner.

[**Note:** *BCD* Annex VII Part 4 point 75]

4.3.117 R Currency mismatches between the underlying obligation and the collateral must be treated conservatively in the *firm's* assessment of *LGD*.

[**Note:** *BCD* Annex VII Part 4 point 76]

4.3.118 R To the extent that *LGD* estimates take into account the existence of collateral, these estimates must not solely be based on the collateral's estimated market value. *LGD* estimates must take into account the effect of the potential inability of the *firm* expeditiously to gain control of its collateral and liquidate it.

[**Note:** *BCD* Annex VII Part 4 point 77]

4.3.119 G

(1) A *firm* may comply with ■ BIPRU 4.3.118 R by reducing the amount of the collateral taken into account for the purposes of calculating *LGD* (applying a haircut to the collateral), basing that reduction on validated realisation experience and using conservatism to reflect the uncertainties.

(2) If collateral is used to reduce the *LGD*, a *firm* should be able to demonstrate how the risk in ■ BIPRU 4.3.118 R has been accounted for. To the extent that it is adequately accounted for in that way it need not be reflected again as part of the residual risk in relation to collateral under the *overall Pillar 2 rule*.

4.3.120 R To the extent that *LGD* estimates take into account the existence of collateral, a *firm* must establish internal requirements for collateral management, legal certainty and risk management that are generally consistent with those set out in ■ BIPRU 5 (Credit risk mitigation) as modified by ■ BIPRU 4.10.

[**Note:** *BCD* Annex VII Part 4 point 78]

4.3.121 R To the extent that a *firm* recognises collateral for determining the exposure value for *counterparty credit risk* according to the *CCR standardised method* or the *CCR internal model method*, any amount expected to be recovered from the collateral must not be taken into account in the *LGD* estimates.

[**Note:** *BCD* Annex VII Part 4 point 79]

4.3.122 R For the specific case of *exposures* already in *default*, a *firm* must use the sum of its best estimate of *expected loss* for each *exposure* given current economic circumstances and *exposure* status and the possibility of additional unexpected *losses* during the recovery period.

[**Note:** *BCD* Annex VII Part 4 point 80]

4.3.123 R To the extent that unpaid late fees have been capitalised in a *firm's* income statement, they must be added to the *firm's* measure of *exposure* and *loss*.

[**Note:** *BCD* Annex VII Part 4 point 81]

Risk quantification: Overall requirements for estimation: Requirements specific to own-conversion factor estimates

4.3.124 R ■ BIPRU 4.3.125 R - ■ BIPRU 4.3.131 R set out requirements specific to own-*conversion factor* estimates.

4.3.125 R A *firm* must estimate *conversion factors* by *facility grade* or pool on the basis of the average expected *conversion factors* by *facility grade* or pool using all observed *defaults* within the data sources (*default* weighted average).

[**Note:** *BCD* Annex VII Part 4 point 87]

4.3.126 G

(1) A *firm* using own estimates of *conversion factors* should take into account all facility types that may result in an *exposure* when an obligor *defaults*, including uncommitted facilities.

(2) A *firm* should treat a facility as an *exposure* from the earliest date at which a customer is able to make drawings under it.

(3) To the extent that a *firm* makes available multiple facilities, it should be able to demonstrate:

(a) how it deals with the fact that *exposures* on one may become *exposures* under another on which the *losses* are ultimately incurred; and

(b) the impact of its approach on its capital requirements.

4

4.3.127 R A *firm* must use *conversion factor* estimates that are appropriate for an economic downturn if those are more conservative than the long-run average. To the extent a *rating system* is expected to deliver realised *conversion factors* at a constant level by grade or pool over time, a *firm* must make adjustments to its estimates of risk parameters by grade or pool to limit the capital impact of an economic downturn.

[**Note:** *BCD* Annex VII Part 4 point 88]

4.3.128 R A *firm's* estimates of *conversion factors* must reflect the possibility of additional drawings by the obligor up to and after the time a *default* event is triggered. The *conversion factor* estimate must incorporate a larger margin of conservatism where a stronger positive correlation can reasonably be expected between the *default* frequency and the magnitude of *conversion factor*.

[**Note:** *BCD* Annex VII Part 4 point 89]

4.3.129 R In arriving at estimates of *conversion factors* a *firm* must consider its specific policies and strategies adopted in respect of account monitoring and payment processing. A *firm* must also consider its ability and willingness to prevent further drawings in circumstances short of payment *default*, such as covenant violations or other technical *default* events.

[**Note:** *BCD* Annex VII Part 4 point 90]

4.3.130 R A *firm* must have adequate systems and procedures in place to monitor facility amounts, current outstandings against committed lines and changes in outstandings per obligor and per grade. A *firm* must be able to monitor outstanding balances on a daily basis.

[**Note:** *BCD* Annex VII Part 4 point 91]

4.3.131 R If a *firm* uses different estimates of *conversion factors* for the calculation of *risk weighted exposure amounts* and internal purposes it must be documented. The *firm* must be able to demonstrate their reasonableness to the *appropriate regulator*.

[**Note:** *BCD* Annex VII Part 4 point 92]

Risk quantification: Overall requirements for estimation: Comparability

4.3.132 G (1) This paragraph contains *guidance* about the interpretation of the requirements relating to comparability in ■ BIPRU 4.3.85 R. It is also relevant to the requirement for representative data in ■ BIPRU 4.3.51 R (5), to the references to comparability in the additional *guidance* in ■ BIPRU 4.3.53 G (7)(b) and to the requirements for similarity in ■ BIPRU 4.3.92 R.

(2) In general, comparability should be based on analyses of the population of *exposures* represented in the data, the lending standards used when the data was generated (where relevant) and other relevant characteristics in relation to the corresponding properties of the *firm's* own portfolio. Other relevant characteristics could include the distribution of the obligors across industries, the size distribution of the *exposures* and similarity with respect to the geographic or demographic distribution of the *exposures*.

4

4.4 The IRB approach: Exposures to corporates, institutions and sovereigns

Application

4.4.1 R

(1) This section applies with respect to the *sovereign, institution and corporate IRB exposure class*.

(2) The *sovereign, institution and corporate IRB exposure class* includes *specialised lending exposures*.

(3) Both ■ BIPRU 4.4 and ■ BIPRU 4.5 (Specialised lending exposures) apply to *specialised lending exposures*. A *firm* may calculate *risk weighted exposure amounts* for a *specialised lending exposure* either:

(a) (if it is able to do so) in accordance with ■ BIPRU 4.4; or

(b) in accordance with ■ BIPRU 4.4 as modified by ■ BIPRU 4.5.

Definition

4.4.2 R

The following *exposures* must be treated as *exposures* to central governments and *central banks*:

(1) *exposures* to regional governments, local authorities or *public sector entities* which are treated as *exposures* to central governments under the *standardised approach*; and

(2) *exposures* to *multilateral development banks* and international organisations which attract a *risk weight* of 0% under the *standardised approach*.

[**Note:** *BCD* Article 86(2)]

4.4.3 R

The following *exposures* must be treated as *exposures* to *institutions*:

(1) *exposures* to regional governments and local authorities which are not treated as *exposures* to central governments under the *standardised approach*;

(2) *exposures* to *public sector entities* which are treated as *exposures* to *institutions* under the *standardised approach*;

(3) exposures to *multilateral development banks* which do not attract a 0% *risk weight* under the *standardised approach*; and

(4) without prejudice to ■ BIPRU 13.3.13 R and ■ BIPRU 13.8.7 R (Exposures to a central counterparty) *exposures* to *recognised third country investment firms* and *exposures* to *recognised clearing houses* and *designated investment exchanges*.

[**Note**: *BCD* Article 86(3) and *CAD* Article 40]

4.4.4 R Any credit obligation not assigned to the *IRB exposure classes* referred to in ■ BIPRU 4.3.2 R (1) (Sovereigns), ■ BIPRU 4.3.2 R (2) (Institutions) and ■ BIPRU 4.3.2 R (4) - ■ BIPRU 4.3.2 R (6) (Retail, equity and securitisations) must be assigned to the *corporate exposure* class.

[**Note:** *BCD* Article 86(7)]

Rating system: Structure of rating system

4.4.5 R ■ BIPRU 4.4.6 R - ■ BIPRU 4.4.21 R apply in addition to ■ BIPRU 4.3.25 R - ■ BIPRU 4.3.28 R (Rating systems).

4.4.6 R A *rating system* must take into account obligor and transaction risk characteristics.

[**Note**: *BCD* Annex VII Part 4 point 5]

4.4.7 R A *rating system* must have an obligor rating scale which reflects exclusively quantification of the risk of obligor *default*. The obligor rating scale must have a minimum of seven grades for non-*defaulted* obligors and one for *defaulted* obligors.

[**Note:** *BCD* Annex VII Part 4 point 6]

4.4.8 R An *obligor grade* means for the purpose of ■ BIPRU 4 as it applies to the *sovereign, institution and corporate IRB exposure class* a risk category within a *rating system's* obligor rating scale, to which obligors are assigned on the basis of a specified and distinct set of rating criteria, from which estimates of *PD* are derived. A *firm* must document both the relationship between *obligor grades* in terms of the level of *default* risk each grade implies and the criteria used to distinguish that level of *default* risk.

[**Note:** *BCD* Annex VII Part 4 point 7]

4.4.9 R A *firm* with portfolios concentrated in a particular market segment and range of *default* risk must have enough *obligor grades* within that range to avoid undue concentrations of obligors in a particular grade. Significant concentrations within a single grade must be supported by convincing empirical evidence that the *obligor grade* covers a reasonably narrow *PD* band and that the *default* risk posed by all obligors in the grade falls within that band.

[**Note:** *BCD* Annex VII Part 4 point 8]

Rating system: Assignment to grades or pools

4.4.10 G Material on assignment to grades or pools can be found in ■ BIPRU 4.3.43 R - ■ BIPRU 4.3.48 R.

Rating system: Assignment of exposures

4.4.11 R Each obligor must be assigned to an *obligor grade* as part of the credit approval process.

[**Note:** *BCD* Annex VII Part 4 point 19]

4.4.12 R Each separate legal entity to which a *firm* is exposed must be separately rated. A *firm* must be able to demonstrate to the *appropriate regulator* that it has acceptable policies regarding the treatment of individual obligor clients and *groups of connected clients*.

[**Note:** *BCD* Annex VII Part 4 point 22]

4.4.13 R Separate *exposures* to the same obligor must be assigned to the same *obligor grade*, irrespective of any differences in the nature of each specific transaction. Exceptions, where separate *exposures* are allowed to result in multiple grades for the same obligor are:

(1) country transfer risk, this being dependent on whether the *exposures* are denominated in local or foreign currency;

(2) where the treatment of associated guarantees to an *exposure* may be reflected in an adjusted assignment to an *obligor grade*; and

(3) where consumer protection, bank secrecy or other legislation prohibit the exchange of client data.

[**Note:** *BCD* Annex VII Part 4 point 23]

Rating system: Overrides

4.4.14 G Material on overrides can be found in ■ BIPRU 4.3.50 R.

Rating system: Integrity of assignment process

4.4.15 R Assignments and periodic reviews of assignments must be completed or approved by an independent party that does not directly benefit from decisions to extend the credit.

[**Note:** *BCD* Annex VII Part 4 point 26]

4.4.16 R A *firm* must update assignments at least annually. High risk obligors and problem *exposures* must be subject to more frequent review. A *firm* must undertake a new assignment if material information on the obligor or *exposure* becomes available.

[**Note:** *BCD* Annex VII Part 4 point 27]

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4.4.17 G Although it will not usually be the case that facility ratings and *conversion factors* will have to be updated more frequently than annually, *LGDs* and *exposure* values are subject to more frequent recalculation due to their connection to drawn balances, which can vary on a daily basis.

4.4.18 R A *firm* must have an effective process to obtain and update relevant information on obligor characteristics that affect *PDs*, and on transaction characteristics that affect *LGDs* and *conversion factors*.

[**Note:** *BCD* Annex VII Part 4 point 28]

Rating system: Use of models

4.4.19 G Material on the use of models can be found in ■ BIPRU 4.3.51 R - ■ BIPRU 4.3.53 G.

Rating system: Documentation of rating systems

4.4.20 G Material on the documentation of rating systems can be found in ■ BIPRU 4.3.19 R - ■ BIPRU 4.3.24 R.

Rating system: Data maintenance

4.4.21 R In addition to complying with the material in ■ BIPRU 4.3.54 R (Data maintenance) a *firm* must collect and store:

(1) complete rating histories on obligors and recognised guarantors;

(2) the dates the ratings were assigned;

(3) the key data and methodology used to derive the rating;

(4) the person responsible for the rating assignment;

(5) the identity of obligors and *exposures* that *defaulted*;

(6) the date and circumstances of such *defaults*;

(7) data on the *PDs* and realised *default* rates associated with rating grades and ratings migration; and

(8) (in the case of a *firm* not using the *advanced IRB approach* in the calculation of *LGDs* and/or *conversion factors*) data on comparisons of realised *LGDs* to the values as set out in ■ BIPRU 4.4.34 R and ■ BIPRU 4.8.25 R and realised *conversion factors* to the values as set out in ■ BIPRU 4.4.37 R, ■ BIPRU 4.4.45 R and ■ BIPRU 4.6.44 R.

[**Note:** *BCD* Annex VII Part 4 point 37]

Risk quantification: Definition of default

4.4.22 R (1) This *rule*, in accordance with ■ BIPRU 4.3.57 R (4) (Definition of default), sets the exact number of days past due that a *firm* should abide by in the case of *exposures* to *PSEs*.

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(2) For counterparts that are *PSEs* situated within the *United Kingdom* the number of days past due is 180.

(3) [deleted]

(4) For counterparts that are *PSEs* in a state other than the *UK* the number of days past due is the lower of:

(a) 180; and

(b) (if a number of days past due for such *exposures* has been fixed under any law of that state applicable to *undertakings* in the *banking sector* or the *investment services sector* that implements the *IRB approach*) that number.

[**Note:** *BCD* Annex VII Part 4 point 44 (part) and point 48 (part)]

Risk quantification: Overall requirements for estimation: Requirements specific to PD estimation

4.4.23 R ■ BIPRU 4.4.24 R - ■ BIPRU 4.4.31 R apply to both the *foundation IRB approach* and the *advanced IRB approach*.

4.4.24 R A *firm* must estimate *PDs* by *obligor grade* from long run averages of one-year *default* rates.

[**Note:** *BCD* Annex VII Part 4 point 59]

4.4.25 R A *firm* must use *PD* estimation techniques only with supporting analysis. A *firm* must recognise the importance of judgmental considerations in combining results of techniques and in making adjustments for limitations of techniques and information.

[**Note:** *BCD* Annex VII Part 4 point 62]

4.4.26 G Where rating agency experience or the output of a statistical default model are the primary component of *PD* estimation, a *firm* should consider whether it needs to make adjustments for other relevant information, such as internal experience, conservatism and cyclical effects. In making these adjustments, a *firm* should consider the extent to which it needs to take account of the potential for both under-recording of actual *defaults* experienced and divergence of actual experience from the true underlying average *PD*.

4.4.27 R To the extent that a *firm* uses data on internal *default* experience for the estimation of *PDs* it must be able to demonstrate in its analysis that the estimates are reflective of underwriting standards and of any differences in the *rating system* that generated the data and the current *rating system*.

Where underwriting standards or *rating systems* have changed, a *firm* must add a greater margin of conservatism in its estimate of *PD*.

[**Note:** *BCD* Annex VII Part 4 point 63]

4.4.28 R To the extent that a *firm* associates or maps its internal grades to the scale used by an *ECAI* or similar organisations and then attributes the *default* rate observed for the external organisation's grades to the *firm's* grades, mappings must be based on a comparison of internal rating criteria to the criteria used by the external organisation and on a comparison of the internal and external ratings of any common obligors. Biases or inconsistencies in the mapping approach or underlying data must be avoided. The external organisation's criteria underlying the data used for quantification must be oriented to *default* risk only and not reflect transaction characteristics. The *firm's* analysis must include a comparison of the *default* definitions used, subject to the requirements in ■ BIPRU 4.3.56 R to ■ BIPRU 4.3.71 R and ■ BIPRU 4.4.22 R (Definition of default). The *firm* must document the basis for the mapping.

[**Note:** *BCD* Annex VII Part 4 point 64]

4.4.29 G It is unlikely that a *firm* will be able to convince the *appropriate regulator* that it had considered all relevant and available information, as required by ■ BIPRU 4.3.74 R, if it used only data from one *ECAI* or similar organisation, where other relevant information is available.

4.4.30 R To the extent that a *firm* uses statistical *default* prediction models it may estimate *PDs* as the simple average of *default*-probability estimates for individual obligors in a given grade. The firm's use of *default* probability models for this purpose must meet the standards specified in ■ BIPRU 4.3.51 R.

[**Note:** *BCD* Annex VII Part 4 point 65]

4.4.31 R Irrespective of whether a *firm* is using external, internal, or pooled data sources, or a combination of the three, for its *PD* estimation, the length of the underlying historical observation period used must be at least five years for at least one source. If the available observation period spans a longer period for any source, and this data is relevant, this longer period must be used. A *firm* not permitted to use own estimates of *LGDs* or *conversion factors* may have, when it implements the *IRB approach*, relevant data covering a period of two years. The period to be covered must increase by one year each year until relevant data cover a period of five years.

[**Note:** *BCD* Annex VII Part 4 point 66 (part)]

IRB foundation approach: General

4.4.32 R ■ BIPRU 4.4.33 R - ■ BIPRU 4.4.39 R set out requirements specific to the *foundation IRB approach*.

4.4.33 R Under the *foundation IRB approach* a *firm* must apply the *LGD* values set out in ■ BIPRU 4.4.34 R and ■ BIPRU 4.8.25 R and the *conversion factors* set out in ■ BIPRU 4.4.37 R.

[**Note:** *BCD* Article 87(8)]

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IRB foundation approach: LGDs

4.4.34 R A *firm* must use the following *LGD* values:

(1) senior *exposures* without eligible collateral, 45%;

(2) subordinated *exposures* without eligible collateral, 75%;

(3) a *firm* may recognise funded and *unfunded credit protection* in the *LGD* in accordance with ■ BIPRU 5 (Credit risk mitigation), as modified by ■ BIPRU 4.10;

(4) *covered bonds* may be assigned an *LGD* value of 11.25%; and

(5) for certain senior *corporate exposure* purchased receivables, for certain subordinated *corporate exposure* purchased receivables and for *dilution risk* of *corporate* purchased receivables the provisions of ■ BIPRU 4.8.25 R (LGDs for corporate receivables) apply.

[**Note:** *BCD* Annex VII Part 2 point 8 (part)]

4.4.35 R [deleted]

(1) [deleted]

(2) [deleted]

(3) [deleted]

(4) [deleted]

Foundation IRB approach: Exposure value and conversion factors

4.4.36 R ■ BIPRU 4.4.37 R - ■ BIPRU 4.4.39 R apply in addition to ■ BIPRU 4.4.71 R - ■ BIPRU 4.4.78 R.

4.4.37 R

(1) The *exposure* value for the items set out in this *rule* must be calculated as the committed but undrawn amount multiplied by the applicable *conversion factor* set out in this *rule*.

(2) For credit lines which are uncommitted, that are unconditionally cancellable at any time by the *firm* without prior notice, or that effectively provide for automatic cancellation due to deterioration in a borrower's credit worthiness, a *conversion factor* of 0 % applies. To apply a *conversion factor* of 0% a *firm* must actively monitor the financial condition of the obligor, and its internal control systems must enable it immediately to detect a deterioration in the credit quality of the obligor.

(3) For short-term letters of credit arising from the movement of goods, a *conversion factor* of 20% applies for both the issuing and confirming *firms*.

(4) For other credit lines, note issuance facilities (NIFs), and revolving underwriting facilities (RUFs), a *conversion factor* of 75% applies.

(5) For undrawn purchase commitments for revolving purchased receivables falling under ■ BIPRU 4.8.29 R, the *conversion factor* set out in that *rule* applies.

[**Note:** *BCD* Annex VII Part 3 point 9 (part)]

4.4.38 R Where a commitment refers to the extension of another commitment, the lower of the two *conversion factors* associated with the individual commitment must be used.

[**Note:** *BCD* Annex VII Part 3 point 10]

4.4.39 R For all off-balance sheet items other than mentioned in ■ BIPRU 4.4.37 R, ■ BIPRU 4.4.45 R, ■ BIPRU 4.4.71 R - ■ BIPRU 4.4.78 R, ■ BIPRU 4.6.44 R, ■ BIPRU 4.8.28 R and ■ BIPRU 4.8.29 R, the *exposure* value must be the following percentage of its value:

(1) 100% if it is a full risk item;

(2) 50% if it is a medium risk item;

(3) 20% if it is a medium/low risk item; and

(4) 0% if it is a low risk item.

For the purposes of this *rule* the off-balance sheet items must be assigned to risk categories as indicated in ■ BIPRU 3.7 (Classification of off-balance sheet items).

[**Note:** *BCD* Annex VII Part 3 point 11]

Advanced IRB approach: General

4.4.40 R ■ BIPRU 4.4.41 R - ■ BIPRU 4.4.55 R set out requirements specific to the *advanced IRB approach*.

4.4.41 R Under the *advanced IRB approach* a *firm* must use its own estimates of *LGDs* and *conversion factors* in accordance with ■ BIPRU 4.

[**Note:** *BCD* Article 87(9)]

Advanced IRB approach: LGDs and PDs

4.4.42 R A *firm* using own *LGD* estimates under the *advanced IRB approach* may recognise *unfunded credit protection* by adjusting *PDs* subject to ■ BIPRU 4.4.43 R.

[**Note:** *BCD* Annex VII Part 2 point 6]

4.4.43 R Notwithstanding ■ BIPRU 4.4.34 R and ■ BIPRU 4.8.25 R, if a *firm's IRB permission* permits it to use own *LGD* estimates under the *advanced IRB approach* for *exposures* to which ■ BIPRU 4 applies and permits it to use the approach in this *rule*, *unfunded credit protection* may be recognised by adjusting *PD* and/or *LGD* estimates subject to the *minimum IRB standards*. A *firm* must not assign guaranteed exposures an adjusted *PD* or *LGD* such that the adjusted

risk weight would be lower than that of a comparable, direct *exposure* to the guarantor.

[**Note:** *BCD* Annex VII Part 2 point 10]

4.4.44 G A *firm* using the *advanced IRB approach* may only recognise *unfunded credit protection* in accordance with ■ BIPRU 4.4.43 R. The other methods for recognising unfunded *credit risk mitigation* under the *standardised approach* and *foundation IRB approach* are not available to a *firm* on the *advanced IRB approach*.

Advanced IRB approach: Conversion factors

4.4.45 R If a *firm* uses its own estimates of *conversion factors* under the *advanced IRB approach* it must calculate the *exposure* value of off-balance sheet *exposures* calculated with the use of *conversion factors* by using its own estimates of *conversion factors* across different product types as mentioned in ■ BIPRU 4.4.37 R and ■ BIPRU 4.4.39 R (2) to ■ BIPRU 4.4.39 R (4).

[**Note:** *BCD* Annex VII Part 3 point 9 (part)]

4.4.46 G Under ■ BIPRU 4.4.45 R, a *firm* may calculate *exposure* values by calculating the amount expected to be claimed, instead of the maximum possible amount of the potential claim. The figure for the amount expected to be claimed should not be less than the current outstandings from time to time.

Advanced IRB approach: Structure of the rating system

4.4.47 R ■ BIPRU 4.4.48 R - ■ BIPRU 4.4.50 R are in addition to ■ BIPRU 4.3.25 R - ■ BIPRU 4.3.28 R and ■ BIPRU 4.4.6 R - ■ BIPRU 4.4.9 R.

4.4.48 R If a *firm's IRB permission* provides for it to use the *advanced IRB approach* for the calculation of *LGDs*, its *rating system* must incorporate a distinct facility rating scale which exclusively reflects *LGD* related transaction characteristics.

[**Note:** *BCD* Annex VII Part 4 point 9]

4.4.49 R A *facility grade* means for the purpose of the *advanced IRB approach* a risk category within a *rating system's* facility scale to which *exposures* are assigned on the basis of a specified and distinct set of rating criteria from which own estimates of *LGDs* are derived. The grade definition must include both a description of how *exposures* are assigned to the grade and of the criteria used to distinguish the level of risk across grades.

[**Note:** *BCD* Annex VII Part 4 point 10]

4.4.50 R Significant concentrations within a single *facility grade* must be supported by convincing empirical evidence that the *facility grade* covers a reasonably narrow *LGD* band, respectively, and that the risk posed by all *exposures* in the grade falls within that band.

[**Note:** *BCD* Annex VII Part 4 point 11]

Advanced IRB approach: Assignment of exposures

4.4.51 R For a *firm* permitted to use own estimates of *LGDs* or *conversion factors* under the *advanced IRB approach*, each *exposure* must be assigned to a *facility grade* as part of the credit approval process. This is in addition to the requirements in ■ BIPRU 4.4.11 R - ■ BIPRU 4.4.13 R.

[**Note:** *BCD* Annex VII Part 4 point 20]

4.4.52 G ■ BIPRU 4.4.50 R and ■ BIPRU 4.4.51 R should be read in the light of ■ BIPRU 4.3.28 R.

Advanced IRB approach: Data maintenance

4.4.53 R As well as complying with ■ BIPRU 4.3.54 R and ■ BIPRU 4.4.21 R (Data maintenance), a *firm* using own estimates of *LGDs* and/or *conversion factors* under the *advanced IRB approach* must collect and store:

(1) complete histories of data on the facility ratings and *LGD* and *conversion factor* estimates associated with each rating scale;

(2) the dates the ratings were assigned and the estimates were done;

(3) the key data and methodology used to derive the facility ratings and *LGD* and *conversion factor* estimates;

(4) the person who assigned the facility rating and the person who provided *LGD* and *conversion factor* estimates;

(5) data on the estimated and realised *LGDs* and *conversion factors* associated with each *defaulted exposure*;

(6) data on the *LGD* of the *exposure* before and after evaluation of the effects of a guarantee or credit derivative, for a *firm* that reflects the credit risk mitigating effects of guarantees or credit derivatives through *LGD*; and

(7) data on the components of *loss* for each *defaulted exposure*.

[**Note:** *BCD* Annex VII Part 4 Point 38]

Advanced IRB approach: Requirements specific to own-LGD estimates

4.4.54 R In addition to the requirements in ■ BIPRU 4.3.74 R - ■ BIPRU 4.3.94 R (General requirements about risk quantification) and ■ BIPRU 4.3.98 R - ■ BIPRU 4.3.123 R (Requirements for risk quantification specific to own-LGD estimates), estimates of *LGD* must be based on data over a minimum of five years, increasing by one year each year after implementation until a minimum of seven years is reached, for at least one data source. If the available observation period spans a longer period for any source, and the data is relevant, this longer period must be used.

[**Note:** *BCD* Annex VII Part 4 point 82]

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Advanced IRB approach: Requirements specific to own-conversion factor estimates

4.4.55 R In addition to the requirements in ■ BIPRU 4.3.124 R - ■ BIPRU 4.3.131 R (Requirements specific to own-conversion factor estimates), estimates of *conversion factors* must be based on data over a minimum of five years, increasing by one year each year after implementation until a minimum of seven years is reached, for at least one data source. If the available observation period spans a longer period for any source, and the data is relevant, this longer period must be used.

[**Note:** *BCD* Annex VII Part 4 point 93]

Calculations: General

4.4.56 R The remainder of this section applies to both the *foundation IRB approach* and the *advanced IRB approach*.

Calculations: Risk-weighted exposure amounts

4.4.57 R Subject to ■ BIPRU 4.4.59 R to ■ BIPRU 4.4.60 R, ■ BIPRU 4.5.6 R, ■ BIPRU 4.5.8 R - ■ BIPRU 4.5.10 R (Risk weights for specialised lending), ■ BIPRU 4.8.16 R, ■ BIPRU 4.8.17 R (Risk weights for corporate exposure purchased receivables) and ■ BIPRU 4.9.3 R (Securitisation: provision of credit protection), *risk weighted exposure amounts* must be calculated according to the formulae in the table in ■ BIPRU 4.4.58 R and the adjustment formula in ■ BIPRU 4.4.79 R (Double default).

[**Note:** *BCD* Annex VII Part 1 point 3]

4.4.58 R Table: Formulae for the calculation of *risk weighted exposure amounts*

This table belongs to ■ BIPRU 4.4.57 R

Correlation (R)	0.12 × (1 - EXP(-50*PD))/(1-EXP(-50)) + 0.24* [1-(1-EXP(-50*PD))/(1-EXP(-50))]
Maturity factor (b)	$(0.11852-0.05478*1n(PD))^2$
	$(LGD*N[(1-R)^{-0.5}*G(PD)+(R/(1-R))^{0.5}*G(0.999)]-PD*LGD)*(1-1.5*b)^{-1}*(1+(M-2.5)*b)*12.5*1.06$
N(x)	denotes the cumulative distribution function for a standard normal random variable (i.e. the probability that a normal random variable with mean zero and variance of one is less than or equal to x). G(z) denotes the inverse cumulative distribution function for a standard normal random variable (i.e. the value x such that N(x) = z).
PD = 0	For PD = 0, RW shall be: 0
PD = 1	For PD = 1: (i) for *defaulted exposures* where a *firm* applies the *LGD* values set out in BIPRU 4.4.32R and BIPRU 4.8.25R RW shall be: 0; (ii) for *defaulted exposures* where a *firm* uses its own estimates of *LGDs*, RW shall be: Max {0, 12.5 *(LGD-EL_{BE})}; where EL_{BE}must be the *firm's* best estimate of *expected*

loss for the *defaulted exposure* according to BIPRU 4.3.122 R.

[**Note:** *BCD* Annex VII Part 1 point 3]

4.4.59 R For *exposures* to companies where the total annual sales for the consolidated group of which the firm is a part is less than EUR 50 million a *firm* may use the following correlation formula for the calculation of *risk weights* for *corporate exposures*. In this formula S is expressed as total annual sales in millions of Euros with EUR 5 million < = S < = EUR 50 million. Reported sales of less than EUR 5 million must be treated as if they were equivalent to EUR 5 million. In accordance with ■ BIPRU 4.8.21 R, for purchased receivables the total annual sales are the weighted average by individual *exposures* of the pool. The formula for the calculation of correlation (R) is:

0.12×(1-EXP(-50*PD))/(1-EXP(-50))+ 0.24*

[1-(1-EXP(-50*PD))/(1-EXP(-50))]

-0.04*(1-(S-5)/45)

[**Note:** *BCD* Annex VII Part 1 point 5 (part)]

4.4.60 R A *firm* must for the purpose of ■ BIPRU 4.4.59 R substitute total assets of the consolidated group for total annual sales when total annual sales are not a meaningful indicator of firm size and total assets are a more meaningful indicator than total annual sales.

[**Note:** *BCD* Annex VII Part 1 point 5 (part)]

Calculations: Expected loss amounts

4.4.61 R *Expected loss* amounts must be calculated according to the formulae in the table in ■ BIPRU 4.4.62 R.

[**Note:** *BCD* Annex VII Part 1 point 30 (part)]

4.4.62 R Table: Formulae for the calculation of *expected loss* amounts

This table belongs to ■ BIPRU 4.4.61 R

Expected loss (*EL*)	equals *PD*×*LGD*
Expected loss amount	equals *EL*×*exposure* value

For *defaulted exposures* (*PD* = 1) where a *firm* uses its own estimates of *LGDs*, *EL* must be $EL_{BE,}$ the *firm's* best estimate of *expected loss* for the *defaulted exposure* according to BIPRU 4.3.122 R.

For exposures subject to the treatment set out in BIPRU 4.4.79 R (Double default) *EL* must be 0.

[**Note:** *BCD* Annex VII Part 1 point 30 (part)]

Calculations: PD

4.4.63 R A *firm* must provide its own estimates of *PDs* in accordance with its *IRB permission* and the *minimum IRB standards*.

[**Note**: *BCD* Article 87(6) (part)]

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4.4.64 R The *PD* of a *corporate exposure* or an *exposure* in the *IRB exposure class* referred to in ■ BIPRU 4.3.2 R (2) (Institutions) must be at least 0.03%.

[**Note:** *BCD* Annex VII Part 2 point 2]

4.4.65 R The *PD* of obligors in *default* must be 100%.

[**Note:** *BCD* Annex VII Part 2 point 4]

4.4.66 R Subject to ■ BIPRU 4.4.42 R (*Advanced IRB approach*: *LGDs* and *PDs*) a *firm* may recognise *unfunded credit protection* in the *PD* in accordance with the provisions of ■ BIPRU 5 (Credit risk mitigation), as modified by ■ BIPRU 4.10. For *dilution risk*, however, a *firm* may also recognise *unfunded credit protection* providers which are specified in its *IRB permission* in addition to those indicated in the *CRM eligibility conditions*.

[**Note:** *BCD* Annex VII Part 2 point 5]

Calculations: Maturity

4.4.67 R

(1) A *firm* must calculate maturity (M) for each of the *exposures* referred to in this *rule* in accordance with this *rule* and subject to ■ BIPRU 4.4.68 R to ■ BIPRU 4.4.70 R. In all cases, M must be no greater than 5 years.

(2) For an instrument subject to a cash flow schedule M must be calculated according to the following formula:

$$M = MAX\{1; MIN\{\sum_t t * CF_t / \sum_t CF_t ; 5\}\}$$

where CF_t denotes the cash flows (principal, interest payments and fees) contractually payable by the obligor in period t.

(3) For derivatives subject to a master netting agreement M must be the weighted average remaining maturity of the *exposure*, where M must be at least 1 year. The notional amount of each *exposure* must be used for weighting the maturity.

(4) For *exposures* arising from fully or nearly-fully collateralised *financial derivative instruments* transactions and fully or nearly-fully collateralised *margin lending transactions* which are subject to a master netting agreement M must be the weighted average remaining maturity of the transactions where M must be at least 10 days. For *repurchase transactions* or securities or commodities lending or borrowing transactions which are subject to a master netting agreement, M must be the weighted average remaining maturity of transactions, where M must be at least 5 days. The notional amount of each transaction must be used for weighting the maturity.

(5) Where a *firm* uses the *CCR internal model method* to calculate the *exposure* values, M must be calculated for *exposures* to which a *firm* applies this method and for which the maturity of the longest-dated contract contained in the *netting set* is greater than one year according to the following formula:

$$M = MIN\left(\frac{\sum_{k=1}^{tk \le 1year} EffectiveEE_k * \Delta t_k * df_k + \sum_{tk>1year}^{maturity} EE_k * \Delta t_k * df_k}{\sum_{k=1}^{tk \le 1year} EffectiveEE_k * \Delta t_k * df_k} ; 5\right)$$

where:

dfk = the risk-free discount factor for future time period tk and the remaining symbols are defined in ■ BIPRU 13.6.

(6) Notwithstanding (7), a *firm* that uses a *CCR internal model method* model to calculate a *one-sided credit valuation adjustment* (CVA) may use the effective credit duration estimated by the model as M if permitted to do so by its *CCR internal model method permission*.

(7) Subject to ■ BIPRU 4.4.68 R, for *netting sets* in which all contracts have an original maturity of less than one year the formula in (2) must be applied.

(8) If a *firm* is permitted under its *IRB permission* to use own *PD* estimates for *corporate exposure* purchased receivables, for drawn amounts M must equal the purchased receivables *exposure* weighted average maturity, where M must be at least 90 days. This same value of M must also be used for undrawn amounts under a committed purchase facility provided the facility contains effective covenants, early amortisation triggers, or other features that protect the purchasing *firm* against a significant deterioration in the quality of the future receivables it is required to purchase over the facility's term. Absent such effective protections, M for undrawn amounts must be calculated as the sum of the longest-dated potential receivable under the purchase agreement and the remaining maturity of the purchase facility, where M must be at least 90 days.

(9) For any other instrument than mentioned in this *rule* or when a *firm* is not in a position to calculate M as set out in (2), M must be the maximum remaining time (in years) that the obligor is permitted to take fully to discharge its contractual obligations, where M must be at least 1 year.

(10) Notwithstanding (2) and (9), M must be at least one-day for:

(a) import letters of credit (including standby letters of credit issued for similar purposes) and acceptances under them;

(b) export letters of credit confirmation and negotiation;

(c) pre-shipment and post-shipment acceptances and financing;

(d) export and import loans collateralised by underlying goods, up to a maximum maturity of 180 days; and

(e) performance guarantees, bid bonds and other guarantees (including standby letters of credit issued for similar purposes) relating to the export and import of goods and services;

provided these *exposures* are not part of the *firm's* ongoing financing of the obligor.

[**Note:** *BCD* Annex VII Part 2 point 13 (part)]

4.4.68 R Notwithstanding ■ BIPRU 4.4.67 R (2) - ■ (4) and (8)-(9), M must be at least one-day for:

(1) fully or nearly-fully collateralised *financial derivative instruments*;

(2) fully or nearly-fully collateralised *margin lending transactions*; and

(3) repurchase transactions, securities or commodities lending or borrowing transactions,

provided the documentation requires daily remargining and daily revaluation and includes provisions that allow for the prompt liquidation or setoff of collateral in the event of *default* or failure to re-margin.

[**Note:** *BCD* Annex VII Part 2 point 14 (part)]

4.4.69 G The last paragraph of paragraph 14 of Part 2 of Annex VII of the *Banking Consolidation Directive* says: "In addition, for other short-term exposures specified by the competent authorities which are not part of the credit institution's ongoing financing of the obligor, M shall be at least one-day. A careful review of the particular circumstances shall be made in each case." ■ BIPRU 4.4.67R (10) is currently the only instance where the *appropriate regulator* has specified any such short-term exposures.

[**Note:** *BCD* Annex VII Part 2 point 14 (part)]

4.4.70 R Maturity mismatches must be treated as specified in ■ BIPRU 4.10 and ■ BIPRU 5 (Credit risk mitigation).

[**Note:** *BCD* Annex VII Part 2 point 16]

Calculations: Exposure value

4.4.71 R Unless provided otherwise in ■ BIPRU 4 the *exposure* value of on-balance sheet *exposures* must be measured gross of value adjustments. This also applies to assets purchased at a price different than the amount owed. For purchased assets, the difference between the amount owed and the net value recorded on the balance-sheet of the firm is denoted discount if the amount owed is larger, and premium if it is smaller.

[**Note:** *BCD* Annex VII Part 3 point 1]

4.4.72 R A *firm* must not treat the *exposure* value of a facility as being less than current drawings under it. Interest accrued to date on an *exposure* under a facility must be included in current drawings or an allowance for it must be built into the *conversion factor*.

4.4.73 R Where a *firm* uses master netting agreements in relation to *repurchase transactions* or *securities or commodities lending or borrowing transactions* the *exposure* value must be calculated in accordance with ■ BIPRU 5 (Credit risk mitigation), as modified by ■ BIPRU 4.10, and ■ BIPRU 13.8.

[**Note:** *BCD* Annex VII Part 3 point 2]

4.4.74 R For on-balance sheet netting of loans and deposits a *firm* must apply for the calculation of the *exposure* value the methods set out in ■ BIPRU 5 (Credit risk mitigation), as modified by ■ BIPRU 4.10.

[**Note:** *BCD* Annex VII Part 3 point 3]

4.4.75 R The *exposure* value for leases must be the discounted minimum lease payments. Minimum lease payments are the payments over the lease term that the lessee is or can be required to make and any bargain option (i.e. option the exercise of which is reasonably certain). Any guaranteed residual value fulfilling the set of conditions in ■ BIPRU 5.7.1 R (Eligibility), as modified by ■ BIPRU 4.10.38 R and ■ BIPRU 4.10.39 R (Unfunded credit protection: Eligibility of providers) regarding the eligibility of protection providers as well as the minimum requirements for recognising other types of guarantees provided in ■ BIPRU 5.7.6 R (Minimum requirements: General) to ■ BIPRU 5.7.12 R (Additional requirements for guarantees) should also be included in the minimum lease payments.

[**Note:** *BCD* Annex VII Part 3 point 4]

4.4.76 R Where an *exposure* takes the form of *securities* or *commodities* sold, posted or lent under *repurchase transactions* or *securities or commodities lending or borrowing transactions*, *long settlement transactions* and *margin lending transactions*, the *exposure* value must be the value of the *securities* or *commodities* determined in accordance with ■ GENPRU 1.3 (Valuation). Where the *financial collateral comprehensive method* is used, the *exposure* value must be increased by the volatility adjustment appropriate to such *securities* or *commodities* as set out in ■ BIPRU 4.10 and ■ BIPRU 5 (Credit risk mitigation). The *exposure* value of *repurchase transactions*, *securities or commodities lending or borrowing transactions*, *long settlements transactions* and *margin lending transactions* must be determined in accordance with ■ BIPRU 13.

[**Note:** *BCD* Annex VII Part 3 point 7]

4.4.77 R Notwithstanding ■ BIPRU 4.4.76 R, the *exposure* value of credit risk *exposures* outstanding, as determined by the *firm*, with a *central counterparty* must be determined in accordance with ■ BIPRU 13.3.3 R and ■ BIPRU 13.8.8 R (Exposure to central counterparty), provided that the *central counterparty's CCR exposures* with all participants in its arrangements are fully collateralised on a daily basis.

[**Note:** *BCD* Annex VII Part 3 point 8]

4.4.78 R In the case of any *financial derivative instrument*, the *exposure* value must be determined by the methods set out in ■ BIPRU 13.

[**Note:** *BCD* Annex VII Part 3 point 5]

Double default

4.4.79 R The *risk weighted exposure amount* for each *exposure* which meets the requirements set out in ■ BIPRU 5.7.2 R and ■ BIPRU 4.4.83 R (Double default) may be adjusted according to the following formula:

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(1) *Risk weighted exposure amount* = RW **exposure* value * (0.15 + 160**PDpp*)]

(2) *PDpp* = *PD* of the protection provider

(3) RW must be calculated using the relevant *risk weight* formula set out in ■ BIPRU 4.4.57 R for the *exposure*, the *PD* of the obligor and the *LGD* of a comparable direct *exposure* to the protection provider. The maturity factor (b) must be calculated using the lower of the *PD* of the protection provider and the *PD* of the obligor.

[**Note:** *BCD* Annex VII Part 1 point 4]

4.4.80 R Notwithstanding ■ BIPRU 4.4.34 R and ■ BIPRU 4.4.43 R, for the purposes of ■ BIPRU 4.4.79 R, the *LGD* of a comparable direct *exposure* to the protection provider shall either be the *LGD* associated with an unhedged facility to the guarantor or the unhedged facility of the obligor, depending upon whether in the event both the guarantor and the obligor *default* during the life of the hedged transaction available evidence and the structure of the guarantee indicate that the amount recovered would depend on the financial condition of the guarantor or obligor, respectively

[**Note:** *BCD* Annex VII Part 2 point 11]

4.4.81 R For the purposes of ■ BIPRU 4.4.79 R, M must be the effective maturity of the credit protection but at least 1 year.

[**Note:** *BCD* Annex VII Part 2 point 13 (part)]

4.4.82 R ■ BIPRU 4.4.83 R applies to the eligibility of protection providers under the *IRB approach* which qualify for the treatment set out in ■ BIPRU 4.4.79 R.

4.4.83 R An *institution*, an *insurance undertaking* (including an *insurance undertaking* that carries out *reinsurance*) or an export credit agency which fulfils the following conditions may be recognised as an eligible provider of *unfunded credit protection* which qualifies for the treatment set out in ■ BIPRU 4.4.79 R:

(1) the protection provider has sufficient expertise in providing *unfunded credit protection*;

(2) the protection provider is regulated in a manner equivalent to the rules laid down in *GENPRU* and *BIPRU* or had, at the time the credit protection was provided, a credit assessment by an *eligible ECAI* which is associated with *credit quality step* 3 or above under the *rules* for the *risk weighting* of *exposures* to *corporates* under the *standardised approach*;

(3) the protection provider had, at the time the credit protection was provided, or for any period of time thereafter, an internal rating with a *PD* equivalent to or lower than that associated with *credit quality step* 2 or above under the *rules* for the *risk weighting* of *exposures* to *corporates* under the *standardised approach*;

(4) the protection provider has an internal rating with a *PD* equivalent to or lower than that associated with *credit quality step* 3 or above

under the *rules* for the *risk weighting* of *exposures* to *corporates* under the *standardised approach*;

For the purpose of this *rule*, credit protection provided by an export credit agency must not benefit from any explicit central government counter-guarantee.

[**Note:** *BCD* Annex VIII Part 1 point 29]

4.4.84 R ■ BIPRU 4.4.85 R applies to the requirements to qualify for the treatment set out in ■ BIPRU 4.4.79 R.

4.4.85 R To be eligible for the treatment set out in ■ BIPRU 4.4.79 R, credit protection deriving from a guarantee or credit derivative must meet the following conditions:

(1) the underlying obligation must be to:

(a) a *corporate exposure*, excluding an *exposure* to an *insurance undertaking* (including an *insurance undertaking* that carries out *reinsurance*); or

(b) an *exposure* to a regional government, local authority or *public sector entity* which is not treated as an *exposure* to a central government or a *central bank* according to ■ BIPRU 4.4.2 R; or

(c) an *exposure* to *retail SME*, classified as a *retail exposure* according to ■ BIPRU 4.6.2 R;

(2) the underlying obligors must not be members of the same *group* as the protection provider;

(3) the *exposure* must be hedged by one of the following instruments:

(a) single name unfunded credit derivatives or single name guarantees;

(b) first to *default* basket products, with these the treatment must be applied to the asset within the basket with the lowest *risk weighted exposure amount*;

(c) n^{th} to *default* basket products, with these the protection obtained is only eligible for consideration under this framework if eligible $(n-1)^{th}$ *default* protection has also been obtained or where (n-1) of the assets within the basket has/have already *defaulted* and where this is the case the treatment must be applied to the asset within the basket with the lowest *risk weighted exposure amount*;

(4) the credit protection must meet the requirements set out in ■ BIPRU 5.7.6 R - ■ BIPRU 5.7.8 R (Minimum requirements: Operational requirements), ■ BIPRU 5.7.11 R (Additional requirements for guarantees) and ■ BIPRU 5.7.13 R - ■ BIPRU 5.7.14 R (Additional requirements for credit derivatives);

(5) the *risk weight* that is associated with the *exposure* prior to the application of the treatment in ■ BIPRU 4.4.79 R does not already factor in any aspect of the credit protection;

(6) a *firm* must have the right and expectation to receive payment from the protection provider without having to take legal action in order to pursue the counterparty for payment;

(7) the purchased credit protection must absorb all credit losses incurred on the hedged portion of an *exposure* that arise due to the occurrence of credit events outlined in the contract;

(8) if the payout structure provides for physical settlement, then there must be legal certainty with respect to the deliverability of a loan, bond or contingent liability and if a *firm* intends to deliver an obligation other than the underlying *exposure*, it must ensure that the deliverable obligation is sufficiently liquid so that the *firm* would have the ability to purchase it for delivery in accordance with the contract;

(9) the terms and conditions of credit protection arrangements must be legally confirmed in writing by both the protection provider and the *firm*;

(10) a *firm* must have a process in place to detect excessive correlation between the creditworthiness of a protection provider and the obligor of the underlying *exposure* due to their performance being dependent on common factors beyond the systematic risk factor;

(11) in the case of protection against *dilution risk*, the seller of purchased receivables must not be a member of the same *group* as the protection provider; and

(12) with reference to (6), to the extent possible, a *firm* must take steps to satisfy itself that the protection provider is willing to pay promptly should a credit event occur.

[**Note:** *BCD* Annex VIII Part 2 point 22]

4.5 The IRB approach: Specialised lending exposures

Application

4.5.1 R ■ BIPRU 4.5 applies with respect to the *exposures* referred to in ■ BIPRU 4.5.3 R.

4.5.2 R Except for ■ BIPRU 4.5.1 R and ■ BIPRU 4.5.3 R, ■ BIPRU 4.5 only applies to the extent that a *firm* applies the method in ■ BIPRU 4.5 (slotting).

Definition of specialised lending

4.5.3 R Within the *corporate exposure IRB exposure class*, a *firm* must separately identify as *specialised lending exposures*, *exposures* which possess the following characteristics:

(1) the *exposure* is to an entity which was created specifically to finance and/or operate physical assets;

(2) the contractual arrangements give the lender a substantial degree of control over the assets and the income that they generate; and

(3) the primary source of repayment of the obligation is the income generated by the assets being financed, rather than the independent capacity of a broader commercial enterprise.

[**Note:** *BCD* Article 86(6)]

Treatment of specialised lending

4.5.4 R If a *firm* is using or is applying to use the *advanced IRB approach* for some or all of its *exposures* in the *sovereign, institution and corporate IRB exposure class*, then *specialised lending exposures* treated under ■ BIPRU 4.5.8 R (Slotting) must be treated as being dealt with under the *advanced IRB approach* for the purposes of the calculations in ■ BIPRU 4.2.30 R and ■ BIPRU 4.2.31 R. If a *firm* is not using or applying to use the *advanced IRB approach* for any of its *exposures* in the *sovereign, institution and corporate IRB exposure class*, in the cases in which it is necessary to distinguish between the *advanced IRB approach* and the *foundation IRB approach*, then *specialised lending exposures* treated under ■ BIPRU 4.5.8 R must be treated as being dealt with under the *foundation IRB approach* for the purposes of the calculations in ■ BIPRU 4.2.30 R and ■ BIPRU 4.2.31 R.

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Structure of rating system

4.5.5 R A *firm* using the methods set out in ■ BIPRU 4.5.8 R (Slotting) for assigning *risk weights* for *specialised lending exposures* is exempt from the requirement to have an obligor rating scale which reflects exclusively quantification of the risk of obligor *default* for these *exposures*. Notwithstanding ■ BIPRU 4.4.7 R (Seven grades for exposures to sovereigns, institutions and corporates), a *firm* must have for these *exposures* four grades for non-*defaulted* obligors and one grade for *defaulted* obligors.

[**Note:** *BCD* Annex VII Part 4 point 12 and point 21]

Assignment of exposures

4.5.6 R

(1) A *firm* using the methods set out in ■ BIPRU 4.5.8 R (Slotting) for assigning *risk weights* for *specialised lending exposure*s must assign each of these *exposures* to a grade in accordance with ■ BIPRU 4 Annex 1 R, taking into account the following factors:

(a) financial strength;

(b) political and legal environment;

(c) transaction and/or asset characteristics;

(d) strength of the sponsor and developer including any public private partnership income stream; and

(e) security package.

(2) A *firm* must slot *exposures* into the five columns in the tables in ■ BIPRU 4.5.9 R and ■ BIPRU 4.5.13 R as follows:

(a) a *firm* must slot an *exposure* categorised as strong under Annex X into column 1;

(b) a *firm* must slot an *exposure* categorised as good under the Annex X into column 2;

(c) a *firm* must slot an *exposure* categorised as satisfactory under Annex X into column 3;

(d) a *firm* must slot an *exposure* categorised as weak under Annex X into column 4;

(e) in accordance with ■ BIPRU 4.5.5 R a *firm* must slot an *exposure* in *default* into column 5.

[**Note:** *BCD* Annex VII Part 1 point 6 (part)]

Calculation of risk-weighted exposure amounts

4.5.7 R Notwithstanding ■ BIPRU 4.3.5 R (Use of relevant parameters for calculating risk weighted exposure amounts), the calculation of *risk weighted exposure amounts* for credit risk for *specialised lending exposures* may be calculated in accordance with ■ BIPRU 4.5.8 R.

[**Note:** *BCD* Article 87(5)]

4.5.8 R For *specialised lending exposures* in respect of which a *firm* cannot demonstrate that its *PD* estimates meet the *minimum IRB standards* it must

assign *risk weights* to these *exposures* according to the table in ■ BIPRU 4.5.9 R.

[**Note:** *BCD* Annex VII Part 1 point 6 (part)]

4.5.9 R

Table: Risk weights for specialised lending

This table belongs to ■ BIPRU 4.5.8 R

Remaining maturity	Category 1 (Strong)	Category 2 (Good)	Category 3 (Sat-isfactory)	Category 4 (Weak)	Category 5
Less than 2.5 years	50%	70%	115%	250%	0%
Equal or more than 2.5 years	70%	90%	115%	250%	0%
The coverage of each of the categories is set out in BIPRU 4.5.6 R					

[**Note:** *BCD* Annex VII Part 1 point 6 (part)]

4.5.10 R

A *firm* may generally assign preferential *risk weights* of 50% to *exposures* in category 1, and a 70% *risk weight* to *exposures* in category 2 if:

(1) its *IRB permission* allows this; and

(2) the *firm's* underwriting characteristics and other risk characteristics are substantially strong for the relevant category.

[**Note:** *BCD* Annex VII Part 1 point 6 (part)]

4.5.11 G

(1) If a *firm* applies for an *IRB permission* or for a variation of an *IRB permission* that permits the treatment in ■ BIPRU 4.5.10 R it should demonstrate that its standards exceed those of the slotting criteria provided for in ■ BIPRU 4.5 and result in ratings that are stronger than the benchmarks referred to in (3).

(2) If a *firm* has an *IRB permission* that permits the treatment in ■ BIPRU 4.5.10 R it should continue to be able to demonstrate the matters in (1) to the *appropriate regulator* if asked.

(3) Although a *firm* should map its internal ratings to the supervisory categories set out in the table in ■ BIPRU 4.5.9 R using the slotting criteria provided in ■ BIPRU 4.5.6 R, each supervisory category broadly corresponds to a range of external credit assessments of BBB- or better, BB+ or BB, BB- or B+ and B to C- (or their equivalents). The fifth category covers *default*.

Calculation of expected loss amounts

4.5.12 R

The *EL* values for *specialised lending exposures* where a *firm* uses the methods set out in ■ BIPRU 4.5.8 R for assigning *risk weights* must be assigned according to the table in ■ BIPRU 4.5.13 R.

[**Note:** *BCD* Annex VII Part 1 point 31 (part)]

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4.5.13 R

Table: Expected loss values for specialised lending

This table belongs to ■ BIPRU 4.5.12 R

Remaining maturity	Category 1 (Strong)	Category 2 (Good)	Category 3 (Sat-isfactory)	Category 4 (Weak)	Category 5
Less than 2.5 years	0%	0.4%	2.8%	8%	50%
Equal or more than 2.5 years	0.4%	0.8%	2.8%	8%	50%
The coverage of each of the categories is set out in BIPRU 4.5.6 R					

[**Note:** *BCD* Annex VII Part 1 point 31 (part)]

4.5.14 R

Where a *firm's IRB permission* authorises it generally to assign preferential *risk weights* as outlined in ■ BIPRU 4.5.10 R of 50% to *exposures* in category 1, and 70% to *exposures* in category 2, the *EL* value for *exposures* in category 1 must be 0%, and for *exposures* in category 2 must be 0.4%.

[**Note:** *BCD* Annex VII Part 1 point 31 (part)]

4.6 The IRB approach: Retail exposures

Application

4.6.1 R ■ BIPRU 4.6 applies with respect to the *exposures* referred to in ■ BIPRU 4.6.2 R.

Definition of retail exposures

4.6.2 R To be eligible to be treated as a *retail exposure*, *exposures* must meet the following criteria:

(1) they must be either to an individual person or persons, or to a small or medium sized entity, provided in the latter case that the total amount owed to the *firm* and *parent undertaking* and its *subsidiary undertakings*, including any past due *exposure*, by the obligor client or *group of connected clients*, but excluding claims or contingent claims secured on residential real estate collateral, must not, to the knowledge of the *firm*, which must have taken reasonable steps to confirm the situation, exceed EUR 1 million;

(2) they are treated by the *firm* in its risk management consistently over time and in a similar manner;

(3) they are not managed just as individually as *exposures* in the *corporate exposure IRB exposure class*;and

(4) they each represent one of a significant number of similarly managed *exposures*.

[**Note:** *BCD* Article 86(4) (part)]

4.6.3 R The present value of retail minimum lease payments is eligible to be treated as a *retail exposure*.

[**Note:** *BCD* Article 86(4) (part)]

4.6.4 G (1) This paragraph sets out *guidance* on ■ BIPRU 4.6.2 R so far as it relates to the boundary between *retail exposures* and *corporate exposures*.

(2) In deciding what steps are reasonable for the purposes of ■ BIPRU 4.6.2 R (1), a *firm* may take into account complexity and cost, as well as the materiality of the impact upon its capital calculation. A *firm* should be able to demonstrate to the *appropriate regulator* that it has complied with the obligation to take reasonable steps under ■ BIPRU 4.6.2 R (1) in the way it takes these factors into account.

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(3) If a *firm* has *exposures* to an owner of a *retail SME* in his personal capacity and *exposures* to the *retail SME* the *firm* should aggregate the two types of *exposure* for the purpose of ■ BIPRU 4.6.2 R (1), although it should not include claims secured on residential real estate collateral. In deciding what steps are reasonable for the purposes of ■ BIPRU 4.6.2 R (1) in aggregating these two types of *exposure*, a *firm* may take into account the materiality of those personal *exposures*. A *firm* should be able to demonstrate to the *appropriate regulator* that it has complied with the obligation to take reasonable steps under ■ BIPRU 4.6.2 R (1) when taking into account materiality in this way.

(4) The definition of *group of connected clients* is set out in the *glossary*. Paragraph (2) of that definition is "two or more *persons* ... who are to be regarded as constituting a single risk because they are so interconnected that, if one of them were to experience financial problems, the other or all of the others would be likely to encounter repayment difficulties". Say that a *firm* has *exposures* to A and B. When deciding whether A and B come within paragraph (2) of the definition two conditions should be satisfied. Firstly the connections between A and B should mean that if A experiences financial problems, B should be likely to encounter repayment difficulties. Secondly, the connections between A and B should mean that if B experiences financial problems, A should be likely to encounter repayment difficulties

(5) A *firm* should have its own documented policy on the types of *exposures* that, in accordance with ■ BIPRU 4.6, qualify as *retail SME exposures*. The *appropriate regulator* would not expect that a definition based on the EUR 1m *exposure* limit would be adequate on its own.

(6) The purpose of the definition of *retail exposure* is to separate a non-granular retail and small and medium sized business portfolio from other business so that a separate capital calculation may be applied to that portfolio that takes into account its non-granularity. Where *retail exposures* are assigned to pools it is the statistical characteristics of these pools which are used to derive the *IRB approach* estimates. Therefore pools should be reasonably homogenous and subject to consistent risk management practices.

(7) A *firm* should have sufficient controls to ensure that any inadvertent assignment of non-eligible *exposures* to the *retail exposure IRB exposure class* is sufficiently immaterial that it does not result in any significant distortion of the overall statistical characteristics of the sub-sets of that *IRB exposure class* which arise when the *exposures* are assigned to grades or pools. Cost considerations do not justify inclusion of non-eligible *exposures* if the effect would be material. Sample testing could be one method of demonstrating that the impact would be immaterial. ■ BIPRU 4.1.25 R applies to *exposures* treated in accordance with this sub-paragraph (7).

(8) If an *exposure* to a small or medium sized business crosses the *retail exposure* size boundary it should be treated as a *corporate*, unless, in accordance with ■ BIPRU 4.1.25 R, the excess is immaterial because of its size or because it is temporary.

(9) ■ BIPRU 4.6.2 R does not require that *exposures* to *retail SMEs* should never be individually managed. In deciding whether the frequency and extent of individual management does or does not make *exposures* ineligible for the *retail exposure IRB exposure class*, a *firm* should consider whether that individual management is:

(a) sufficiently insignificant not to disrupt the homogeneity of the pool;

(b) consistent with the management of other *exposures* in the same *retail exposure* pool; and

(c) significantly different in extent from the individual management that occurs for *corporate exposures*, looked at as a whole.

(10) Where an *exposure* is denominated in other currencies, a *firm* may calculate the Euro equivalent for the purposes of ■ BIPRU 4.6.2 R (1) using any appropriate set of exchange rates provided its choice has no obvious bias and that the *firm* is consistent in its approach to choosing rates.

(11) A *firm* may monitor compliance with the €1m threshold in ■ BIPRU 4.6.2 R (1) on the basis of approved limits provided that it has internal control procedures that are sufficient to ensure that amounts owed cannot diverge from those approved limits to such an extent as to give rise to a breach of the €1m threshold or, if the *firm* is relying on provisions relating to reasonable steps in ■ BIPRU 4.6.2 R (1), any material breach of that threshold.

Rating system: Structure of rating system

4.6.5 G Further material on the structure of rating systems can be found in ■ BIPRU 4.3.25 R - ■ BIPRU 4.3.28 R.

Rating system: Assignment to grades or pools

4.6.6 R *Rating systems* must reflect both obligor and transaction risk, and must capture all relevant obligor and transaction characteristics.

[**Note:** *BCD* Annex VII Part 4 point 13]

4.6.7 R The level of risk differentiation must ensure that the number of *exposures* in a given grade or pool is sufficient to allow for meaningful quantification and validation of the *loss* characteristics at the grade or pool level. The distribution of *exposures* and obligors across grades or pools must be such as to avoid excessive concentrations.

[**Note:** *BCD* Annex VII Part 4 point 14]

4.6.8 G

(1) This paragraph contains *guidance* on the level of differentiation referred to in ■ BIPRU 4.6.7 R.

(2) It is important that a *firm* achieves adequate segmentation to deliver robust estimates of *LGD* and *conversion factors*, as well as *PD*. Whether the focus should be more on *exposure* size or collateral type is a question of fact for the particular circumstances in which the

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assignment of *exposures* to grades or pools occurs. Typically the *appropriate regulator* would expect both to be important.

(3) A *firm* may allocate *retail exposures* to pools based on direct estimates of *PD*, *LGD* and *conversion factors* as well as using an approach under which the *firm* segments first and attributes *PD*, *LGD* and *conversion factors* afterwards. However the result should in either case be that the pools are sufficiently homogenous.

(4) The number and size of pools should be determined in relation to the objective of establishing homogeneous risk. Pools should be of sufficient size to permit the production of robust risk estimates but should not be so large as to obscure variations in quality.

4.6.9 R A *firm* must be able to demonstrate to the *appropriate regulator* that the process of assigning *exposures* to grades or pools provides for a meaningful differentiation of risk, provides for a grouping of sufficiently homogenous exposures, and allows for accurate and consistent estimation of *loss* characteristics at grade or pool level.

[**Note:** *BCD* Annex VII Part 4 point 15 (part)]

4.6.10 G For purchased receivables, ■ BIPRU 4.8 contains material about assignment to grades or pools.

4.6.11 R

(1) A *firm* must consider the following risk drivers when assigning *exposures* to grades or pools:

(a) obligor risk characteristics;

(b) transaction risk characteristics, including product or collateral types or both; and

(c) delinquency.

(2) In the case of (1)(b) a *firm* must explicitly address cases where several *exposures* benefit from the same collateral.

(3) However:

(a) a *firm* need not consider delinquency if this is compatible with its *IRB permission*; and

(b) (in the case of a *firm* with an *IRB permission* that permits the *firm* not to consider delinquency) it should be able to demonstrate to the *appropriate regulator* that delinquency is not a material risk driver for the *exposures* treated in this way.

[**Note:** *BCD* Annex VII Part 4 Point 16]

Rating system: Assignment of exposures

4.6.12 R Each *exposure* must be assigned to a grade or a pool as part of the credit approval process.

[**Note:** *BCD* Annex VII Part 4 point 24]

Rating system: Overrides

4.6.13 G Material on overrides can be found in ■ BIPRU 4.3.50 R.

Rating system: Integrity of assignment process

4.6.14 R A *firm* must at least annually update obligor and facility assignments or review the *loss* characteristics and delinquency status of each identified risk pool whichever is applicable. A *firm* must also at least annually review in a representative sample the status of individual *exposures* within each pool as a means of ensuring that *exposures* continue to be assigned to the correct pool.

[**Note:** *BCD* Annex VII Part 4 point 29]

4.6.15 G Annual rescoring is one method of meeting the requirement in ■ BIPRU 4.6.14 R. However a *firm* need not carry out this update by means of a full re-run of a credit scoring model if it is able to demonstrate that its method is appropriate to the portfolio given its materiality and its impact on its capital requirements and that the *firm* still meets the *minimum IRB standards*.

Rating system: Use of models

4.6.16 G Material on the use of models can be found in ■ BIPRU 4.3.51 R - ■ BIPRU 4.3.53 G.

Rating system: Documentation

4.6.17 G Material on documentation can be found in ■ BIPRU 4.3.19 R - ■ BIPRU 4.3.24 R.

Rating system: Data maintenance

4.6.18 R In addition to complying with ■ BIPRU 4.3.54 R (Data maintenance) a *firm* must collect and store:

(1) data used in the process of allocating *exposures* to grades or pools;

(2) data on the estimated *PDs*, *LGDs* and *conversion factors* associated with grades or pools of *exposures*;

(3) the identity of obligors and *exposures* that *defaulted*;

(4) for *defaulted exposures*, data on the grades or pools to which the *exposure* was assigned over the year prior to *default* and the realised outcomes on *LGD* and *conversion factor*; and

(5) data on *loss* rates for *qualifying revolving retail exposures*.

[**Note:** *BCD* Annex VII Part 4 point 39]

Risk quantification: Definition of default

4.6.19 G Material on the definition of *default* can be found in ■ BIPRU 4.3.56 R - ■ BIPRU 4.3.72 G.

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4.6.20 R

(1) This *rule*, in accordance with ■ BIPRU 4.3.57 R (4) (Definition of default), sets the exact number of days past due that a *firm* must abide by in the case of *retail exposures*.

(2) For *retail exposures* to counterparts situated within the *United Kingdom* the number of days past due is 180 days with the exception of *retail SME exposures*. For these *exposures* the number is 90 days.

(3) [deleted]

(4) For *retail exposures* to counterparts in a state outside the *United Kingdom* the number of days past due is the lower of:

(a) 180; and

(b) (if a number of days past due for such *exposures* has been fixed under any national law of that state applicable to *undertakings* in the *banking sector* or the *investment services sector* that implements the *IRB approach*) that number.

[**Note:** *BCD* Annex VII Part 4 point 44 (part) and point 48 (part)]

4.6.21 R

A *firm* may apply the definition of *default* at a facility level.

[**Note:** *BCD* Annex VII Part 4 point 44 (part)]

4.6.22 G

Where a *firm* chooses to apply the definition of *default* at facility level and a customer has *defaulted* on a facility, then *default* on that facility is likely to influence the *PD* assigned to that customer on other facilities and so should be taken into account.

Risk quantification: Overall requirements for estimation

4.6.23 G

Material on the overall requirements for estimation can be found in ■ BIPRU 4.3.73 R - ■ BIPRU 4.3.94 R.

Risk quantification: Requirements specific to PD estimation

4.6.24 R

A *firm* must estimate *PDs* by obligor grade or pool from long run averages of one-year *default* rates.

[**Note:** *BCD* Annex VII Part 4 point 67]

4.6.25 R

Notwithstanding ■ BIPRU 4.6.24 R, *PD* estimates may also be derived from realised *losses* and appropriate estimates of *LGDs*.

[**Note:** *BCD* Annex VII Part 4 point 68]

4.6.26 R A *firm* must regard internal data for assigning exposures to grades or pools as the primary source of information for estimating *loss* characteristics. A *firm* may use external data (including pooled data) or statistical models for quantification provided a strong link can be demonstrated between:

(1) the *firm's* process of assigning *exposures* to grades or pools and the process used by the external data source; and

(2) the firm's internal risk profile and the composition of the external data.

[**Note:** *BCD* Annex VII Part 4 point 69]

4.6.27 R If a *firm* derives long run average estimates of *PD* and *LGD* for *retail exposures* from an estimate of total *losses*, and an appropriate estimate of *PD* or *LGD*, the process for estimating total *losses* must meet the *minimum IRB standards* for estimation of *PD* and *LGD*, and the outcome must be consistent with the concept of *LGD* as set out in ■ BIPRU 4.3.99 R (Default weighted average).

[**Note:** *BCD* Annex VII Part 4 point 70]

4.6.28 R Irrespective of whether a *firm* is using external, internal, pooled data sources or a combination of the three, for its estimation of *loss* characteristics, the length of the underlying historical observation period used must be at least five years for at least one source. If the available observation spans a longer period for any source, and these data are relevant, this longer period must be used. However:

(1) a *firm* need not give equal importance to historic data if this is compatible with its *IRB permission*; and

(2) (in the case of a *firm* with an *IRB permission* that permits this treatment of historic data) the *firm* must be able to convince the *appropriate regulator* that more recent data is a better predictor of *loss* rates.

[**Note:** *BCD* Annex VII Part 4 point 71 (part)]

4.6.29 R A *firm* may have, when implementing the *IRB approach*, relevant data covering a period of two years. The period to be covered must increase by one year each year until relevant data covers a period of five years.

[**Note:** *BCD* Annex VII Part 4 point 71 (part)]

4.6.30 R A *firm* must identify and analyse expected changes of risk parameters over the life of credit *exposures* (seasoning effects).

[**Note:** *BCD* Annex VII Part 4 point 72]

4

Risk quantification: Requirements specific to own-LGD estimation

4.6.31 R Notwithstanding ■ BIPRU 4.3.99 R (Default weighted average), *LGD* estimates may be derived from realised *losses* and appropriate estimates of *PDs*.

[**Note:** *BCD* Annex VII Part 4 point 83]

4.6.32 R Notwithstanding ■ BIPRU 4.3.128 R (Additional drawings), a *firm* may reflect future drawings either in its *conversion factor* or in its *LGD* estimates.

[**Note:** *BCD* Annex VII Part 4 point 84]

4.6.33 R Estimates of *LGD* must be based on data over a minimum of five years. Notwithstanding ■ BIPRU 4.3.99 R (Default weighted average):

(1) a *firm* need not give equal importance to historic data if this is permitted by its *IRB permission*; and

(2) (in the case of a *firm* with an *IRB permission* that permits this treatment of historic data) the *firm* must be able to convince the *appropriate regulator* that more recent data is a better predictor of loss rates.

[**Note:** *BCD* Annex VII Part 4 point 86 (part)]

4.6.34 R A *firm* may have, when it implements the *IRB approach*, relevant data covering a period of two years. The period to be covered must increase by one year each year until relevant data covers a period of five years.

[**Note:** *BCD* Annex VII Part 4 point 86 (part)]

4.6.35 G The *appropriate regulator* does not assume that all portfolios are sensitive to downturns. The *appropriate regulator* also accepts that for some portfolios, particularly in unsecured lending, the impact of the material drivers on *LGD* may be weak. However the burden is on the *firm* to demonstrate that its models are appropriate for the circumstances in which they are applied.

4.6.36 G Additional material on requirements specific to own-*LGD* estimation can be found in ■ BIPRU 4.3.98 R - ■ BIPRU 4.3.123 R.

Risk quantification: Requirements specific to own-conversion factor estimates

4.6.37 R Notwithstanding ■ BIPRU 4.3.128 R (Additional drawings), a *firm* may reflect future drawings either in its *conversion factors* or in its *LGD* estimates.

[**Note:** *BCD* Annex VII Part 4 point 94]

4.6.38 R Estimates of *conversion factors* must be based on data over a minimum of five years. Notwithstanding ■ BIPRU 4.3.125 R:

(1) a *firm* need not give equal importance to historic data if this is permitted by its *IRB permission*; and

(2) (in the case of a *firm* with an *IRB permission* that permits this treatment of historic data) the *firm* must be able to convince the *appropriate regulator* if asked that more recent data is a better predictor of loss rates.

[**Note:** *BCD* Annex VII Part 4 point 95 (part)]

4.6.39 R A *firm* may have, when it implements the *IRB approach*, relevant data covering a period of two years. The period to be covered must increase by one year each year until relevant data cover a period of five years.

[**Note:** *BCD* Annex VII Part 4 point 95 (part)]

4.6.40 G Additional material on requirements specific to own-*conversion factor* estimation can be found in ■ BIPRU 4.3.124 R - ■ BIPRU 4.3.131 R.

Calculation of risk weighted exposure amounts for retail exposures: General

4.6.41 R Subject to ■ BIPRU 4.6.43 R and ■ BIPRU 4.6.44 R, the *risk weighted exposure amounts* for *retail exposures* must be calculated according to the formulae in the table in ■ BIPRU 4.6.42 R.

[**Note:** *BCD* Annex VII Part 1 point 10 1st sentence]

4.6.42 R Table: Risk weighted exposure amounts for retail exposures

This table belongs to ■ BIPRU 4.6.41 R

Correlation (R)	0.03 × (1 - EXP(-35**PD*))/(1-EXP(-35)) + 0.16* [1-(1-EXP(-35**PD*))/(1-EXP(-35))]
Risk weight (RW)	(*LGD**N[(1-R)$^{-0.5}$*G(*PD*)+(R/(1-R))$^{0.5}$ *G(0.999)]-*PD***LGD*)* 12.5*1.06
N(x)	denotes the cumulative distribution function for a standard normal random variable (i.e. the probability that a normal random variable with mean zero and variance of one is less than or equal to x).
G(z)	denotes the inverse cumulative distribution function for a standard normal random variable (i.e. the value x such that N(x) = z).
PD = 1	For *PD* = 1 (*defaulted exposure*), RW must be: Max {0, 12.5 *(LGD- EL_{BE})} where EL_{BE}must be the firm's best estimate of *expected loss* for the *defaulted exposure* according to BIPRU 4.3.122 R.
Risk weighted exposure amount	equals RW**exposure* value

[**Note:** *BCD* Annex VII Part 1 point 10 (part)]

4

Calculation of risk weighted exposure amounts for retail exposures: Retail mortgages

4.6.43 R For *retail exposures* secured by real estate collateral a correlation (R) of 0.15 must replace the correlation formula in the table in ■ BIPRU 4.6.42 R.

[**Note:** *BCD* Annex VII Part 1 point 12]

Calculation of risk weighted exposure amounts for retail exposures: Qualifying revolving retail exposures

4.6.44 R

(1) For *qualifying revolving retail exposures* a correlation (R) of 0.04 must replace the correlation formula in the table in ■ BIPRU 4.6.42 R.

(2) *Retail exposures* qualify as *qualifying revolving retail exposures* if they meet the following conditions:

(a) the *IRB permission* of the *firm* in question does not disapply this paragraph;

(b) the *exposures* are to individuals;

(c) the *exposures* are revolving, unsecured, and, to the extent they are not drawn, immediately and unconditionally cancellable by the *firm*;

(d) the maximum *exposure* to a single individual in the sub-portfolio is EUR 100,000 or less;

(e) the *firm* is able to demonstrate to the *appropriate regulator* that the use of the correlation formula in this paragraph is limited to portfolios that have exhibited low volatility of *loss* rates, relative to their average level of *loss* rates, especially within the low *PD* bands; and

(f) the *firm* is able to demonstrate to the *appropriate regulator* that treatment as a *qualifying revolving retail exposure* is consistent with the underlying risk characteristics of the sub-portfolio.

(3) In the context of this *rule* revolving *exposures* are defined as those where customers' outstanding balances are permitted to fluctuate based on their decisions to borrow and repay, up to a limit established by the *firm* in question. Undrawn commitments may be considered as unconditionally cancellable if the terms permit the *firm* to cancel them to the full extent allowable under consumer protection and related legislation.

[**Note:** *BCD* Annex VII Part 1 point 13 (part) and Part 3 point 9(a) (part)]

4.6.45 G A *firm* should be able to demonstrate the low volatility of *loss* rates mentioned in ■ BIPRU 4.6.44 R (2)(e) at the time of the initial application for an *IRB permission* and thereafter at any time on request. The benchmark level should be the volatility of *loss* rates for the *qualifying revolving retail exposure* portfolio relative to the volatilities of *loss* rates of other relevant types of *retail exposures*. A *firm* should demonstrate low volatility by reference to data on the mean and standard deviation of *loss* rates over a time period that can be regarded as representative of the long-run performance of the portfolios concerned.

4

4.6.46 G In the *appropriate regulator's* view a sub-portfolio consisting of credit card or overdraft obligations will usually meet the condition in ■ BIPRU 4.6.44 R (2)(f). In the *appropriate regulator's* view it is unlikely that any other type of *retail exposure* will do so. If a *firm* wishes to apply the treatment in ■ BIPRU 4.6.44 R (1) to product types other than credit card or overdraft obligations it should first discuss this with the *appropriate regulator*.

Calculation of expected loss amounts

4.6.47 R *Expected loss* amounts must be calculated according to the formulae in the table in ■ BIPRU 4.6.48 R.

[**Note:** *BCD* Annex VII Part 1 point 30 (part)]

4.6.48 R Table: Formulae for the calculation of expected loss amounts

This table belongs to ■ BIPRU 4.6.47 R

Expected loss (*EL*)	equals *PD*×*LGD*
Expected loss amount	equals *EL*×*exposure* value

For *defaulted exposures* (*PD* = 1) where a *firm* uses its own estimates of *LGDs*, *EL* must be $EL_{BE,}$ the *firm's* best estimate of *expected loss* for the *defaulted exposure* according to BIPRU 4.3.122 R.

For *exposures* subject to the treatment set out in BIPRU 4.4.79 R (Double default) *EL* must be 0.

[**Note:** *BCD* Annex VII Part 1 point 30 (part)]

Calculation of PDs

4.6.49 R A *firm* must provide its own estimates of *PDs* in accordance with its *IRB permission* and the *minimum IRB standards*.

[**Note**: *BCD* Article 87(6) (part)]

4.6.50 R The *PD* of an *exposure* must be at least 0.03%.

[**Note:** *BCD* Annex VII Part 2 point 17]

4.6.51 R The *PD* of obligors in *default* must be 100%. If a *firm* is using the facility level approach described in ■ BIPRU 4.6.21 R, the *PD* of an *exposure* in *default* must be 100%.

[**Note:** *BCD* Annex VII Part 2 point 18]

4.6.52 R *Unfunded credit protection* may be recognised by adjusting *PDs* subject to ■ BIPRU 4.6.54 R. For *dilution risk*, where a *firm* does not use its own estimates of *LGDs*, this must be subject to compliance with ■ BIPRU 5 (Credit risk mitigation) modified by ■ BIPRU 4.10 and, for this purpose, a *firm* may recognise *unfunded credit protection* providers other than those indicated in the *CRM eligibility conditions* provided the *firm* is able to demonstrate that the unfunded protection provider giving the undertaking is sufficiently

reliable and that the protection agreement is legally effective in accordance with ■ BIPRU 5.2.7 R (Unfunded credit protection).

[**Note:** *BCD* Annex VII Part 2 point 20]

Calculation of LGDs

4.6.53 R A *firm* must provide its own estimates of *LGDs* in accordance with its *IRB permission* and the *minimum IRB standards*.

[**Note**: *BCD* Article 87(7) (part)]

4.6.54 R *Unfunded credit protection* may be recognised as eligible by adjusting *PD* or *LGD* estimates subject to the *minimum IRB standards* as specified in ■ BIPRU 4.10.43 R - ■ BIPRU 4.10.48 R and in accordance with the *IRB permission* either in support of an individual *exposure* or a pool of *exposures*. A *firm* must not assign guaranteed *exposures* an adjusted *PD* or *LGD* such that the adjusted *risk weight* would be lower than that of a comparable, direct *exposure* to the guarantor.

[**Note:** *BCD* Annex VII Part 2 point 22]

Calculation of exposure values and own conversion factors

4.6.55 R Except where otherwise specified, ■ BIPRU 4.4.37 R - ■ BIPRU 4.4.39 R (Exposure value and conversion factors), ■ BIPRU 4.4.45 R (AIRB conversion factors) and ■ BIPRU 4.4.71 R - ■ BIPRU 4.4.78 R (Calculation of exposure values for sovereigns, institutions and corporates) also apply to *retail exposures*.

4.6.56 R A *firm* must provide its own estimates of *conversion factors* in accordance with its *IRB permission* and the *minimum IRB standards*.

[**Note**: *BCD* Article 87(7) (part)]

Double default

4.6.57 R The *risk weighted exposure amount* for each *exposure* to *retail SME* as defined in ■ BIPRU 4.6.2 R which meets the requirements set out in ■ BIPRU 4.4.83 R and ■ BIPRU 4.4.85 R may be calculated according to ■ BIPRU 4.4.79 R (Double default).

[**Note:** *BCD* Annex VII Part 1 point 11]

4.6.58 R Notwithstanding ■ BIPRU 4.6.54 R for the purposes of ■ BIPRU 4.4.80 R the *LGD* of a comparable direct *exposure* to the protection provider must either be the *LGD* associated with an unhedged facility to the guarantor or the unhedged facility of the obligor, depending upon whether in the event both the guarantor and obligor *default* during the life of the hedged transaction available evidence and the structure of the guarantee indicate that the amount recovered would depend on the financial condition of the guarantor or obligor, respectively.

[**Note:** *BCD* Annex VII Part 2 point 23]

4.7 The IRB approach: Equity exposures

Application

4.7.1 R ■ BIPRU 4.7 applies with respect to the *exposures* referred to in ■ BIPRU 4.7.2 R.

Definition of equity exposures

4.7.2 R The following *exposures* must be classed as *equity exposures*:

(1) non-debt *exposures* conveying a subordinated, residual claim on the assets or income of the issuer; and

(2) debt *exposures* the economic substance of which is similar to the *exposures* specified in (1).

[**Note:** *BCD* Article 86(2)]

Calculation of risk-weighted exposure amounts

4.7.3 R Notwithstanding ■ BIPRU 4.3.5 R (Relevant parameters), the calculation of *risk weighted exposure amounts* for credit risk for all *exposures* belonging to the *equity exposure IRB exposure class* must be calculated in accordance with one of the following ways:

(1) the simple risk weight approach (see ■ BIPRU 4.7.8 R;

(2) the *PD/LGD approach* (see ■ BIPRU 4.7.13 R); and

(3) the internal models approach (see ■ BIPRU 4.7.23 R);

in accordance with ■ BIPRU 4.7 and subject to the *firm's IRB permission*.

[**Note:** *BCD* Article 87(4) (part)]

4.7.4 R Even if a *firm's IRB permission* would otherwise permit the use of the internal models approach as referred to in ■ BIPRU 4.7.3 R (3), it may only use that approach if it meets the minimum requirements in ■ BIPRU 4.7.27 R - ■ BIPRU 4.7.35 R.

[**Note:** *BCD* Article 87(4) (part)]

4.7.5 R A *firm* may employ different approaches to different portfolios where the *firm* itself uses different approaches internally. A *firm* must, if it uses different approaches in accordance with the previous sentence, be able to

demonstrate to the *appropriate regulator* that the choice is made consistently and is not determined by regulatory arbitrage considerations.

[**Note:** *BCD* Annex VII Part 1 point 17]

4.7.6 R Notwithstanding ■ BIPRU 4.7.5 R a firm may, if its *IRB permission* permits it to do so, attribute the *risk weighted exposure amounts* for *equity exposures* to *ancillary services undertakings* according to the treatment of *non credit-obligation assets*.

[**Note:** *BCD* Annex VII Part 1 point 18]

Exposure value

4.7.7 R The *exposure* value must be the value presented in the financial statements. Admissible *equity exposure* measures are the following:

(1) for investments held at fair value with changes in value flowing directly through income and into *capital resources*, the *exposure* value is the fair value presented in the balance sheet;

(2) for investments held at fair value with changes in value not flowing through income but into a tax-adjusted separate component of equity, the *exposure* value is the fair value presented in the balance sheet; and

(3) for investments held at cost or at the lower of cost or market value, the *exposure* value is the cost or market value presented in the balance sheet.

[**Note:** *BCD* Annex VII Part 3 point 12]

The calculation of risk-weighted exposure amounts for equity exposures: The simple risk weight approach: Introduction

4.7.8 R ■ BIPRU 4.7.9 R to ■ BIPRU 4.7.12 R set out the simple risk weight approach for calculating the *risk weighted exposure amounts* for *equity exposures* as referred to in ■ BIPRU 4.7.3 R (1).

The calculation of risk-weighted exposure amounts for equity exposures: The simple risk weight approach: Risk weighted exposure amounts

4.7.9 R The *risk weighted exposure amounts* must be calculated according to the following formula:

risk-weighted exposure amounts = RW * *exposure* value;

where:

(1) *risk weight* (RW) = 190% for private *equity exposures* in sufficiently diversified portfolios;

(2) *risk weight* (RW) = 290% for exchange traded *equity exposures*; and

(3) *risk weight* (RW) = 370% for all other *equity exposures*.

[**Note:** *BCD* Annex VII Part 1 point 19]

4.7.10 R Short cash positions and derivative instruments held in the *non-trading book* are permitted to offset long positions in the same individual stocks provided that these instruments have been explicitly designated as hedges of specific *equity exposures* and that they provide a hedge for at least another year. Other short positions must be treated as if they are long positions with the relevant *risk weight* assigned to the absolute value of each position. In the context of maturity mismatched positions, the method is that for *corporate exposures* as set out in ■ BIPRU 4.4.70 R.

[**Note:** *BCD* Annex VII Part 1 point 20]

4.7.11 R A *firm* may recognise *unfunded credit protection* obtained on an *equity exposure* in accordance with the methods set out in ■ BIPRU 5 (Credit risk mitigation), as modified by ■ BIPRU 4.10.

[**Note:** *BCD* Annex VII Part 1 point 21]

The calculation of risk-weighted exposure amounts for equity exposures: The simple risk weight approach: Expected loss

4.7.12 R The *expected loss* amounts for *equity exposures* must be calculated according to the following formula:

(1) *expected loss* amount = *EL* × *exposure* value; and

(2) the *EL* values must be the following:

(a) *expected loss* (*EL*) = 0.8% for private *equity exposures* in sufficiently diversified portfolios;

(b) *expected loss* (*EL*) = 0.8% for exchange traded *equity exposures*; and

(c) *expected loss* (*EL*) = 2.4% for all other *equity exposures*.

[**Note:** *BCD* Annex VII Part 1 point 32]

The calculation of risk-weighted exposure amounts for equity exposures: The PD/LGD approach: Introduction

4.7.13 R ■ BIPRU 4.7.14 R to ■ BIPRU 4.7.22 R set out the *PD/LGD approach* for calculating the *risk weighted exposure amounts* for *equity exposures*.

The calculation of risk-weighted exposure amounts for equity exposures: The PD/LGD approach: Risk weighted exposure amounts

4.7.14 R The *risk weighted exposure amounts* must be calculated according to the formulas in ■ BIPRU 4.4.58 R (Risk weighted exposure amounts for sovereigns, institutions and corporates). If a *firm* does not have sufficient information to use the definition of *default* a scaling factor of 1.5 must be assigned to the *risk weights*.

[**Note:** *BCD* Annex VII Part 1 point 22]

4

4.7.15 R At the individual *exposure* level the sum of the *expected loss* amount multiplied by 12.5 and the *risk weighted exposure amount* must not exceed the *exposure* value multiplied by 12.5.

[**Note:** *BCD* Annex VII Part 1 point 23]

4.7.16 R A *firm* may recognise *unfunded credit protection* obtained on an *equity exposure* in accordance with the methods set out in ■ BIPRU 5 (Credit risk mitigation) as modified by ■ BIPRU 4.10. This must be subject to an *LGD* of 90% on the *exposure* to the provider of the hedge. For private *equity exposures* in sufficiently diversified portfolios an *LGD* of 65% may be used.

[**Note:** *BCD* Annex VII Part 1 point 24]

The calculation of risk-weighted exposure amounts for equity exposures: The PD/LGD approach: Calculation of expected loss amounts

4.7.17 R The *expected loss* amounts for *equity exposures* must be calculated according to the following formulae:

(1) *expected loss* (EL) = *PD* × *LGD*; and

(2) *expected loss* amount = *EL* × *exposure* value.

[**Note:** *BCD* Annex VII Part 1 point 33]

The calculation of risk-weighted exposure amounts for equity exposures: The PD/LGD approach: PDs

4.7.18 R *PDs* must be determined according to the methods for *corporate exposures*. The following minimum *PDs* must be applied:

(1) 0.09% for exchange traded *equity exposures* where the investment is part of a long-term customer relationship;

(2) 0.09% for non-exchange traded *equity exposures* where the returns on the investment are based on regular and periodic cash flows not derived from capital gains;

(3) 0.40% for exchange traded *equity exposures* including other short positions as set out in ■ BIPRU 4.7.10 R; and

(4) 1.25% for all other *equity exposures* including other short positions as set out in ■ BIPRU 4.7.10 R.

[**Note:** *BCD* Annex VII Part 2 point 24]

4.7.19 R ■ BIPRU 4.4.29 G (five year observation period) applies to the *PD/LGD approach*.

[**Note:** *BCD* Annex VII Part 4 point 66 (part)]

The calculation of risk-weighted exposure amounts for equity exposures: The PD/LGD approach: LGDs

4.7.20 R Private *equity exposures* in sufficiently diversified portfolios may be assigned an *LGD* of 65%.

[**Note:** *BCD* Annex VII Part 2 point 25]

4.7.21 R All other *exposures* must be assigned an *LGD* of 90%.

[**Note:** *BCD* Annex VII Part 2 point 26]

The calculation of risk-weighted exposure amounts for equity exposures: The PD/LGD approach: Maturity

4.7.22 R M (maturity) assigned to all *exposures* must be 5 years.

[**Note:** *BCD* Annex VII Part 2 point 27]

The calculation of risk-weighted exposure amounts for equity exposures: The internal models approach: Introduction

4.7.23 R ■ BIPRU 4.7.24 R to ■ BIPRU 4.7.35 R set out the internal models approach for calculating the *risk weighted exposure amounts* for *equity exposures* as referred to in ■ BIPRU 4.7.3 R (3).

The calculation of risk-weighted exposure amounts for equity exposures: The internal models approach: Risk weighted exposure amounts

4.7.24 R The *risk weighted exposure amount* is the potential *loss* on the *firm's equity exposures* as derived using internal value-at-risk models subject to the 99th percentile, one-tailed confidence interval of the difference between quarterly returns and an appropriate risk-free rate computed over a long-term sample period, multiplied by 12.5. The *risk weighted exposure amounts* at the *equity exposure* portfolio level must not be less than the total of the sums of the minimum *risk weighted exposure amounts* required under the *PD/LGD approach* and the corresponding *expected loss* amounts multiplied by 12.5 and calculated on the basis of the *PD* values set out in ■ BIPRU 4.7.18 R (1) and the corresponding *LGD* values set out in ■ BIPRU 4.7.20 R and ■ BIPRU 4.7.21 R.

[**Note:** *BCD* Annex VII Part 1 point 25]

4.7.25 R A *firm* may recognise *unfunded credit protection* obtained on an *equity position*.

[**Note:** *BCD* Annex VII Part 1 point 26]

The calculation of risk weighted exposure amounts for equity exposures: The internal models approach: Expected loss amounts

4.7.26 R The *expected loss* amounts for *equity exposures* under the internal models approach must be 0%.

[**Note:** *BCD* Annex VII Part 1 point 34]

4

The calculation of risk weighted exposure amounts for equity exposures: The internal models approach: Capital requirements and risk quantification

4.7.27 R

(1) A firm must meet the standards set out in (2) to (9) for the purpose of calculating capital requirements.

(2) The estimate of potential *loss* must be robust to adverse market movements relevant to the long-term risk profile of the *firm's* specific holdings. The data used to represent return distributions must reflect the longest sample period for which data is available and be meaningful in representing the risk profile of the firm's specific *equity exposures*. The data used must be sufficient to provide conservative, statistically reliable and robust loss estimates that are not based purely on subjective or judgmental considerations. A *firm* must be able to demonstrate to the *appropriate regulator* that the shock employed provides a conservative estimate of potential *losses* over a relevant long-term market or business cycle.

(3) A *firm* must combine empirical analysis of available data with adjustments based on a variety of factors in order to attain model outputs that achieve appropriate realism and conservatism. In constructing Value at Risk (VaR) models estimating potential quarterly losses, a *firm* may use quarterly data or convert shorter horizon period data to a quarterly equivalent using an analytically appropriate method supported by empirical evidence and through a well-developed and documented thought process and analysis. Such an approach must be applied conservatively and consistently over time. Where only limited relevant data is available a *firm* must add appropriate margins of conservatism.

(4) The models used must be able to capture adequately all of the material risks embodied in equity returns including both the *general market risk* and *specific risk* exposure of the *firm's equity exposure* portfolio. The internal models must adequately explain historical price variation, capture both the magnitude and changes in the composition of potential concentrations, and be robust to adverse market environments. The population of risk *exposures* represented in the data used for estimation must be closely matched to or at least comparable with those of the *firm's equity exposures*.

(5) The internal model must be appropriate for the risk profile and complexity of a *firm's equity exposure* portfolio. Where a *firm* has material holdings with values that are highly non-linear in nature the internal models must be designed to capture appropriately the risks associated with such instruments.

(6) Mapping of individual positions to proxies, market indices, and risk factors must be plausible, intuitive, and conceptually sound.

(7) A *firm* must be able to demonstrate to the *appropriate regulator* through empirical analyses the appropriateness of risk factors, including their ability to cover both *general market risk* and *specific risk*.

(8) The estimates of the return volatility of *equity exposures* must incorporate relevant and available data, information, and methods.

Independently reviewed internal data or data from external sources (including pooled data) must be used.

(9) A rigorous and comprehensive stress-testing programme must be in place.

[**Note:** *BCD* Annex VII Part 4 point 115]

The calculation of risk-weighted exposure amounts for equity exposures: The internal models approach: Risk management and controls

4.7.28 R

(1) With regard to the development and use of internal models for capital requirement purposes, a *firm* must establish policies, procedures, and controls to ensure the integrity of the model and modelling process. These policies, procedures, and controls must include the ones set out in the rest of this paragraph.

(2) There must be full integration of the internal model into the overall management information systems of the *firm* and in the management of the *non-trading book equity exposure* portfolio. In particular they must be used in:

(a) measuring and assessing *equity exposure* portfolio performance (including the risk adjusted performance);

(b) allocating economic capital to *equity exposures*; and

(c) evaluating overall capital adequacy and the investment management process.

(3) A *firm* must have established management systems, procedures, and control functions for ensuring the periodic and independent review of all elements of the internal modelling process, including approval of model revisions, vetting of model inputs, and review of model results, such as direct verification of risk computations. These reviews must assess the accuracy, completeness, and appropriateness of model inputs and results and focus on both finding and limiting potential errors associated with known weaknesses and identifying unknown model weaknesses. Such reviews may be conducted by an internal independent unit, or by an independent external third party.

(4) There must be adequate systems and procedures for monitoring investment limits and the risk exposures of *equity exposures*.

(5) The units responsible for the design and application of the model must be functionally independent from the units responsible for managing individual investments.

(6) Parties responsible for any aspect of the modelling process must be adequately qualified. Management must allocate sufficient skilled and competent resources to the modelling function.

[**Note:** *BCD* Annex VII Part 4 point 116]

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The calculation of risk-weighted exposure amounts for equity exposures: The internal models approach: Validation and documentation

4.7.29 R A *firm* must have a robust system in place to validate the accuracy and consistency of its internal models and modelling processes. All material elements of the internal models and the modelling process and validation must be documented.

[**Note:** *BCD* Annex VII Part 4 point 117]

4.7.30 R A *firm* must use the internal validation process to assess the performance of its internal models and processes in a consistent and meaningful way.

[**Note:** *BCD* Annex VII Part 4 point 118]

4.7.31 R The methods and data used for quantitative validation must be consistent through time. Changes in estimation and validation methods and data (both data sources and periods covered) must be documented.

[**Note:** *BCD* Annex VII Part 4 point 119]

4.7.32 R A *firm* must regularly compare actual *equity exposure* returns (computed using realised and unrealised gains and losses) with modelled estimates. Such comparisons must make use of historical data that cover as long a period as possible. A *firm* must document the methods and data used in such comparisons. This analysis and documentation must be updated at least annually.

[**Note:** *BCD* Annex VII Part 4 point 120]

4.7.33 R A firm must make use of other quantitative validation tools and comparisons with external data sources. The analysis must be based on data that are appropriate to the portfolio, are updated regularly, and cover a relevant observation period. A *firm's* internal assessments of the performance of its models must be based on as long a period as possible.

[**Note:** *BCD* Annex VII Part 4 point 121]

4.7.34 R A *firm* must have sound internal standards for situations where comparison of actual *equity exposure* returns with the models' estimates calls the validity of the estimates or of the models as such into question. These standards must take account of business cycles and similar systematic variability in *equity exposure* returns. All adjustments made to internal models in response to model reviews must be documented and consistent with the *firm's* model review standards.

[**Note:** *BCD* Annex VII Part 4 point 122]

4.7.35 R The internal model and the modelling process must be documented, including the responsibilities of parties involved in the modelling, and the model approval and model review processes.

[**Note:** *BCD* Annex VII Part 4 point 123]

4.8 The IRB approach: Purchased receivables

Application

4.8.1 R ■ BIPRU 4.8 applies with respect to purchased receivables.

4.8.2 G Purchased receivables do not form an *IRB exposure class* on their own. For any purchased receivable, the provisions of the sections of ■ BIPRU 4 that deal with the *IRB exposure class* to which it belongs also apply, as modified by this section.

[**Note**: *BCD* Annex VII Part 4 point 15 (part)]

Structure of rating systems

4.8.3 R For *retail exposure* that are purchased receivables, the grouping referred to in ■ BIPRU 4.6.9 R must reflect the seller's underwriting practices and the heterogeneity of its customers.

Risk quantification: Overall requirements for estimation: General

4.8.4 G Further general material about the requirements for estimation can be found in ■ BIPRU 4.3.73 R - ■ BIPRU 4.3.94 R.

4.8.5 R The estimates for determining the risk parameters *PD*, *LGD*, *conversion factor* and *EL* must reflect all relevant information available to the purchasing *firm* regarding the quality of the underlying receivables, including data for similar pools provided by the seller, by the purchasing *firm*, or by external sources. The purchasing *firm* must evaluate any data relied upon which is provided by the seller.

[**Note**: *BCD* Annex VII Part 4 point 53]

Risk quantification: Overall requirements for estimation: Requirements specific to PD estimation

4.8.6 R With respect to ■ BIPRU 4.6.26 R (Internal and external data for PD estimation: retail exposures) a *firm* may use external and internal reference data for *PD* estimation. A *firm* must use all relevant data sources as points of comparison.

[**Note**: *BCD* Annex VII Part 4 point 69 (part)]

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4.8.7 R For *corporate exposure* purchased receivables a *firm* may estimate *ELs* by obligor grade from long run averages of one-year realised *default* rates.

[**Note**: *BCD* Annex VII Part 4 point 60]

4.8.8 R If a *firm* derives long run average estimates of *PDs* and *LGDs* for *corporate exposure* purchased receivables from an estimate of *EL*, and an appropriate estimate of *PD* or *LGD*, the process for estimating total *losses* must meet the overall standards for estimation of *PD* and *LGD* set out in the *minimum IRB standards*, and the outcome must be consistent with the concept of *LGD* as set out in ■ BIPRU 4.3.99 R.

[**Note**: *BCD* Annex VII Part 4 point 61]

Risk quantification: Overall requirements for estimation: Requirements specific to own-LGD estimates

4.8.9 R A *firm* may use external and internal reference data for its *LGD* estimates in the case of *retail exposures* that are purchased receivables.

[**Note**: *BCD* Annex VII Part 4 point 85]

Risk quantification: Overall requirements for estimation: Minimum requirements for purchased receivables: General

4.8.10 R ■ BIPRU 4.8.11 R - ■ BIPRU 4.8.15 R set out minimum requirements specific to the treatment of purchased receivables under the *IRB approach*.

Risk quantification: Overall requirements for estimation: Minimum requirements for purchased receivables: Legal certainty

4.8.11 R The structure of the facility must ensure that under all foreseeable circumstances a *firm* has effective ownership and control of all cash remittances from the receivables. When the obligor makes payments directly to a seller or servicer a *firm* must verify regularly that payments are forwarded completely and within the contractually agreed terms. Servicer means an entity that manages a pool of purchased receivables or the underlying credit *exposures* on a day-to-day basis. A *firm* must have procedures to ensure that ownership over the receivables and cash receipts is protected against bankruptcy stays or legal challenges that could materially delay the lender's ability to liquidate or assign the receivables or retain control over cash receipts.

[**Note**: *BCD* Annex VII Part 4 point 105]

Risk quantification: Overall requirements for estimation: Minimum requirements for purchased receivables: Effectiveness of monitoring systems

4.8.12 R

(1) A *firm* must monitor both the quality of the purchased receivables and the financial condition of the seller and servicer. In particular a *firm* must comply with the remaining provisions of this *rule*.

(2) A *firm* must assess the correlation among the quality of the purchased receivables and the financial condition of both the seller and servicer, and have in place internal policies and procedures that

provide adequate safeguards to protect against such contingencies, including the assignment of an internal risk rating for each seller and servicer.

(3) A *firm* must have clear and effective policies and procedures for determining seller and servicer eligibility. A *firm* or its agent must conduct periodic reviews of sellers and servicers in order to verify the accuracy of reports from the seller or servicer, detect fraud or operational weaknesses, and verify the quality of the seller's credit policies and servicer's collection policies and procedures. The findings of these reviews must be documented.

(4) A *firm* must assess the characteristics of the purchased receivables pools including:

(a) over-advances;

(b) history of the seller's arrears, bad debts, and bad debt allowances;

(c) payment terms; and

(d) potential contra accounts.

(4) A *firm* must have effective policies and procedures for monitoring on an aggregate basis single-obligor concentrations both within and across purchased receivables pools.

(5) A *firm* must ensure that it receives from the servicer timely and sufficiently detailed reports of receivables ageings and dilutions to ensure compliance with the *firm's* eligibility criteria and advancing policies governing purchased receivables, and provide an effective means with which to monitor and confirm the seller's terms of sale and dilution.

[**Note**: *BCD* Annex VII Part 4 point 106]

Risk quantification: Overall requirements for estimation: Minimum requirements for purchased receivables: Effectiveness of work-out systems

4.8.13 R A *firm* must have systems and procedures for detecting deteriorations in the seller's financial condition and purchased receivables quality at an early stage, and for addressing emerging problems proactively. In particular a *firm* must have clear and effective policies, procedures, and information systems to monitor covenant violations, and clear and effective policies and procedures for initiating legal actions and dealing with problem purchased receivables.

[**Note**: *BCD* Annex VII Part 4 point 107]

Risk quantification: Overall requirements for estimation: Minimum requirements for purchased receivables: Effectiveness of systems for controlling collateral, credit availability and cash

4.8.14 R A *firm* must have clear and effective policies and procedures governing the control of purchased receivables, credit, and cash. In particular, written internal policies must specify all material elements of the receivables

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purchase programme, including the advancing rates, eligible collateral, necessary documentation, concentration limits, and the way cash receipts are to be handled. These elements must take appropriate account of all relevant and material factors, including the seller's and servicer's financial condition, risk concentrations, and trends in the quality of the purchased receivables and the seller's customer base, and internal systems must ensure that funds are advanced only against specified supporting collateral and documentation.

[**Note**: *BCD* Annex VII Part 4 point 108]

Risk quantification: Overall requirements for estimation: Minimum requirements for purchased receivables: Compliance with the firm's internal policies and procedures

4.8.15 R A *firm* must have an effective internal process for assessing compliance with all internal policies and procedures. The process must include regular audits of all critical phases of the *firm's* receivables purchase programme, verification of the separation of duties between, firstly, the assessment of the seller and servicer and the assessment of the obligor and, secondly, between the assessment of the seller and servicer and the field audit of the seller and servicer and evaluations of back office operations, with particular focus on qualifications, experience, staffing levels, and supporting automation systems.

[**Note**: *BCD* Annex VII Part 4 point 109]

Calculation of risk-weighted asset amounts: Eligibility for different treatments: Corporate exposures

4.8.16 R For its *corporate exposure* purchased receivables a *firm* must comply with the minimum requirements set out in ■ BIPRU 4.8.11 R - ■ BIPRU 4.8.15 R. For *corporate exposure* purchased receivables that comply in addition with the conditions set out in ■ BIPRU 4.8.18 R, and where it would be unduly burdensome for a *firm* to use the risk quantification standards for *corporate exposures* as set out in the *minimum IRB standards* for these receivables, the risk quantification standards for *retail exposures* as set out in the *minimum IRB standards* may be used.

[**Note**: *BCD* Annex VII Part 1 point 7]

4.8.17 R For *corporate exposure* purchased receivables, refundable purchase discounts, collateral or partial guarantees that provide first-loss protection for *default losses*, dilution *losses*, or both, may be treated as first-loss positions under the provisions in ■ BIPRU 9 (Securitisation) about the *IRB approach*.

[**Note**: *BCD* Annex VII Part 1 point 8]

Calculation of risk weighted asset amounts: Eligibility for different treatments: Retail exposures

4.8.18 R To be eligible for the *retail exposure* treatment purchased receivables must comply with the minimum requirements set out in ■ BIPRU 4.8.11 R - ■ BIPRU 4.8.15 R and the following conditions:

(1) the *firm* has purchased the receivables from unrelated, third party sellers, and its *exposure* to the obligor of the receivable does not include any *exposures* that are directly or indirectly originated by the *firm* itself;

(2) the purchased receivables must be generated on an arm's-length basis between the seller and the obligor (and as such, intercompany accounts receivables and receivables subject to contra-accounts between firms that buy and sell to each other are ineligible);

(3) the purchasing *firm* has a claim on all proceeds from the purchased receivables or a pro-rata interest in the proceeds; and

(4) the portfolio of purchased receivables is sufficiently diversified.

[**Note**: *BCD* Annex VII Part 1 point 14]

4.8.19 R With respect to *retail exposures*, for purchased receivables, refundable purchase discounts, collateral or partial guarantees that provide first-loss protection for *default losses*, dilution *losses*, or both, may be treated as first-loss positions under the provisions in ■ BIPRU 9 (Securitisation) about the *IRB approach*.

[**Note**: *BCD* Annex VII Part 1 point 15]

4.8.20 R For hybrid pools of purchased *retail exposure* receivables where the purchasing *firm* cannot separate *exposures* secured by real estate collateral and *qualifying revolving retail exposures* from other *retail exposures*, the retail *risk weight* function producing the highest capital requirements for those *exposures* must apply.

[**Note**: *BCD* Annex VII Part 1 point 16]

Calculation of risk weighted asset amounts for dilution risk

4.8.21 R The *risk weights* for *dilution risk* for purchased receivables (both *corporate exposures* and *retail exposures*) must be calculated according to this *rule*. The *risk weights* must be calculated according to the formula in ■ BIPRU 4.4.58 R. However, for the purposes of that formula, the total annual sales referred to in ■ BIPRU 4.4.59 R are the weighted average by individual *exposures* of the pool. The input parameters *PD* and *LGD* and the *exposure* value must be determined under the applicable provisions of ■ BIPRU 4 as modified by this section. M (maturity) must be 1 year. However:

(1) a *firm* need not recognise *dilution risk* if its *IRB permission* permits this; and

(2) (in the case of a *firm* with an *IRB permission* that permits the treatment of *dilution risk* in (1)) the *firm* must be able to convince the *appropriate regulator* that *dilution risk* is immaterial.

[**Note**: *BCD* Article 87(2) (part) and Annex VII Part 1 point 28]

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Calculation of risk weighted exposure amounts: PDs

4.8.22 R For purchased *corporate exposure* receivables in respect of which a *firm* cannot demonstrate that its *PD* estimates meet the *minimum IRB standards*, the *PDs* for these *exposures* must be determined according to the following methods:

(1) for senior claims on purchased *corporate exposure* receivables *PD* must be the *firm's* estimate of *EL* divided by *LGD* for these receivables;

(2) for subordinated claims on purchased *corporate exposure* receivables *PD* must be the *firm's* estimate of *EL*; and

(3) if a *firm* is under its *IRB permission* using the *advanced IRB approach* for *LGD* estimates for *corporate exposures* and it can decompose its *EL* estimates for purchased *corporate exposure* receivables into *PDs* and *LGDs* in a reliable manner, the *LGD* estimate may be used.

[**Note**: *BCD* Annex VII Part 2 point 3]

4.8.23 R In the case of *corporate exposures*, for *dilution risk* of purchased receivables *PD* must be set equal to *EL* estimate for *dilution risk*. If a *firm* is under its *IRB permission* using the *advanced IRB approach* for *LGD* estimates for *corporate exposures* and it can decompose its *EL* estimates for *dilution risk* of purchased *corporate exposure* receivables into *PDs* and *LGDs* in a reliable manner, the *PD* estimate may be used. A *firm* may recognise *unfunded credit protection* in the *PD* in accordance with the provisions of ■ BIPRU 9 and ■ BIPRU 5 as modified by ■ BIPRU 4.10. A *firm* may recognise those *unfunded credit protection* providers set out in its *IRB permission* in addition to those indicated in the *CRM eligibility conditions*. Where a *firm's IRB permission* allows it to use its own *LGD* estimates for *dilution risk* of purchased corporate receivables, the *firm* may recognise *unfunded credit protection* by adjusting *PDs* subject to the provisions of ■ BIPRU 4.4.43 R.

[**Note**: *BCD* Annex VII Part 2 point 7]

4.8.24 R In the case of *retail exposures*, for *dilution risk* of purchased receivables *PD* must be set equal to *EL* estimates for *dilution risk*. If a *firm* can decompose its *EL* estimates for *dilution risk* of purchased receivables into *PDs* and *LGDs* in a reliable manner, the *PD* estimate may be used.

[**Note**: *BCD* Annex VII Part 2 point 19]

Calculation of risk weighted asset amounts: LGDs: Corporate exposures

4.8.25 R The following *LGD* values apply for purchased *corporate exposure* receivables:

(1) for senior purchased *corporate exposure* receivables *exposures* where a *firm* cannot demonstrate that its *PD* estimates meet the *minimum IRB standards*, the value is 45%;

(2) for subordinated purchased *corporate exposure* receivables *exposures* where a *firm* cannot demonstrate that its *PD* estimates meet the *minimum IRB standards*, the value is 100%; and

(3) for *dilution risk* of purchased *corporate exposure* receivables, the value is 75%.

[**Note**: *BCD* Annex VII Part 2 point 8(e) to (g)]

4.8.26 R Notwithstanding ■ BIPRU 4.4.34 R and ■ BIPRU 4.8.25 R, for *dilution risk* and *default* risk if a *firm* is under its *IRB permission* using the *advanced IRB approach* for *LGD* estimates for *corporate exposures* and it can decompose its *EL* estimates for purchased *corporate exposure* receivables into *PDs* and *LGDs* in a reliable manner, the *LGD* estimate for purchased *corporate exposure* receivables may be used.

[**Note**: *BCD* Annex VII Part 2 point 9]

Calculation of risk weighted asset amounts: LGDs: Retail exposures

4.8.27 R For *dilution risk* of purchased *retail exposure* receivables an *LGD* value of 75% must be used. If a *firm* can decompose its *EL* estimates for *dilution risk* of purchased receivables into *PDs* and *LGDs* in a reliable manner, the *LGD* estimate may be used.

[**Note**: *BCD* Annex VII Part 2 point 21]

Calculation of risk weighted asset amounts: Exposure value

4.8.28 R The *exposure* value for the calculation of *risk weighted exposure amounts* of purchased receivables must be the outstanding amount minus the capital requirements for *dilution risk* prior to *credit risk mitigation*.

[**Note**: *BCD* Annex VII Part 3 point 6]

4.8.29 R

(1) The *exposure* value for the items in (2) must be calculated as the committed but undrawn amount multiplied by a *conversion factor*.

(2) For undrawn purchase commitments for revolving purchased receivables that are unconditionally cancellable or that effectively provide for automatic cancellation at any time by the *firm* without prior notice, a *conversion factor* of 0% applies. To apply a *conversion factor* of 0%, a *firm* must actively monitor the financial condition of the obligor, and its internal control systems must enable it immediately to detect a deterioration in the credit quality of the obligor.

[**Note:** *BCD* Annex VII Part 3 point 9 (c)]

Calculation of expected loss amounts

4.8.30 R The *expected loss* amounts for *dilution risk* of purchased receivables must be calculated according to the following formula:

expected loss (*EL*) = *PD* × *LGD*; and

expected loss amount = *EL* × *exposure* value.

[**Note**: *BCD* Article 88(5) and Annex VII Part 1 point 35]

4.9 The IRB approach: Securitisation, non-credit obligations assets and CIUs

Application

4.9.1 R BIPRU 4.9 applies with respect to *securitisation exposures*, *non credit-obligation assets* and *exposures* to *CIUs*.

Securitisation exposures

4.9.2 R The following must be calculated in accordance with ■ BIPRU 9 (Securitisation):

(1) *risk-weighted exposure amounts* for *securitised exposures* and for *exposures* belonging to the *IRB exposure class* referred to in ■ BIPRU 4.3.2 R (6) (securitisation positions); and

(2) the *expected loss* amounts for *securitised exposures*.

[**Note**: *BCD* Article 87(10) and Article 88(3)]

Provision of credit protection

4.9.3 R Where a *firm* provides credit protection for a number of *exposures* under terms that the nth default among the *exposures* shall trigger payment and that this credit event shall terminate the contract, if the product has an external credit assessment from an *eligible ECAI* the *risk weights* set out in ■ BIPRU 9 must be applied. If the product is not rated by an *eligible ECAI*, the *risk weights* of the *exposures* included in the basket must be aggregated, excluding n-1 *exposures* where the sum of the *expected loss* amount multiplied by 12.5 and the *risk weighted exposure amount* must not exceed the nominal amount of the protection provided by the credit derivative multiplied by 12.5. The n-1 *exposures* to be excluded from the aggregation must be determined on the basis that they must include those *exposures* each of which produces a lower *risk weighted exposure amount* than the *risk weighted exposure amount* of any of the *exposures* included in the aggregation.

[**Note**: *BCD* Annex VII Part 1 point 9]

Non credit obligation assets: Introduction

4.9.4 R ■ BIPRU 4.9.5 R-■ BIPRU 4.9.10 R apply to *non credit-obligation assets*.

Non credit obligation assets: Inclusion of residual value of leases

4.9.5 R The *non credit obligation asset IRB exposure class* includes the residual value of leased properties, if not included in the lease *exposure* as defined in ■ BIPRU 4.4.75 R.

[**Note**: *BCD* Article 86(8)]

Non credit obligation assets: Risk weighted exposure amount

4.9.6 R The *risk weighted exposure amounts* must be calculated according to the formula:

Risk-weighted exposure amount = 100% * *exposure* value except for when the *exposure* is a residual value of leased properties in which case it must be calculated as follows:

1/t * 100% * *exposure* value;where t is the greater of 1 and the nearest number of whole years of the lease remaining.

[**Note**: *BCD* Annex VII Part 1 point 27]

4.9.7 G t should be an integer number reflecting the nearest number of whole years of the lease remaining and should decrease as the lease matures so that the discounted value steps up gradually from a small value to 100% as the end of the lease approaches.

4.9.8 R Where a *firm* has full recourse in respect of purchased receivables for *default* risk and for *dilution risk*, to the seller of the purchased receivables, ■ BIPRU 4.8.21 R and ■ BIPRU 4.8.30 R need not be applied. The *exposure* may instead be treated as a collateralised *exposure*.

[**Note**: *BCD* Article 87(2) (part)]

Non credit obligation assets: Exposure value

4.9.9 R The *exposure* value of *non credit-obligation assets* must be the value presented in the financial statements.

[**Note**: *BCD* Annex VII Part 3 point 13]

Non credit obligation assets: Expected loss amounts

4.9.10 R For *non credit-obligation assets* the *expected loss* amount must be zero.

[**Note**: *BCD* Article 88(4)]

Collective investment undertakings

4.9.11 R

(1) Where *exposures* in the form of a *CIU* meet the criteria set out in ■ BIPRU 3.4.121 R (Conditions for look through treatment under the standardised approach) and the *firm* is aware of all of the underlying *exposures* of the *CIU*, the *firm* must look through to those underlying *exposures* in order to calculate *risk weighted exposure amounts* and *expected loss* amounts in accordance with the methods set out in ■ BIPRU 4.■ BIPRU 4.9.12 R applies to the part of the underlying *exposures* of the *CIU* of which the *firm* is not aware or could not

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reasonably be aware. In particular, ■ BIPRU 4.9.12 R must apply where it would be unduly burdensome for the *firm* to look through the underlying *exposures* in order to calculate *risk weighted exposure amounts* and *expected loss* amounts in accordance with methods set out in this *rule*.

(2) Where (1) applies but a *firm* does not meet the conditions for using the methods set out in ■ BIPRU 4 for all or part of the underlying *exposures* of the *CIU*, *risk weighted exposure amounts* and *expected loss* amounts must be calculated in accordance with the following approaches.

(3) For *equity exposures* the approach set out in ■ BIPRU 4.7.9 R - ■ BIPRU 4.7.12 R (Simple risk weights) must be used. If, for those purposes, the *firm* is unable to differentiate between private equity, exchange-traded and other *equity exposures*, it must treat the *exposures* concerned as other *equity exposures*.

(4) For all other underlying *exposures*, the *standardised approach* must be used, subject to the following modifications:

(a) [deleted]

(b) [deleted]

(c) for *exposures* subject to a specific *risk weight* for unrated *exposures* or subject to the *credit quality step* yielding the highest *risk weight* for a given exposure class, the *risk weight* must be multiplied by a factor of two, but cannot be higher than 1250%; and

(d) for all other *exposures*, the *risk weight* must be multiplied by a factor of 1.1 and subject to a minimum of 5%.

[**Note**: *BCD* Article 87(11)]

4.9.12 R

(1) Where *exposures* in the form of a *CIU* do not meet the criteria set out in ■ BIPRU 3.4.121 R (Conditions for look through treatment under the standardised approach) or the *firm* is not aware of all of the underlying *exposures* of the *CIU*, a *firm* must look through to the underlying *exposures* and calculate *risk weighted exposure amounts* and *expected loss* amounts in accordance with the approach set out in ■ BIPRU 4.7.9 R - ■ BIPRU 4.7.12 R (Simple risk weights). If, for those purposes, the *firm* is unable to differentiate between private equity, exchange-traded and other *equity exposures*, it must treat the *exposures* concerned as other *equity exposures*. For these purposes, non-equity *exposures* must be assigned to one of the classes (private equity, exchange traded equity or other equity) set out in ■ BIPRU 4.7.9 R (Simple risk weight approach) and unknown *exposures* must be assigned to the other equity class.

(2) Alternatively to the method described in (1), a *firm* may calculate itself or rely on a third party to calculate and report the average *risk weighted exposure amounts* based on the *CIU's* underlying *exposures* and calculated in accordance with the approaches in ■ BIPRU 4.9.11R (3) to ■ BIPRU 4.9.11R (4), provided that the correctness of the calculation and the report is adequately ensured.

(3) [deleted]

(4) [deleted]

(a) [deleted]

(b) [deleted]

[**Note**: *BCD* Article 87(12)]

4.9.13 G For the purposes of ■ BIPRU 4.9.12 R (1), in the case of non-equity *exposures* a *firm* should look at the risk profile of the underlying *exposures* and map these to an equivalent equity *risk weight*. For example, if the underlying *exposures* are exchange-traded, the *risk weight* of exchange-traded *equity exposures* will apply. If the underlying *exposures* are unknown, the *risk weight* of the other equity class will apply. Only under exceptional circumstances would supervisors expect to see non-equity *exposures* mapped to the diversified private equity *risk weight*.

4.9.14 G For the purposes of ■ BIPRU 4.9.12 R (2), a *firm* should ensure that any third party relied on for the calculations and report possesses the necessary competence and experience to ensure that the calculations and report are correct.

4.9.15 R The *expected loss* amounts for *exposures* referred to in ■ BIPRU 4.9.11 R - ■ BIPRU 4.9.12 R must be calculated in accordance with the methods set out in ■ BIPRU 4.4.61 R (Calculation of expected loss for sovereigns, institutions and corporates), ■ BIPRU 4.5.12 R - ■ BIPRU 4.5.14 R (Calculation of expected loss for specialised lending), ■ BIPRU 4.6.47 R - ■ BIPRU 4.6.48 R (Calculation of expected loss for retail exposures), ■ BIPRU 4.7.12 R, ■ BIPRU 4.7.17 R and ■ BIPRU 4.7.26 R (Calculation of expected loss for equity exposures) and ■ BIPRU 4.8.30 R (Dilution risk of purchased receivables).

[**Note**: *BCD* Article 88(6)]

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4.10 The IRB approach: Credit risk mitigation

Application

4.10.1 G ■ BIPRU 4.10 applies to all *exposures* treated under the *IRB approach*.

Purpose

4.10.2 G ■ BIPRU 4.10 sets out modifications to ■ BIPRU 5 (Credit risk mitigation) for those *exposures* for which the *IRB approach* is being used.

General

4.10.3 R A *firm* using the *IRB approach*, but not using its own estimates of *LGD* and *conversion factors*, may recognise *credit risk mitigation* in accordance with ■ BIPRU 5 as modified by ■ BIPRU 4.10 in the calculation of *risk weighted exposure amounts* for the purposes of the calculation of the *credit risk capital component* or as relevant *expected loss* amounts for the purposes of the calculation in ■ GENPRU 2.2.191 R to ■ GENPRU 2.2.193 R or ■ GENPRU 2.2.236 R.

[**Note**: *BCD* Article 91 (as it applies to the *IRB approach*)]

4.10.4 R

(1) Where the requirements of ■ BIPRU 5.2.2 R - ■ BIPRU 5.2.8 R are met the calculation of *risk weighted exposure amounts*, and, as relevant, *expected loss* amounts, may be modified in accordance with ■ BIPRU 5 as modified by ■ BIPRU 4.10.

(2) No *exposure* in respect of which *credit risk mitigation* is obtained must produce a higher *risk weighted exposure amount* or *expected loss* amount than an otherwise identical *exposure* in respect of which there is no *credit risk mitigation*.

(3) Where the *risk weighted exposure amount* already takes account of credit protection under the *IRB approach* the calculation of the credit protection must not be further recognised under ■ BIPRU 5 or ■ BIPRU 4.10.

(4) Subject to ■ BIPRU 5.2.8 R (Maturity mismatches), ■ BIPRU 5.2.9 R (Combinations of credit risk mitigation in the standardised approach) and ■ BIPRU 5.7.27 R to ■ BIPRU 5.7.28 R (Basket credit risk mitigation techniques), where the *CRM eligibility conditions* and the *CRM minimum requirements* are satisfied, the calculation of *risk weighted exposure amounts* and *expected loss* amounts under the *IRB approach* may be modified in accordance with the provisions of ■ BIPRU 5 and

■ BIPRU 4.10 that deal with calculating the effects of credit risk mitigation.

[**Note**: *BCD* Article 93 and Annex VIII Part 3 point 1(as they apply to the *IRB approach*)]

Eligibility of funded credit protection: General

4.10.5 R In addition to the collateral set out in ■ BIPRU 5.3.1 R to ■ BIPRU 5.3.2 R, ■ BIPRU 5.4.1 R to ■ BIPRU 5.4.8 R and ■ BIPRU 5.6.1 R (Eligibility of funded credit protection) the provisions of ■ BIPRU 4.10.6 R - ■ BIPRU 4.10.11R (Eligibility of real estate collateral), ■ BIPRU 4.10.14 R (Eligibility: receivables), ■ BIPRU 4.10.16 R (Eligibility: other physical collateral), and ■ BIPRU 4.10.19 R (Eligibility: leasing), apply where a *firm* calculates *risk weighted exposure amounts* and *expected loss* amounts under the *IRB approach*.

[**Note**: *BCD* Annex VIII Part 1 point 12]

Real estate collateral: Types of eligible collateral: General

4.10.6 R

(1) Residential real estate property which is or will be occupied or let by the owner or the beneficial owner in the case of personal investment companies and commercial real estate property, that is offices and other commercial premises, may be recognised as eligible collateral where the conditions set out in the remaining provisions of this paragraph are met.

(2) The value of the property must not materially depend upon the credit quality of the obligor. This requirement does not preclude situations where purely macro-economic factors affect both the value of the property and the performance of the borrower.

(3) The risk of the borrower must not materially depend upon the performance of the underlying property or project, but rather on the underlying capacity of the borrower to repay the debt from other sources. As such, repayment of the facility must not materially depend on any cash flow generated by the underlying property serving as collateral.

[**Note**: *BCD* Annex VIII Part 1 point 13]

4.10.7 R The condition in ■ BIPRU 4.10.6 R (3) does not apply to *exposures* secured by residential real estate property situated within the *United Kingdom*.

[**Note**: *BCD* Annex VIII Part 1 point 16 (part)]

4.10.8 G

(1) The *FCA* may only disapply the condition in ■ BIPRU 4.10.6 R (3) if it has evidence that the *UK* market is well-developed and long-established with loss-rates which are sufficiently low to justify such action.

(2) If the evidence were to change so that the action was no longer justified the *appropriate regulator* would expect to revoke ■ BIPRU 4.10.7 R.

[**Note:** *BCD* Annex VIII Part 1 point 16]

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4.10.9 R

(1) The condition in ■ BIPRU 4.10.6 R (3) does not apply for *exposures* secured by residential real estate property situated outside the *UK*.

(2) [deleted]

4.10.10 R

(1) The condition in ■ BIPRU 4.10.6 R (3) does not apply for commercial real estate property situated outside the *UK*.

(2) [deleted]

Real estate collateral: Types of eligible collateral: Finnish housing legislation

4.10.11 R [deleted]

4.10.12 R [deleted]

Real estate collateral: Minimum requirements for recognition

4.10.13 R For the recognition of real estate collateral: the minimum requirements in ■ BIPRU 3.4.64 R - ■ BIPRU 3.4.73 R must be met with the following adjustments:

(1) those provisions apply to all real estate collateral eligible under BIPRU 4.10; and

(2) the minimum frequency of valuation as referred to in BIPRU 3.4.66 R is once every year for commercial real estate.

[**Note**: *BCD* Annex VIII Part 2 point 8 (as it applies to the *IRB approach*)]

Receivables: Types of eligible collateral

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4.10.14 R Amounts receivable linked to a commercial transaction or transactions with an original maturity of less than or equal to one year may be recognised as eligible collateral. Eligible receivables do not include those associated with *securitisations*, sub-participations or credit derivatives or amounts owed by affiliated parties.

[**Note**: *BCD* Annex VIII Part 1 point 20]

Receivables: Minimum requirements for recognition

4.10.15 R

(1) For the recognition of receivables as collateral the requirements in this paragraph must be met.

(2) The legal mechanism by which the collateral is provided must be robust and effective and ensure that the lender has clear rights over the proceeds.

(3) A *firm* must take all steps necessary to fulfil local requirements in respect of the enforceability of security interests. There must be a framework which allows the lender to have a first priority claim over the collateral subject to any claims of preferential creditors provided for in applicable insolvency law.

(4) A *firm* must have conducted sufficient legal review confirming the enforceability of the collateral arrangements in all relevant jurisdictions.

(5) The collateral arrangements must be properly documented, with a clear and robust procedure for the timely collection of collateral. A *firm's* procedures must ensure that any legal conditions required for declaring the default of the borrower and timely collection of collateral are observed. In the event of the obligor's financial distress or default, a *firm* must have legal authority to sell or assign the receivables to other parties without consent of the receivables obligors.

(6) A *firm* must have a sound process for determining the credit risk associated with the receivables. Such a process must include, among other things, analyses of the obligor's business and industry and the types of customers with whom the obligor does business. Where a *firm* relies on the obligor to ascertain the credit risk of the customers, the *firm* must review the obligor's credit practices to ascertain their soundness and credibility.

(7) The margin between the amount of the *exposure* and the value of the receivables must reflect all appropriate factors, including the cost of collection, concentration within the receivables pool pledged by an

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individual obligor, and potential concentration risk within the *firm's* total *exposures* beyond that controlled by the *firm's* general methodology. A *firm* must maintain a continuous monitoring process appropriate to the receivables. Additionally, compliance with loan covenants, Environmental restrictions, and other legal requirements must be reviewed on a regular basis.

(8) The receivables pledged by an obligor must be diversified and not be unduly correlated with the obligor. Where there is material positive correlation, the attendant risks must be taken into account in the setting of margins for the collateral pool as a whole.

(9) Receivables from affiliates of the obligor (including *subsidiary undertakings* and employees) must not be recognised as risk mitigants.

(10) A *firm* must have a documented process for collecting receivable payments in distressed situations. The requisite facilities for collection must be in place, even when the *firm* normally looks to the obligor for collections.

[**Note**: *BCD* Annex VIII Part 2 point 9]

Other physical collateral: Types of eligible collateral

4.10.16 R A *firm* may recognise as eligible collateral a physical item of a type other than those types indicated in BIPRU 4.10.6 R - BIPRU 4.10.8R (Eligibility of real estate collateral) if its *IRB permission* provides that the *firm* may treat collateral of that type as eligible and if the *firm* is able to demonstrate the following:

(1) the existence of liquid markets for disposal of the collateral in an expeditious and economically efficient manner;

(2) the existence of well-established, publicly available market prices for the collateral; and

(3) there is no evidence that the net prices it receives when collateral is realised deviates significantly from the market prices referred to in (b).

[**Note**: *BCD* Annex VIII Part 1 point 21]

4.10.17 G If a *firm* wishes to recognise other types of collateral in accordance with BIPRU 4.10.16 R (whether as part of its application for an *IRB permission* or under a variation of its *IRB permission*) it should demonstrate to the *appropriate regulator* how the criteria in BIPRU 4.10.16 R (1) - BIPRU 4.10.16 R (3) have been met with respect to that type of collateral.

Other physical collateral: Minimum requirements for recognition

4.10.18 R (1) If a type of other physical collateral referred to in BIPRU 4.10.16 R is potentially eligible under a *firm's IRB permission* a *firm* must only recognise it as eligible if the minimum requirements in (2) to (10) are met.

(2) The collateral arrangement must be legally effective and enforceable in all relevant jurisdictions and must enable the *firm* to realise the value of the property within a reasonable timeframe.

(3) With the sole exception of permissible prior claims referred to in BIPRU 4.10.15 R (3), only first liens on, or charges over, collateral must be permissible. As such, the *firm* must have priority over all other lenders to the realised proceeds of the collateral.

(4) The value of the property must be monitored on a frequent basis and at a minimum once every year. More frequent monitoring must be carried out where the market is subject to significant changes in conditions.

(5) The loan agreement (or other agreement documenting the *exposure*) must include detailed descriptions of the collateral plus detailed specifications of the manner and frequency of revaluation.

(6) The types of physical collateral accepted by the *firm* and policies and practices in respect of the appropriate amount of each type of collateral relative to the *exposure* amount must be clearly documented in internal credit policies and procedures available for examination.

(7) The *firm's* credit policies with regard to the transaction structure must address appropriate collateral requirements relative to the *exposure* amount, the ability to liquidate the collateral readily, the ability to establish objectively a price or market value, the frequency with which the value can readily be obtained (including a professional appraisal or valuation), and the volatility or a proxy of the volatility of the value of the collateral.

(8) Both initial valuation and revaluation must take fully into account any deterioration or obsolescence of the collateral. Particular attention must be paid in valuation and revaluation to the effects of the passage of time on fashion- or date-sensitive collateral.

(9) The *firm* must have the right to inspect the property physically. It must have policies and procedures addressing its exercise of the right to physical inspection.

(10) The *firm* must have procedures to monitor that the property taken as protection is adequately insured against damage.

[**Note**: *BCD* Annex VIII Part 2 point 10]

Leasing: Types of eligible transactions and conditions of eligibility

4.10.19 R

(1) Where the requirements set out in this paragraph are met, *exposures* arising from transactions whereby a *firm* leases property to a third party must be treated the same as loans collateralised by the type of property leased.

(2) For the *exposures* arising from leasing transactions to be treated as collateralised by the type of property leased, the following conditions must be met:

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(a) the conditions set out or referred to in ■ BIPRU 4.10.13 R or ■ BIPRU 4.10.18 R as appropriate for the recognition as collateral of the type of property leased are met;

(b) there is robust risk management on the part of the lessor with respect to the use to which the leased asset is put, its age, and planned duration of its use, including appropriate monitoring of the value of the security;

(c) there is in place a robust legal framework establishing the lessor's legal ownership of the asset and its ability to exercise its rights as owner in a timely fashion; and

(d) where this has not already been ascertained in calculating the *LGD* level, the difference between value of the unamortised amount and the market value of the security must not be so large as to overstate the *credit risk mitigation* attributed to the leased assets.

[**Note**: *BCD* Annex VIII Part 1 point 22 and Part 2 point 11]

Calculating risk-weighted exposure amounts and expected loss amounts for funded credit risk mitigation: Introduction

4.10.20 R ■ BIPRU 4.10.21 R - ■ BIPRU 4.10.37 R and ■ BIPRU 4.10.49 R set out how the calculation of *risk weighted exposure amounts* and *expected loss* amounts under ■ BIPRU 4.1 - ■ BIPRU 4.9 may be modified to take into account *credit risk mitigation* that meets the *CRM eligibility conditions* and the *CRM minimum requirements*.

Calculating risk weighted exposure amounts and expected loss amounts for funded credit risk mitigation: Valuation: Receivables

4.10.21 R The value of receivables for the purpose of calculating the effect of *credit risk mitigation* must be the amount receivable.

[**Note**: *BCD* Annex VIII Part 3 point 66]

Calculating risk weighted exposure amounts and expected loss amounts for funded credit risk mitigation: Valuation: Other physical collateral

4.10.22 R Physical collateral recognised as eligible as described in ■ BIPRU 4.10.16 R must be valued for the purpose of calculating the effect of *credit risk mitigation* at its market value. Market value is the estimated amount for which the property would exchange on the date of valuation between a willing buyer and a willing seller in an arm's-length transaction.

[**Note**: *BCD* Annex VIII Part 3 point 67]

Calculating risk weighted exposure amounts and expected loss amounts: General treatment

4.10.23 R ■ BIPRU 4.10.24 R - ■ BIPRU 4.10.28R apply to collateral in the form of real estate collateral, receivables, other physical collateral and leasing permitted by ■ BIPRU 4.10 and *exposures* secured by such collateral.

4.10.24 R LGD* (the effective *loss given default*) calculated as set out in ■ BIPRU 4.10.25 R - ■ BIPRU 4.10.28 R must be taken as the *LGD*.

[**Note**: *BCD* Annex VIII Part 3 point 68]

4.10.25 R Where the ratio of the value of the collateral (C) to the *exposure* value (E) is below a threshold level of C* (the required minimum collateralisation level for the *exposure*) as laid down in ■ BIPRU 4.10.28 R, LGD* must be the *LGD* laid down in the other sections of ■ BIPRU 4 for uncollateralised *exposures* to the counterparty. For this purpose, the *exposure* value of items listed in ■ BIPRU 4.4.37 R to ■ BIPRU 4.4.39 R and ■ BIPRU 4.8.29 R must be calculated using a *conversion factor* or percentage of 100% rather than the *conversion factors* or percentages indicated in those rules.

[**Note**: *BCD* Annex VIII Part 3 point 69]

4.10.26 R Where the ratio of the value of the collateral to the *exposure* value exceeds a second, higher threshold level of C** (i.e. the required level of collateralisation to receive full *LGD* recognition) as laid down in ■ BIPRU 4.10.28 R, LGD* must be that prescribed in that table.

[**Note**: *BCD* Annex VIII Part 3 point 70]

4.10.27 R Where the required level of collateralisation C** is not achieved in respect of the *exposure* as a whole, the *exposure* must be considered to be two *exposures* - that part in respect of which the required level of collateralisation C** is achieved and the remainder.

[**Note**: *BCD* Annex VIII Part 3 point 71]

4.10.28 R Table: Minimum LGD for secured portion of exposures

This table belongs to ■ BIPRU 4.10.24 R - ■ BIPRU 4.10.27 R

	LGD* for senior claims or contingent claims	LGD* for subordinated claims or contingent claims	Required minimum collateralisation level of the exposure (C*)	Required minimum collateralisation level of the exposure (C**)
Receivables	35%	65%	0%	125%
Residential real estate/ commercial real estate	35%	65%	30%	140%
Other collateral	40%	70%	30%	140%

[**Note**: *BCD* Annex VIII Part 3 point 72 (part)]

Calculating risk weighted exposure amounts and expected loss amounts for funded credit risk mitigation: Alternative treatment for real estate collateral

4.10.29 R [deleted]

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Calculating risk weighted exposure amounts and expected loss amounts: Mixed pools of collateral

4.10.30 R

(1) Where:

(a) *risk weighted exposure amounts* and *expected loss* amounts are calculated under the *IRB approach*; and

(b) an *exposure* is collateralised by both financial collateral and other eligible collateral;

LGD* to be taken as the *LGD* for the purposes of the *IRB approach* must be calculated in accordance with this *rule*.

(2) A *firm* must subdivide the volatility-adjusted value of the *exposure* (i.e. the value after the application of the volatility adjustment as set out in ■ BIPRU 5.4.28 R (Volatility adjustments under the financial collateral comprehensive method) into parts each covered by only one type of collateral. That is, the *firm* must divide the *exposure* into the part covered by eligible financial collateral, the part covered by receivables, the parts covered by commercial real estate property collateral and/or residential real estate property collateral, the part covered by other eligible collateral, and the unsecured part, as relevant.

(3) LGD* for each part of *exposure* must be calculated separately in accordance with the relevant provisions of ■ BIPRU 5 (Credit risk mitigation) and ■ BIPRU 4.10.

[**Note**: *BCD* Annex VIII Part 3 points 76 to 78]

Calculating risk weighted exposure amounts and expected loss amounts for funded credit risk mitigation: Other modifications of the rules on credit risk mitigation: Financial collateral simple method

4.10.31 R The *financial collateral simple method* must not be used under the *IRB approach*.

[**Note**: *BCD* Annex VIII Part 3 point 24 (part)]

Calculating risk weighted exposure amounts and expected loss amounts for funded credit risk mitigation: Other modifications of the rules on credit risk mitigation: Master netting agreements

4.10.32 R

(1) This *rule* sets out how the calculations under ■ BIPRU 5.6.11 R (Using the supervisory volatility adjustments or the own estimates volatility adjustments approaches to master netting agreements covering repurchase transactions and/or securities or commodities lending or borrowing transactions and/or other capital market driven transactions) must be modified under the *IRB approach*.

(2) Where *risk weighted exposure amounts* and *expected loss* amounts are calculated under the *IRB approach*, E is the *exposure* value for each separate *exposure* under the agreement referred to in the provisions listed in (1) that would apply in the absence of the credit protection.

[**Note**: *BCD* Annex VIII Part 3 point 11 (as it applies to the *IRB approach*)]

4.10.33 R

(1) This *rule* sets out how the calculations under ■ BIPRU 5.6.24 R (Using the internal models approach to master netting agreements covering repurchase transactions and/or securities or commodities lending or borrowing transactions and/or other capital market driven transactions) must be modified under the *IRB approach*.

(2) Where *risk weighted exposure amounts* and *expected loss* amounts are calculated under the *IRB approach* E is the *exposure* value for each separate *exposure* under the agreement referred to in the provisions listed in (1) that would apply in the absence of the credit protection.

[**Note**: *BCD* Annex VIII Part 3 point 20 (as it applies to the *IRB approach*)]

4.10.34 R

(1) This *rule* sets out how the calculations under ■ BIPRU 5.6.29 R (Calculating risk-weighted exposure amounts and expected loss amounts for master netting agreements covering repurchase transactions and/or securities or commodities lending or borrowing transactions and/or other capital market driven transactions) must be modified under the *IRB approach*.

(2) E* must be taken as the *exposure* value of the *exposure* to the counterparty arising from the transactions subject to the master

netting agreement referred to in the provisions listed in (1) for the purposes of ■ BIPRU 4.

[**Note**: *BCD* Annex VIII Part 3 point 23 (as it applies to the *IRB approach*)]

Calculating risk weighted exposure amounts and expected loss amounts for funded credit risk mitigation: Other modifications of the rules on credit risk mitigation: Financial collateral comprehensive method

4.10.35 R

(1) This *rule* sets out how the calculations under ■ BIPRU 5.4.28 R (Calculating adjusted values under the financial collateral comprehensive method) must be modified under the *IRB approach*.

(2) E as referred to in the provisions listed in (1) is the *exposure* value as would be determined under the *IRB approach* if the *exposure* was not collateralised. For this purpose, where a *firm* calculates *risk weighted exposure amounts* under the *IRB approach*, the *exposure* value of the items listed in ■ BIPRU 4.4.37 R to ■ BIPRU 4.4.39 R, ■ BIPRU 4.4.45 R, ■ BIPRU 4.6.44 R (3) and ■ BIPRU 4.8.29 R must be calculated using a *conversion factor* of 100% rather than the *conversion factors* or percentages indicated in those provisions.

4.10.36 R

(1) This *rule* sets out the calculation of *risk weighted exposure amounts* and *expected loss* amounts under the *financial collateral comprehensive method* for a *firm* using the *IRB approach*.

(2) LGD* (the effective *loss given default*) calculated as set out in this paragraph must be taken as the *LGD* for the purposes of ■ BIPRU 4.

(3) *LGD** = *LGD* x (E*/E) where:

(a) *LGD* is the *loss given default* that would apply to the *exposure* under the *IRB approach* if the *exposure* was not collateralised;

(b) E is the *exposure* value as calculated under ■ BIPRU 4; and

(c) E* is as calculated under ■ BIPRU 5.4.28 R (3) (Calculation of adjusted values under the financial collateral comprehensive method).

[**Note**: *BCD* Annex VIII Part 3 point 61]

4.10.37 R

(1) In the case of a *firm* using the *IRB approach* to calculate *risk weighted exposure amounts* and *expected loss* amounts, the *persons* in (2) are added to the list in ■ BIPRU 5.4.64 R (Definition of core market participant).

(2) The *persons* referred to in (1) are other financial companies (including insurance companies) *exposures* to which do not have a credit assessment by an *eligible ECAI* and are internally rated as having a *probability of default* equivalent to that associated with the credit assessments of *ECAIs* that are associated with *credit quality step* 2 or above under the *rules* for the *risk weighting* of *exposures* under the *standardised approach* to credit risk.

[**Note**: *BCD* Annex VIII Part 3 point 58(h) (as it applies to the *IRB approach*)]

Unfunded credit protection: Eligibility of providers

4.10.38 R

(1) In the case of a *firm* using the *IRB approach* in calculating *risk weighted exposure amounts* and *expected loss* amounts, the *persons* in (2) are added to the list in ■ BIPRU 5.7.1 R (List of eligible providers of unfunded credit protection).

(2) The *persons* referred to in (1) are other corporate entities, including *parent undertakings*, *subsidiary undertakings* and affiliate corporate entities of the *firm*, that do not have a credit assessment by an *eligible ECAI* and are internally rated as having a *probability of default* equivalent to that associated with the credit assessments of *ECAIs* that are associated with *credit quality step* 2 or above under the *rules* for the *risk weighting* of *exposures* under the *standardised approach* to credit risk.

[**Note**: *BCD* Annex VIII Part 1 point 26(g)(ii)]

4.10.39 R

Where *risk weighted exposure amounts* and *expected loss* amounts are calculated under the *IRB approach*, to be eligible a guarantor must be internally rated by a *firm* in accordance with the provisions of the *minimum IRB standards*.

[**Note**: *BCD* Annex VIII Part 1 point 27]

Unfunded credit protection: Minimum requirements for assessing the effect of guarantees and credit derivatives: Introduction

4.10.40 R

■ BIPRU 4.10.41 R to ■ BIPRU 4.10.48 R set out the minimum requirements:

(1) assessing the effect of guarantees and credit derivatives for:

(a) *exposures* in the *sovereign, institution and corporate IRB exposure class* where the *advanced IRB approach* is being used to calculate *LGDs*; and

(b) *retail exposures*; and

(2) additionally, in the case of *retail exposure* guarantees, to the assignment of *exposures* to grades or pools, and the estimation of *PD*.

[**Note**: *BCD* Annex VII Part 4 point 97]

4.10.41 R

The requirements in ■ BIPRU 4.10.40 R (2) and ■ BIPRU 4.10.42 R - ■ BIPRU 4.10.48 R do not apply to guarantees provided by *institutions*, central governments, *central banks* and other *corporate* entities which meet the requirements in ■ BIPRU 5.7.1 R (7) if the *firm* has received approval under ■ BIPRU 4.2 to apply the *standardised approach* for *exposures* to such entities. In this case the requirements of ■ BIPRU 5 (credit risk mitigation) apply.

[**Note**: *BCD* Annex VII Part 4 point 96]

4

Unfunded credit protection: Minimum requirements for assessing the effect of guarantees and credit derivatives: Eligible guarantors and guarantees

4.10.42 R A *firm* must have clearly specified criteria for the types of guarantors it recognises for the calculation of *risk weighted exposure amounts*.

[**Note**: Annex VII Part 4 point 98]

4.10.43 R For recognised guarantors the same requirements as for obligors as set out in ■ BIPRU 4.3.43 R - ■ BIPRU 4.3.48 R (Assignment to grades and pools), ■ BIPRU 4.4.11 R - ■ BIPRU 4.4.18 R and ■ BIPRU 4.4.51 R (Assignment of exposures and rating systems), ■ BIPRU 4.5.6 R (Assignment of exposures) and ■ BIPRU 4.6.11 R and ■ BIPRU 4.6.14 R (Assignment of exposures and rating systems) apply.

[**Note**: *BCD* Annex VII Part 4 point 99]

4.10.44 R The guarantee must be evidenced in writing, non-cancellable on the part of the guarantor, in force until the obligation is satisfied in full (to the extent of the amount and tenor of the guarantee) and legally enforceable against the guarantor in a jurisdiction where the guarantor has assets to attach and enforce a judgement. Guarantees prescribing conditions under which the guarantor may not be obliged to perform (conditional guarantees) may be recognised if the *IRB permission* permits this. A *firm* must (in the case of a *firm* with an *IRB permission* that permits conditional guarantees) be able to demonstrate to the *appropriate regulator* that the assignment criteria adequately address any potential reduction in the risk mitigation effect.

[**Note**: *BCD* Annex VII Part 4 point 100]

Unfunded credit protection: Minimum requirements for assessing the effect of guarantees and credit derivatives: Adjustment criteria

4.10.45 R A *firm* must have clearly specified criteria for adjusting grades, pools or *LGD* estimates, and in the case of *retail exposures* and eligible purchased receivables, the process of allocating *exposures* to grades or pools, to reflect the impact of guarantees for the calculation of *risk weighted exposure amounts*. These criteria must comply with the minimum requirements referred to in ■ BIPRU 4.10.43 R.

[**Note**: *BCD* Annex VII Part 4 point 101]

4.10.46 R The criteria in ■ BIPRU 4.10.45 R must be plausible and intuitive. They must address the guarantor's ability and willingness to perform under the guarantee, the likely timing of any payments from the guarantor, the degree to which the guarantor's ability to perform under the guarantee is correlated with the obligor's ability to repay, and the extent to which residual risk to the obligor remains.

[**Note**: *BCD* Annex VII Part 4 point 102]

Unfunded credit protection: Minimum requirements for assessing the effect of guarantees and credit derivatives: Credit derivatives

4.10.47 R The minimum requirements for guarantees set out in ■ BIPRU 4.10 also apply for single name credit derivatives. In relation to a mismatch between the underlying obligation and the reference obligation of the credit derivative or the obligation used for determining whether a credit event has occurred the requirements set out under ■ BIPRU 5.7.14 R (Mismatches and credit derivatives) apply. For *retail exposures* and eligible purchased receivables, this paragraph applies to the process of allocating *exposures* to grades or pools.

[**Note**: *BCD* Annex VII Part 4 point 103]

4.10.48 R The criteria applied by ■ BIPRU 4.10.47 R must address the payout structure of the credit derivative and conservatively assess the impact this has on the level and timing of recoveries. A *firm* must consider the extent to which other forms of residual risk remain.

[**Note**: *BCD* Annex VII Part 4 point 104]

Unfunded credit protection: Minimum requirements for assessing the effect of guarantees and credit derivatives: Calculating risk weighted exposure amounts and expected loss amounts

4.10.49 R

(1) This *rule* relates to the calculation of *risk-weighted exposure amounts* and *expected loss* amounts in the case of *unfunded credit protection*.

(2) ■ BIPRU 5.7.21 R (Tranching) applies for the purpose in (1).

(3) The provisions in (4) replace those in ■ BIPRU 5.7.22 R to ■ BIPRU 5.7.25 R (Calculating risk weighted exposure amounts under the standardised approach in the case of unfunded credit protection).

(4) For the covered portion of the *exposure* value E (based on the adjusted value of the credit protection G_A), the *PD* for the purposes of ■ BIPRU 4 may be the *PD* of the protection provider, or a *PD* between that of the borrower and that of the guarantor if a full substitution is deemed not to be warranted. In the case of subordinated *exposures* and non-subordinated unfunded protection, the *LGD* to be applied for the purposes of ■ BIPRU 4 may be that associated with senior claims.

(5) For any uncovered portion of the *exposure* value E the *PD* must be that of the borrower and the *LGD* must be that of the underlying *exposure*.

(6) G_A is the value of G* as calculated under ■ BIPRU 5.7.17 R (Valuation of unfunded credit protection) further adjusted for any maturity mismatch as laid down in ■ BIPRU 4.10.51 R (Maturity mismatches).

(7) E is the *exposure* value as related to the following rules: ■ BIPRU 4.4.38 R, ■ BIPRU 4.4.39 R, ■ BIPRU 4.4.71 R to ■ BIPRU 4.4.78 R, ■ BIPRU 4.7.7 R, ■ BIPRU 4.8.28 R, ■ BIPRU 4.8.29 R and ■ BIPRU 4.9.9 R. For this purpose, the *exposure* value of the items referred to in ■ BIPRU 4.4.37 R to ■ BIPRU 4.4.39 R and ■ BIPRU 4.8.29 R must be

calculated using a *conversion factor* or percentage of 100% rather than the *conversion factors* or percentages indicated in those rules.

[**Note**: *BCD* Annex VIII Part 3 points 90 to 92]

Maturity mismatches

4.10.50 R In addition to ■ BIPRU 5.8.2 R, where there is a maturity mismatch the credit protection must not be recognised where the *exposure* is a short term *exposure* specified in the *firm's IRB permission* as being subject to a one-day floor rather than a one-year floor in respect of the maturity value (M) under ■ BIPRU 4.4.68 R.

[**Note**: *BCD* Annex VIII Part 4 point 2(b)]

4.10.51 R G_A as calculated under ■ BIPRU 5.8.11 R is then taken as the value of the protection for the purposes of calculating the effects of *unfunded credit protection* under the *IRB approach*.

[**Note**: *BCD* Annex VIII Part 4 point 8 (part)]

Supervisory Slotting Criteria for Specialised Lending

This Annex outlines the criteria that must be used to slot a *specialised lending exposure* into the categories in ■ BIPRU 4.5.6 R.

This table belongs to ■ BIPRU 4.5.6 R and must be used in accordance with that rule only for project finance exposures.

Table 1 - Supervisory Rating Grades for Project Finance Exposures				
	Strong	Good	Satisfactory	Weak
Financial strength				
Market conditions	Few competing suppliers or substantial and durable advantage in location, cost, or technology. Demand is strong and growing	Few competing suppliers or better than average location, cost, or technology but this situation may not last. Demand is strong and stable	Project has no advantage in location, cost, or technology. Demand is adequate and stable	Project has worse than average location, cost, or technology. Demand is weak and declining
Financial ratios (e.g. debt service coverage ratio (DSCR), loan life coverage ratio (LLCR), project life coverage ratio (PLCR), and debt-to-equity ratio)	Strong financial ratios considering the level of project risk; very robust economic assumptions	Strong to acceptable financial ratios considering the level of project risk; robust project economic assumptions	Standard financial ratios considering the level of project risk	Aggressive financial ratios considering the level of project risk
Stress analysis	The project can meet its financial obligations under sustained, severely stressed economic or sectoral conditions	The project can meet its financial obligations under normal stressed economic or sectoral conditions. The project is only likely to default under severe economic conditions	The project is vulnerable to stresses that are not uncommon through an economic cycle, and may default in a normal downturn	The project is likely to default unless conditions improve soon
Financial structure				
Duration of the credit compared to the duration of the project	Useful life of the project significantly exceeds tenor of the loan	Useful life of the project exceeds tenor of the loan	Useful life of the project exceeds tenor of the loan	Useful life of the project may not exceed tenor of the loan
Amortisation schedule	Amortising debt	Amortising debt	Amortising debt repayments with limited bullet payment	Bullet repayment or amortising debt repayments with high bullet repayment
Political and legal environment				
Political risk, in-	Very low exposure;	Low exposure; sat-	Moderate expo-	High exposure; no

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Table 1 - Supervisory Rating Grades for Project Finance Exposures				
	Strong	Good	Satisfactory	Weak
cluding transfer risk, considering project type and mitigants	strong mitigation instruments, if needed	isfactory mitigation instruments, if needed	sure; fair mitigation instruments	or weak mitigation instruments
Force majeure risk (war, civil unrest, etc)	Low exposure	Acceptable exposure	Standard protection	Significant risks, not fully mitigated
Government support and project's importance for the country over the long term	Project of strategic importance for the country (preferably export-oriented). Strong support from Government	Project considered important for the country. Good level of support from Government	Project may not be strategic but brings unquestionable benefits for the country. Support from Government may not be explicit	Project not key to the country. No or weak support from Government
Stability of legal and regulatory environment (risk of change in law)	Favourable and stable regulatory environment over the long term	Favourable and stable regulatory environment over the medium term	Regulatory changes can be predicted with a fair level of certainty	Current or future regulatory issues may affect the project
Acquisition of all necessary supports and approvals for such relief from local content laws	Strong	Satisfactory	Fair	Weak
Enforceability of contracts, collateral and security	Contracts, collateral and security are enforceable	Contracts, collateral and security are enforceable	Contracts, collateral and security are considered enforceable even if certain non-key issues may exist	There are unresolved key issues in respect if actual enforcement of contracts, collateral and security
Transaction characteristics				
Design and technology risk	Fully proven technology and design	Fully proven technology and design	Proven technology and design - start-up issues are mitigated by a strong completion package	Unproven technology and design; technology issues exist and/or complex design
Construction risk				
Permitting and siting	All permits have been obtained	Some permits are still outstanding but their receipt is considered very likely	Some permits are still outstanding but the permitting process is well defined and they are considered routine	Key permits still need to be obtained and are not considered routine. Significant conditions may be attached
Type of construction contract	Fixed-price date-certain turnkey construction EPC (engineering and procurement contract)	Fixed-price date-certain turnkey construction EPC	Fixed-price date-certain turnkey construction contract with one or several contractors	No or partial fixed-price turnkey contract and/or interfacing issues with multiple contractors

Table 1 - Supervisory Rating Grades for Project Finance Exposures				
	Strong	Good	Satisfactory	Weak
Completion guarantees	Substantial liquidated damages supported by financial substance and/or strong completion guarantee from sponsors with excellent financial standing	Significant liquidated damages supported by financial substance and/or completion guarantee from sponsors with good financial standing	Adequate liquidated damages supported by financial substance and/or completion guarantee from sponsors with good financial standing	Inadequate liquidated damages or not supported by financial substance or weak completion guarantees
Track record and financial strength of contractor in constructing similar projects.	Strong	Good	Satisfactory	Weak
Operating risk				
Scope and nature of operations and maintenance (O & M) contracts	Strong long-term O&M contract, preferably with contractual performance incentives, and/or O&M reserve accounts	Long-term O&M contract, and/or O&M reserve accounts	Limited O&M contract or O&M reserve account	No O&M contract: risk of high operational cost overruns beyond mitigants
Operator's expertise, track record, and financial strength	Very strong, or committed technical assistance of the sponsors	Strong	Acceptable	Limited/weak, or local operator dependent on local authorities
Off-take risk				
(a) If there is a take-or-pay or fixed-price off-take contract:	Excellent creditworthiness of off-taker; strong termination clauses; tenor of contract comfortably exceeds the maturity of the debt	Good creditworthiness of off-taker; strong termination clauses; tenor of contract exceeds the maturity of the debt	Acceptable financial standing of off-taker; normal termination clauses; tenor of contract generally matches the maturity of the debt	Weak off-taker; weak termination clauses; tenor of contract does not exceed the maturity of the debt
(b) If there is no take-or-pay or fixed-price off-take contract:	Project produces essential services or a commodity sold widely on a world market; output can readily be absorbed at projected prices even at lower than historic market growth rates	Project produces essential services or a commodity sold widely on a regional market that will absorb it at projected prices at historical growth rates	Commodity is sold on a limited market that may absorb it only at lower than projected prices	Project output is demanded by only one or a few buyers or is not generally sold on an organised market
Supply risk				
Price, volume and transportation risk of feed-stocks; supplier's track record and financial strength	Long-term supply contract with supplier of excellent financial standing	Long-term supply contract with supplier of good financial standing	Long-term supply contract with supplier of good financial standing - a degree of price risk may remain	Short-term supply contract or long-term supply contract with financially weak supplier - a degree of price risk definitely remains

Table 1 - Supervisory Rating Grades for Project Finance Exposures				
	Strong	Good	Satisfactory	Weak
Reserve risks (e.g. natural resource development)	Independently audited, proven and developed reserves well in excess of requirements over lifetime of the project	Independently audited, proven and developed reserves in excess of requirements over lifetime of the project	Proven reserves can supply the project adequately through the maturity of the debt	Project relies to some extent on potential and undeveloped reserves
Strength of Sponsor				
Sponsor's track record, financial strength, and country/sector experience	Strong sponsor with excellent track record and high financial standing	Good sponsor with satisfactory track record and good financial standing	Adequate sponsor with adequate track record and good financial standing	Weak sponsor with no or questionable track record and/or financial weaknesses
Sponsor support, as evidenced by equity, ownership clause and incentive to inject additional cash if necessary	Strong. Project is highly strategic for the sponsor (core business - long-term strategy)	Good. Project is strategic for the sponsor (core business - long-term strategy)	Acceptable. Project is considered important for the sponsor (core business)	Limited. Project is not key to sponsor's long-term strategy or core business
Security Package				
Assignment of contracts and accounts	Fully comprehensive	Comprehensive	Acceptable	Weak
Pledge of assets, taking into account quality, value and liquidity of assets	First perfected security interest in all project assets, contracts, permits and accounts necessary to run the project	Perfected security interest in all project assets, contracts, permits and accounts necessary to run the project	Acceptable security interest in all project assets, contracts, permits and accounts necessary to run the project	Little security or collateral for lenders; weak negative pledge clause
Lender's control over cash flow (e.g. cash sweeps, independent escrow accounts)	Strong	Satisfactory	Fair	Weak
Strength of the covenant package (mandatory prepayments, payment deferrals, payment cascade, dividend restrictions...)	Covenant package is strong for this type of project Project may issue no additional debt	Covenant package is satisfactory for this type of project Project may issue extremely limited additional debt	Covenant package is fair for this type of project Project may issue limited additional debt	Covenant package is Insufficient for this type of project Project may issue unlimited additional debt
Reserve funds (debt service, O&M, renewal and replacement, unforeseen events, etc)	Longer than average coverage period, all reserve funds fully funded in cash or letters of credit from highly rated bank	Average coverage period, all reserve funds fully funded	Average coverage period, all reserve funds fully funded	Shorter than average coverage period, reserve funds funded from operating cash flows

This table belongs to ■ BIPRU 4.5.6 R and must be used in accordance with that rule only for income-producing real estate exposures

Table 2 - Supervisory Rating Grades for Income-Producing Real Estate Exposures				
	Strong	Good	Satisfactory	Weak
Financial strength				
Market conditions	The supply and demand for the project's type and location are currently in equilibrium. The number of competitive properties coming to market is equal or lower than forecasted demand	The supply and demand for the project's type and location are currently in equilibrium. The number of competitive properties coming to market is roughly equal to forecasted demand	Market conditions are roughly in equilibrium. Competitive properties are coming on the market and others are in the planning stages. The project's design and capabilities may not be state of the art compared to new projects	Market conditions are weak. It is uncertain when conditions will improve and return to equilibrium. The project is losing tenants at lease expiration. New lease terms are less favourable compared to those expiring
Financial ratios and advance rate	The property's debt service coverage ratio (DSCR) is considered strong (DSCR is not relevant for the construction phase) and its loan to value ratio (LTV) is considered low given its property type. Where a secondary market exists, the transaction is underwritten to market standards	The DSCR (not relevant for development real estate) and LTV are satisfactory. Where a secondary market exists, the transaction is underwritten to market standards	The property's DSCR has deteriorated and its value has fallen, increasing its LTV	The property's DSCR has deteriorated significantly and its LTV is well above underwriting standards for new loans
Stress analysis	The property's resources, contingencies and liability structure allow it to meet its financial obligations during a period of severe financial stress (e.g. interest rates, economic growth)	The property can meet its financial obligations under a sustained period of financial stress (e.g. interest rates, economic growth). The property is likely to default only under severe economic conditions	During an economic downturn, the property would suffer a decline in revenue that would limit its ability to fund capital expenditures and significantly increase the risk of default	The property's financial condition is strained and is likely to default unless conditions improve in the near term
Cash-flow predictability				
(a) For complete and stabilised property	The property's leases are long-term with creditworthy tenants and their maturity dates are scattered. The property has a track record of tenant retention upon lease expira-	Most of the property's leases are long-term, with tenants that range in creditworthiness. The property experiences a normal level of tenant turnover upon lease expiration. Its vacancy rate is	Most of the property's leases are medium rather than long-term with tenants that range in creditworthiness. The property experiences a moderate level of tenant turnover upon lease expira-	The property's leases are of various terms with tenants that range in creditworthiness. The property experiences a very high level of tenant turnover upon lease expiration. Its vacancy rate is

Table 2 - Supervisory Rating Grades for Income-Producing Real Estate Exposures				
	Strong	Good	Satisfactory	Weak
	tion. Its vacancy rate is low. Expenses (maintenance, insurance, security, and property taxes) are predictable	low. Expenses are predictable	tion. Its vacancy rate is moderate. Expenses are relatively predictable but vary in relation to revenue	high. Significant expenses are incurred preparing space for new tenants
(b) For complete but not stabilised property	Leasing activity meets or exceeds projections. The project should achieve stabilisation in the near future	Leasing activity meets or exceeds projections. The project should achieve stabilisation in the near future	Most leasing activity is within projections; however, stabilisation will not occur for some time	Market rents do not meet expectations. Despite achieving target occupancy rate, cash flow coverage is tight due to disappointing revenue
(c) For construction phase	The property is entirely pre-leased through the tenor of the loan or pre-sold to an investment grade tenant or buyer, or the bank has a binding commitment for take-out financing from an investment grade lender	The property is entirely pre-leased or pre-sold to a creditworthy tenant or buyer, or the bank has a binding commitment for permanent financing from a creditworthy lender	Leasing activity is within projections but the building may not be pre-leased and there may not exist a take-out financing. The bank may be the permanent lender	The property is deteriorating due to cost overruns, market deterioration, tenant cancellations or other factors. There may be a dispute with the party providing the permanent financing
Asset characteristics				
Location	Property is located in highly desirable location that is convenient to services that tenants desire	Property is located in desirable location that is convenient to services that tenants desire	The property location lacks a competitive advantage	The property's location, configuration, design and maintenance have contributed to the property's difficulties
Design and condition	Property is favoured due to its design, configuration, and maintenance, and is highly competitive with new properties	Property is appropriate in terms of its design, configuration and maintenance. The property's design and capabilities are competitive with new properties	Property is adequate in terms of its configuration, design and maintenance	Weaknesses exist in the property's configuration, design or maintenance
Property is under construction	Construction budget is conservative and technical hazards are limited. Contractors are highly qualified	Construction budget is conservative and technical hazards are limited. Contractors are highly qualified	Construction budget is adequate and contractors are ordinarily qualified	Project is over budget or unrealistic given its technical hazards. Contractors may be under qualified
Strength of Sponsor/Developer				

Table 2 - Supervisory Rating Grades for Income-Producing Real Estate Exposures				
	Strong	Good	Satisfactory	Weak
Financial capacity and willingness to support the property	The sponsor/developer made a substantial cash contribution to the construction or purchase of the property. The sponsor/developer has substantial resources and limited direct and contingent liabilities. The sponsor/developer's properties are diversified geographically and by property type	The sponsor/developer made a material cash contribution to the construction or purchase of the property. The sponsor/developer's financial condition allows it to support the property in the event of a cash flow shortfall. The sponsor/developer's properties are located in several geographic regions	The sponsor/developer's contribution may be immaterial or non-cash. The sponsor/developer is average to below average in financial resources	The sponsor/developer lacks capacity or willingness to support the property
Reputation and track record with similar properties	Experienced management and high sponsors' quality. Strong reputation and lengthy and successful record with similar properties	Appropriate management and sponsors' quality. The sponsor or management has a successful record with similar properties	Moderate management and sponsors' quality. Management or sponsor track record does not raise serious concerns	Ineffective management and substandard sponsors' quality. Management and sponsor difficulties have contributed to difficulties in managing properties in the past
Relationships with relevant real estate actors	Strong relationships with leading actors such as leasing agents	Proven relationships with leading actors such as leasing agents	Adequate relationships with leasing agents and other parties providing important real estate services	Poor relationships with leasing agents and/or other parties providing important real estate services
Security Package				
Nature of lien	Perfected first lien (Note 1)	Perfected first lien (Note 1)	Perfected first lien (Note 1)	Ability of lender to foreclose is constrained
Assignment of rents (for projects leased to long-term tenants)	The lender has obtained an assignment. They maintain current tenant information that would facilitate providing notice to remit rents directly to the lender, such as a current rent roll and copies of the project's leases	The lender has obtained an assignment. They maintain current tenant information that would facilitate providing notice to the tenants to remit rents directly to the lender, such as current rent roll and copies of the project's leases	The lender has obtained an assignment. They maintain current tenant information that would facilitate providing notice to the tenants to remit rents directly to the lender, such as current rent roll and copies of the project's leases	The lender has not obtained an assignment of the leases or has not maintained the information necessary to readily provide notice to the building's tenants

Table 2 - Supervisory Rating Grades for Income-Producing Real Estate Exposures				
	Strong	Good	Satisfactory	Weak
Quality of the insurance coverage	Appropriate	Appropriate	Appropriate	Substandard
Note 1: Lenders in some markets extensively use loan structures that include junior liens. Junior liens may be indicative of this level of risk if the total LTV inclusive of all senior positions does not exceed a typical first loan LTV.				

This table belongs to ■ BIPRU 4.5.6 R and must be used in accordance with that rule only for object finance exposures

Table 3 - Supervisory Rating Grades for Object Finance Exposures				
	Strong	Good	Satisfactory	Weak
Financial strength				
Market conditions	Demand is strong and growing, strong entry barriers, low sensitivity to changes in technology and economic outlook	Demand is strong and stable. Some entry barriers, some sensitivity to changes in technology and economic outlook	Demand is adequate and stable, limited entry barriers, significant sensitivity to changes in technology and economic outlook	Demand is weak and declining, vulnerable to changes in technology and economic outlook, highly uncertain environment
Financial ratios (debt service coverage ratio and loan-to-value ratio)	Strong financial ratios considering the type of asset. Very robust economic assumptions	Strong / acceptable financial ratios considering the type of asset. Robust project economic assumptions	Standard financial ratios for the asset type	Aggressive financial ratios considering the type of asset
Stress analysis	Stable long-term revenues, capable of withstanding severely stressed conditions through an economic cycle	Satisfactory short-term revenues. Loan can withstand some financial adversity. Default is only likely under severe economic conditions	Uncertain short-term revenues. Cash flows are vulnerable to stresses that are not uncommon through an economic cycle. The loan may default in a normal downturn	Revenues subject to strong uncertainties; even in normal economic conditions the asset may default, unless conditions improve
Market liquidity	Market is structured on a worldwide basis; assets are highly liquid	Market is worldwide or regional; assets are relatively liquid	Market is regional with limited prospects in the short term, implying lower liquidity	Local market and/or poor visibility. Low or no liquidity, particularly on niche markets
Political and legal environment				
Political risk, including transfer risk	Very low; strong mitigation instruments, if needed	Low; satisfactory mitigation instruments, if needed	Moderate; fair mitigation instruments	High; no or weak mitigation instruments
Legal and regulatory risks	Jurisdiction is favourable to repossession and enforcement of contracts	Jurisdiction is favourable to repossession and enforcement of contracts	Jurisdiction is generally favourable to repossession and enforcement of contracts, even if repossession might be long and/or difficult	Poor or unstable legal and regulatory environment. Jurisdiction may make repossession and enforcement of contracts lengthy or impossible

Table 3 - Supervisory Rating Grades for Object Finance Exposures				
	Strong	Good	Satisfactory	Weak
Transaction characteristics				
Financing term compared to the economic life of the asset	Full payout profile/minimum balloon. No grace period	Balloon more significant, but still at satisfactory levels	Important balloon with potentially grace periods	Repayment in fine or high balloon
Operating risk				
Permits / licensing	All permits have been obtained; asset meets current and foreseeable safety regulations	All permits obtained or in the process of being obtained; asset meets current and foreseeable safety regulations	Most permits obtained or in process of being obtained, outstanding ones considered routine, asset meets current safety regulations	Problems in obtaining all required permits, part of the planned configuration and/or planned operations might need to be revised
Scope and nature of O & M contracts	Strong long-term O&M contract, preferably with contractual performance incentives, and/or O&M reserve accounts (if needed)	Long-term O&M contract, and/or O&M reserve accounts (if needed)	Limited O&M contract or O&M reserve account (if needed)	No O&M contract: risk of high operational cost overruns beyond mitigants
Operator's financial strength, track record in managing the asset type and capability to re-market asset when it comes off-lease	Excellent track record and strong re-marketing capability	Satisfactory track record and re-marketing capability	Weak or short track record and uncertain re-marketing capability	No or unknown track record and inability to re-market the asset
Asset characteristics				
Configuration, size, design and maintenance (i.e. age, size for a plane) compared to other assets on the same market	Strong advantage in design and maintenance. Configuration is standard such that the object meets a liquid market	Above average design and maintenance. Standard configuration, maybe with very limited exceptions - such that the object meets a liquid market	Average design and maintenance. Configuration is somewhat specific, and thus might cause a narrower market for the object	Below average design and maintenance. Asset is near the end of its economic life. Configuration is very specific; the market for the object is very narrow
Resale value	Current resale value is well above debt value	Resale value is moderately above debt value	Resale value is slightly above debt value	Resale value is below debt value
Sensitivity of the asset value and liquidity to economic cycles	Asset value and liquidity are relatively insensitive to economic cycles	Asset value and liquidity are sensitive to economic cycles	Asset value and liquidity are quite sensitive to economic cycles	Asset value and liquidity are highly sensitive to economic cycles
Strength of sponsor				
Operator's finan-	Excellent track re-	Satisfactory track	Weak or short	No or unknown

Table 3 - Supervisory Rating Grades for Object Finance Exposures				
	Strong	Good	Satisfactory	Weak
cial strength, track record in managing the asset type and capability to re-market asset when it comes off-lease	cord and strong re-marketing capability	record and re-marketing capability	track record and uncertain re-marketing capability	track record and inability to re-market the asset
Sponsors' track record and financial strength	Sponsors with excellent track record and high financial standing	Sponsors with good track record and good financial standing	Sponsors with adequate track record and good financial standing	Sponsors with no or questionable track record and/or financial weaknesses
Security Package				
Asset control	Legal documentation provides the lender effective control (e.g. a first perfected security interest, or a leasing structure including such security) on the asset, or on the company owning it	Legal documentation provides the lender effective control (e.g. a perfected security interest, or a leasing structure including such security) on the asset, or on the company owning it	Legal documentation provides the lender effective control (e.g. a perfected security interest, or a leasing structure including such security) on the asset, or on the company owning it	The contract provides little security to the lender and leaves room to some risk of losing control on the asset
Rights and means at the lender's disposal to monitor the location and condition of the asset	The lender is able to monitor the location and condition of the asset, at any time and place (regular reports, possibility to lead inspections)	The lender is able to monitor the location and condition of the asset, almost at any time and place	The lender is able to monitor the location and condition of the asset, almost at any time and place	The lender is able to monitor the location and condition of the asset are limited
Insurance against damages	Strong insurance coverage including collateral damages with top quality insurance companies	Satisfactory insurance coverage (not including collateral damages) with good quality insurance companies	Fair insurance coverage (not including collateral damages) with acceptable quality insurance companies	Weak insurance coverage (not including collateral damages) or with weak quality insurance companies

This table belongs to ■ BIPRU 4.5.6 R and must be used in accordance with that rule only for commodities finance exposures.

Table 4 - Supervisory Rating Grades for Commodities Finance Exposures				
	Strong	Good	Satisfactory	Weak
Financial strength				
Degree of over-collateralisation of trade	Strong	Good	Satisfactory	Weak
Political and legal Environment				
Country risk	No country risk	Limited exposure to country risk (in particular, offshore	Exposure to country risk (in particular, offshore loca-	Strong exposure to country risk (in particular, inland

Table 4 - Supervisory Rating Grades for Commodities Finance Exposures				
	Strong	Good	Satisfactory	Weak
		location of reserves in an emerging country)	tion of reserves in an emerging country)	reserves in an emerging country)
Mitigation of country risks	Very strong mitigation:	Strong mitigation:	Acceptable mitigation:	Only partial mitigation:
	Strong offshore Mechanisms	Offshore mechanisms	Offshore mechanisms	No offshore mechanisms
	Strategic commodity	Strategic commodity	Less strategic commodity	Non-strategic commodity
	1st class buyer	Strong buyer	Acceptable buyer	Weak buyer
Asset characteristics				
Liquidity and susceptibility to damage	Commodity is quoted and can be hedged through futures or OTC instruments. Commodity is not susceptible to damage	Commodity is quoted and can be hedged through OTC instruments. Commodity is not susceptible to damage	Commodity is not quoted but is liquid. There is uncertainty about the possibility of hedging. Commodity is not susceptible to damage	Commodity is not quoted. Liquidity is limited given the size and depth of the market. No appropriate hedging instruments. Commodity is susceptible to damage
Strength of sponsor				
Financial strength of trader	Very strong, relative to trading philosophy and risks	Strong	Adequate	Weak
Track record, including ability to manage the logistic process	Extensive experience with the type of transaction in question. Strong record of operating success and cost efficiency	Sufficient experience with the type of transaction in question. Above average record of operating success and cost efficiency	Limited experience with the type of transaction in question. Average record of operating success and cost efficiency	Limited or uncertain track record in general. Volatile costs and profits
Trading controls and hedging policies	Strong standards for counterparty selection, hedging, and monitoring	Adequate standards for counterparty selection, hedging, and monitoring	Past deals have experienced no or minor problems	Trader has experienced significant losses on past deals
Quality of financial disclosure	Excellent	Good	Satisfactory	Financial disclosure contains some uncertainties or is insufficient
Security package				
Asset control	First perfected security interest provides the lender legal control of	First perfected security interest provides the lender legal control of	At some point in the process, there is a rupture in the control of the as-	Contract leaves room for some risk of losing control over the as-

Table 4 - Supervisory Rating Grades for Commodities Finance Exposures				
	Strong	Good	Satisfactory	Weak
	the assets at any time if needed	the assets at any time if needed	sets by the lender. The rupture is mitigated by knowledge of the trade process or a third party undertaking as the case may be	sets. Recovery could be jeopardised
Insurance against damages	Strong insurance coverage including collateral damages with top quality insurance companies	Satisfactory insurance coverage (not including collateral damages) with good quality insurance companies	Fair insurance coverage (not including collateral damages) with acceptable quality insurance companies	Weak insurance coverage (not including collateral damages) or with weak quality insurance companies

Chapter 5

Credit risk mitigation

5.1 Application and purpose

Application

5.1.1 R ■ BIPRU 5 applies to a *BIPRU firm*.

Purpose

5.1.2 G Pursuant to the third paragraph of article 95(2) of the *UK CRR*, ■ BIPRU 5 applies requirements that correspond, in part, to Articles 78(1) and 91 to 93 and Annex VIII of the *Banking Consolidation Directive*.

5.1.3 G ■ BIPRU 5 sets out the principles for the recognition of *credit risk mitigation* in the calculation of *risk weighted exposure amounts* for the purposes of the calculation of the *credit risk capital component*.

5.1.4 G ■ BIPRU 4.10 applies requirements that correspond to those parts of Articles 91 to 93 and Annex VIII of the *Banking Consolidation Directive* which are specific to the recognition of *credit risk mitigation* by *firms* using the *IRB approach*, and modifies the application of the provisions in ■ BIPRU 5 to those *firms*.

5.1.5 G In certain cases provisions specific to the *IRB approach* have been kept in ■ BIPRU 5 in order to reduce duplication. The main examples are certain references to *expected loss* and references in the *IRB approach* in the provisions in ■ BIPRU 5.7 about basket *CRM* techniques.

5.2 The central principles of credit risk mitigation

5.2.1 R A *firm* using the *standardised approach* may recognise *credit risk mitigation* in accordance with ■ BIPRU 5 in the calculation of *risk weighted exposure amounts* for the purposes of the calculation of the *credit risk capital component*.

[**Note**: *BCD* Article 91]

5.2.2 R The technique used to provide the credit protection together with the actions and steps taken and procedures and policies implemented by a *lending firm* must be such as to result in credit protection arrangements which are legally effective and enforceable in all relevant jurisdictions.

[**Note**: *BCD* Article 92(1)]

5.2.3 R

(1) A *firm* must not recognise credit protection as eligible until it has conducted sufficient legal review confirming that the credit protection arrangements are legally effective and enforceable in all relevant jurisdictions in accordance with ■ BIPRU 5.2.2 R.

(2) A *firm* must re-conduct legal reviews as necessary to ensure continuing enforceability and effectiveness.

5.2.4 R A *lending firm* must take all appropriate steps to ensure the effectiveness of the credit protection arrangement and to address related risks.

[**Note**: *BCD* Article 92(2)]

Funded credit protection

5.2.5 R In the case of *funded credit protection*:

(1) to be eligible for recognition the assets relied upon must be sufficiently liquid and their value over time sufficiently stable to provide appropriate certainty as to the credit protection achieved having regard to the approach used to calculate *risk weighted exposure amounts* and to the degree of recognition allowed; eligibility is limited to the assets set out in the *CRM eligibility conditions*; and

(2) the *lending firm* must have the right to liquidate or retain, in a timely manner, the assets from which the protection derives in the event of the default, insolvency or bankruptcy of the obligor – or other credit

event set out in the transaction documentation – and, where applicable, of the custodian holding the collateral; the degree of correlation between the value of the assets relied upon for protection and the credit quality of the obligor must not be undue.

[**Note**: *BCD* Article 92(3) and (4)]

Treatment of credit linked notes

5.2.6 G A credit linked note should be treated, to the extent of its cash funding, as *funded credit protection*. Therefore the conditions in ■ BIPRU 5 regulating the eligibility of protection providers for *unfunded credit protection* do not apply. However the other provisions about the requirements for the recognition of *unfunded credit protection* do apply.

Unfunded credit protection

5.2.7 R In the case of *unfunded credit protection*:

(1) to be eligible for recognition the party giving the undertaking must be sufficiently reliable, and the protection agreement legally effective and enforceable in the relevant jurisdictions, to provide appropriate certainty as to the credit protection achieved having regard to the approach used to calculate *risk weighted exposure amounts* and to the degree of recognition allowed; and

(2) eligibility is limited to the protection providers and types of protection agreement set out in the *CRM eligibility conditions*.

[**Note**: *BCD* Article 92(5)]

Minimum requirements

5.2.8 R The minimum requirements set out in BIPRU 5 must be complied with.

[**Note**: *BCD* Article 92(6)]

5.2.9 R A *firm* must be able to satisfy the *appropriate regulator* that it has adequate risk management processes to control the risks to which the *firm* may be exposed as a result of carrying out *credit risk mitigation*. Those processes must include appropriate stress tests and scenario analyses relating to those risks, including residual risk and the risks relating to the intrinsic value of the *credit risk mitigation*.

[**Note**: *BCD* Annex VIII Part 2 point 1]

5.2.10 R Notwithstanding the presence of *credit risk mitigation* taken into account for the purposes of calculating *risk weighted exposure amounts* and as relevant *expected loss* amounts, a *firm* must continue to undertake full credit risk assessment of the underlying *exposure* and must be in a position to demonstrate to the *appropriate regulator* the fulfilment of this requirement. In the case of *repurchase transactions* and/or *securities or commodities lending or borrowing transactions* the underlying *exposure* must, for the purposes of this *rule* only, be deemed to be the net amount of the *exposure*.

[**Note**: *BCD* Annex VIII Part 2 point 2]

Calculating the effects of the credit risk mitigation

5.2.11 R Where the requirements of ■ BIPRU 5.2.2 R to ■ BIPRU 5.2.8 R are met the calculation of *risk weighted exposure amounts*, may be modified in accordance with ■ BIPRU 5.

[**Note**: *BCD* Article 93(1)]

5.2.12 R No *exposure* in respect of which *credit risk mitigation* is obtained may produce a higher *risk weighted exposure amount* than an otherwise identical *exposure* in respect of which there is no *credit risk mitigation*.

[**Note**: *BCD* Article 93(2)]

5.2.13 R Where the *risk weighted exposure amount* already takes account of credit protection under the *standardised approach* the calculation of the credit protection must not be further recognised under ■ BIPRU 5.

[**Note**: *BCD* Article 93(3)]

5.2.14 R Subject to ■ BIPRU 5.8, ■ BIPRU 5.9 and ■ BIPRU 5.7.27 R to ■ BIPRU 5.7.28 R, where the *CRM eligibility conditions* and the *CRM minimum requirements* are satisfied, the calculation of *risk weighted exposure amounts* under the *standardised approach* may be modified in accordance with the provisions of ■ BIPRU 5.

[**Note**: *BCD* Annex VIII Part 3 point 1]

5.2.15 R Cash, *securities* or *commodities* purchased, borrowed or received under a *repurchase transaction* or *securities or commodities lending or borrowing transaction* must be treated as collateral.

[**Note**: BCD Annex VIII Part 3 point 2]

5.3 On balance sheet netting

Eligibility

5.3.1 R A *firm* may recognise as eligible the on-balance sheet netting of mutual claims between the *firm* and its counterparty.

[**Note**: *BCD* Annex VIII Part 1 point 3]

5.3.2 R Without prejudice to ■ BIPRU 5.6.1 R, eligibility is limited to reciprocal cash balances between a *firm* and a counterparty. Only loans and deposits of the *lending firm* may be subject to a modification of *risk weighted exposure amounts* and, as relevant, *expected loss* amounts as a result of an on-balance sheet netting agreement.

[**Note**: *BCD* Annex VIII Part 1 point 4]

Minimum requirements

5.3.3 R For on-balance sheet netting agreements - other than master netting agreements covering *repurchase transactions*, *securities or commodities lending or borrowing transactions* and/or other *capital market-driven transactions* – to be recognised for the purposes of ■ BIPRU 5 the following conditions must be satisfied:

(1) they must be legally effective and enforceable in all relevant jurisdictions, including in the event of the insolvency or bankruptcy of a counterparty;

(2) the *firm* must be able to determine at any time those assets and liabilities that are subject to the on-balance sheet netting agreement;

(3) the *firm* must monitor and control the risks associated with the termination of the credit protection; and

(4) the *firm* must monitor and control the relevant *exposures* on a net basis.

[**Note**: *BCD* Annex VIII Part 2 point 3]

Calculating the effects of credit risk mitigation

5.3.4 R Loans and deposits with a *lending firm* subject to on-balance sheet netting are to be treated as cash collateral.

[**Note**: *BCD* Annex VIII Part 3 point 4]

5.4 Financial collateral

Eligibility

5.4.1 R

(1) Where the *credit risk mitigation* used relies on the right of a *firm* to liquidate or retain assets, eligibility depends upon whether *risk weighted exposure amounts*, and, as relevant, *expected loss* amounts, are calculated under the *standardised approach* or the *IRB approach*.

(2) Eligibility further depends upon whether the *financial collateral simple method* is used or the *financial collateral comprehensive method*.

(3) In relation to *repurchase transactions* and *securities or commodities lending or borrowing transactions*, eligibility also depends upon whether the transaction is booked in the *non-trading book* or the *trading book*.

[**Note:** *BCD* Annex VIII Part 1 point 6]

5.4.2 R

The following financial items may be recognised as eligible collateral under all approaches and methods:

(1) cash on deposit with, or *cash assimilated instruments* held by, the *lending firm*;

(2) *debt securities* issued by central governments or *central banks* which *securities* have a credit assessment by an *eligible ECAI* or export credit agency recognised as eligible for the purposes of the *standardised approach*, which is associated with *credit quality step* 4 or above under the *rules* for the *risk weighting* of *exposures* to central governments and *central banks* under the *standardised approach*;

(3) *debt securities* issued by *institutions* which *securities* have a credit assessment by an *eligible ECAI* associated with *credit quality step* 3 or above under the *rules* for the *risk weighting* of *exposures* to a *credit institution* under the *standardised approach*;

(4) *debt securities* issued by other entities which *securities* have a credit assessment by an *eligible ECAI* associated with *credit quality step* 3 or above under the *rules* for the *risk weighting* of *exposures* to *corporates* under the *standardised approach*;

(5) *debt securities* with a short-term credit assessment by an *eligible ECAI* associated with *credit quality step* 3 or above under the *rules* for the *risk weighting* of short term exposures under the *standardised approach*;

(6) equities or *convertible* bonds that are included in a main index; and

(7) gold.

[**Note:** *BCD* Annex VIII Part 1 point 7 (part)]

5.4.3 R For the purposes of ■ BIPRU 5.4.2 R (2), '*debt securities* issued by central governments or *central banks*' include –

(1) *debt securities* issued by regional governments or local authorities *exposures* to which are treated as *exposures* to the central government in whose jurisdiction they are established under the *standardised approach*;

(2) *debt securities* issued by *public sector entities* which are treated as *exposures* to central governments in accordance with ■ BIPRU 3.4.24 R;

(3) *debt securities* issued by *multilateral development banks* to which a 0% *risk weight* is assigned under the *standardised approach*; and

(4) *debt securities* issued by *international organisations* which are assigned a 0% *risk weight* under the *standardised approach*.

[**Note:** *BCD* Annex VIII Part 1 point 7 (part)]

5.4.4 R For the purposes of ■ BIPRU 5.4.2 R (3), '*debt securities* issued by *institutions*' include:

(1) *debt securities* issued by regional governments or local authorities other than those *exposures* to which are treated as *exposures* to the central government in whose jurisdiction they are established under the *standardised approach*;

(2) *debt securities* issued by *public sector entities*, *exposures* to which are treated as *exposures* to a *credit institution* under the *standardised approach*;

(3) *debt securities* issued by *multilateral development banks* other than those to which a 0% *risk weight* is assigned under the *standardised approach*.

[**Note:** *BCD* Annex VIII Part 1 point 7 (part)]

5.4.5 R *Debt securities* issued by *institutions* which *securities* do not have a credit assessment by an *eligible ECAI* may be recognised as eligible collateral if they fulfil the following criteria:

(1) they are listed on a *recognised investment exchange* or a *designated investment exchange*;

(2) they qualify as senior debt;

(3) all other rated issues by the issuing *institution* of the same seniority have a credit assessment by an *eligible ECAI* associated with *credit quality step* 3 or above under the *rules* for the *risk weight* of

exposures to *institutions* or short term *exposures* under the *standardised approach*;

(4) the *lending firm* has no information to suggest that the issue would justify a credit assessment below that indicated in (3); and

(5) the *firm* can demonstrate to the *appropriate regulator* that the market liquidity of the instrument is sufficient for these purposes.

[**Note:** *BCD* Annex VIII Part 1 point 8]

5.4.6 R

(1) Units in *CIUs* may be recognised as eligible collateral if the following conditions are satisfied:

(a) they have a daily public price quote;

(b) the *CIU* is limited to investing in instruments that are eligible for recognition under ■ BIPRU 5.4.2 R to ■ BIPRU 5.4.5 R; and

(c) if the *CIU* is not limited to investing in instruments that are eligible for recognition under ■ BIPRU 5.4.2 R to ■ BIPRU 5.4.5 R, units may be recognised with the value of the eligible assets as collateral under the assumption that the *CIU* has invested to the maximum extent allowed under its mandate in non-eligible assets. In cases where non-eligible assets can have a negative value due to liabilities or contingent liabilities resulting from ownership, the *firm* must calculate the total value of the non-eligible assets and must reduce the value of the eligible assets by that of the non-eligible assets in case the latter is negative in total.

(2) The use (or potential use) by a *CIU* of derivative instruments to hedge permitted investments shall not prevent units in that *CIU* from being eligible.

[**Note:** *BCD* Annex VIII Part 1 point 9]

5.4.7 R

In relation to ■ BIPRU 5.4.2 R (2) to ■ (5):

(1) where a *security* has two credit assessments by *eligible ECAIs*, the less favourable assessment must be deemed to apply;

(2) in cases where a *security* has more than two credit assessments by *eligible ECAIs*:

(a) the two most favourable assessments must be deemed to apply; or

(b) if the two most favourable credit assessments are different, the less favourable of the two must be deemed to apply.

[**Note:** *BCD* Annex VIII Part 1 point 10]

5.4.8 R

(1) In addition to the collateral set out in ■ BIPRU 5.4.2 R to ■ BIPRU 5.4.7 R, where a *firm* uses the *financial collateral comprehensive method*, the following financial items may be recognised as eligible collateral:

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(a) equities or *convertible* bonds not included in a main index but traded on a *recognised investment exchange* or a *designated investment exchange*;

(b) units in *CIUs* if the following conditions are met:

(i) they have a daily public price quote; and

(ii) the *CIU* is limited to investing in instruments that are eligible for recognition under ■ BIPRU 5.4.2 R to ■ BIPRU 5.4.5 R and the items mentioned in (a); and

(c) if the *CIU* is not limited to investing in instruments that are eligible for recognition under ■ BIPRU 5.4.2 R to ■ BIPRU 5.4.5 R and the items mentioned in (a) of this *rule*, units may be recognised with the value of the eligible assets as collateral under the assumption that the *CIU* has invested to the maximum extent allowed under its mandate in non-eligible assets. In cases where non-eligible assets can have a negative value due to liabilities or contingent liabilities resulting from ownership, the *firm* must calculate the total value of the non-eligible assets and must reduce the value of the eligible assets by that of the non-eligible assets, in case the latter is negative in total.

(2) The use (or potential use) by a *CIU* of derivative instruments to hedge permitted investments shall not prevent units in that *CIU* from being eligible.

[**Note:** *BCD* Annex VIII Part 1 point 11]

Minimum requirements

5.4.9 R For the recognition of financial collateral and gold, the following conditions must be met:

(1) the low correlation conditions in ■ BIPRU 5.4.10 R;

(2) the legal certainty conditions in ■ BIPRU 5.4.11 R; and

(3) the operational requirements in ■ BIPRU 5.4.12 R.

[**Note:** *BCD* Annex VIII Part 2 point 6]

5.4.10 R The low correlation conditions referred to in ■ BIPRU 5.4.9 R (1) are as follows:

(1) (a) the credit quality of the obligor and the value of the collateral must not have a material positive correlation; and

(b) *securities* issued by the obligor, or any related *group* entity are not eligible.

(2) notwithstanding (1)(b), the obligor's own issues of *covered bonds* falling within the terms of ■ BIPRU 3.4.107 R to ■ BIPRU 3.4.109 R may be recognised as collateral for *repurchase transactions*, provided that (1)(a) is complied with.

[**Note:** *BCD* Annex VIII Part 2 point 6(a)]

5.4.11 R The legal certainty conditions referred to in ■ BIPRU 5.4.9 R (2) are as follows:

(1) a *firm* must fulfil any contractual and statutory requirements in respect of, and take all steps necessary to ensure, the enforceability of the collateral arrangements under the law applicable to its interest in the collateral;

(2) in accordance with the general principle in ■ BIPRU 5.2.2 R, a *firm* must have conducted sufficient legal review confirming the enforceability of the collateral arrangements in all relevant jurisdictions; and

(3) a *firm* must re-conduct such review as necessary to ensure continuing enforceability.

[**Note:** *BCD* Annex VIII Part 2 point 6(b)]

5.4.12 R The operational requirements referred to in ■ BIPRU 5.4.9 R (3) are as follows:

(1) the collateral arrangements must be properly documented, with a clear and robust procedure for the timely liquidation of collateral;

(2) a *firm* must employ robust procedures and processes to control risks arising from the use of collateral – including risks of failed or reduced credit protection, valuation risks, risks associated with the termination of the credit protection, concentration risk arising from the use of collateral and the interaction with the *firm's* overall risk profile;

(3) a *firm* must have documented policies and practices concerning the types and amounts of collateral accepted;

(4) a *firm* must calculate the market value of the collateral, and revalue it accordingly, with a minimum frequency of once every six months and whenever the *firm* has reason to believe that there has occurred a significant decrease in its market value; and

(5) where the collateral is held by a third party, a *firm* must take reasonable steps to ensure that the third party segregates the collateral from its own assets.

[**Note:** *BCD* Annex VIII Part 2 point 6(c)]

5.4.13 R In addition to the requirements set out in ■ BIPRU 5.4.9 R, for the recognition of financial collateral under the *financial collateral simple method* the residual maturity of the protection must be at least as long as the residual maturity of the *exposure*.

[**Note:** *BCD* Annex VIII Part 2 point 7]

The financial collateral simple method: General

5.4.14 R ■ BIPRU 5.4.17 R – ■ BIPRU 5.4.22 R set out the calculation of the effects of *credit risk mitigation* under the *financial collateral simple method*.

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5.4.15 R The *financial collateral simple method* is available only where *risk weighted exposure amounts* are calculated under the *standardised approach* to credit risk.

[**Note:** *BCD* Annex VIII Part 3 point 24 (part)]

5.4.16 R A *firm* must not use both the *financial collateral simple method* and the *financial collateral comprehensive method*, unless such use is for the purposes of ■ BIPRU 4.2.17 R to ■ BIPRU 4.2.19 R and ■ BIPRU 4.2.26 R, and such use is provided for by the *firm's IRB permission*. A *firm* must demonstrate to the *appropriate regulator* that this exceptional application of both methods is not used selectively with the purpose of achieving reduced minimum capital requirements and does not lead to regulatory arbitrage.

[**Note:** *BCD* Annex VIII Part 3 point 24 (part)]

The financial collateral simple method: Valuation

5.4.17 R Under the *financial collateral simple method*, recognised financial collateral is assigned a value equal to its market value as determined in accordance with ■ BIPRU 5.4.12 R.

[**Note:** *BCD* Annex VIII Part 3 point 25]

The financial collateral simple method: Calculating risk-weighted exposure amounts

5.4.18 R The *risk weight* that would be assigned under the *standardised approach* to credit risk if the *lending firm* had a direct *exposure* to the collateral instrument must be assigned to those portions of *exposure* values collateralised by the market value of recognised collateral. For this purpose, the *exposure* value of an off-balance sheet item listed in ■ BIPRU 3.7.2 R must be 100% of its value rather than the *exposure* value indicated in ■ BIPRU 3.2.1 R. The *risk weight* of the collateralised portion must be a minimum of 20% except as specified in ■ BIPRU 5.4.19 R to ■ BIPRU 5.4.21 R. The remainder of the *exposure*value receives the *risk weight* that would be applied to an unsecured *exposure* to the counterparty under the *standardised approach*.

[**Note:** *BCD* Annex VIII Part 3 point 26]

The financial collateral simple method: Repurchase transactions and securities lending or borrowing transactions

5.4.19 R A *risk weight* of 0% must be assigned to the collateralised portion of the *exposure* arising from transactions which fulfil the criteria enumerated in ■ BIPRU 5.4.62 R. If the counterparty to the transaction is not a *core market participant* a *risk weight* of 10% must be assigned.

[**Note:** *BCD* Annex VIII Part 3 point 27]

The financial collateral simple method: financial derivative instruments subject to daily mark-to-market

5.4.20 R A *risk weight* of 0% must, to the extent of the collateralisation, be assigned to the *exposure* values determined under ■ BIPRU 13 for *financial derivative instruments* and subject to daily marking-to-market, collateralised by cash or

cash assimilated instruments where there is no currency mismatch. A *risk weight* of 10% must be assigned to the extent of the collateralisation to the *exposure* values of such transactions collateralised by *debt securities* issued by central governments or *central banks* which are assigned a 0% *risk weight* under the *standardised approach*.

[**Note:** *BCD* Annex VIII Part 3 point 28 (part)]

5.4.21 R A 0% *risk weight* may be assigned where the *exposure* and the collateral are denominated in the same currency, and either:

(1) the collateral is cash on deposit or a *cash assimilated instrument*; or

(2) the collateral is in the form of *debt securities* issued by central governments or *central banks* eligible for a 0% *risk weight* under the *standardised approach*, and its market value has been discounted by 20%.

[**Note:** *BCD* Annex VIII Part 3 point 29]

5.4.22 R For the purposes of ■ BIPRU 5.4.20 R and ■ BIPRU 5.4.21 R '*debt securities* issued by central governments or *central banks*' must include:

(1) *debt securities* issued by regional governments or local authorities *exposures* to which are treated as *exposures* to the central government in whose jurisdiction they are established under the *standardised approach*;

(2) *debt securities* issued by *multilateral development banks* to which a 0% *risk weight* is assigned under or by virtue of the *standardised approach*; and

(3) *debt securities* issued by *international organisations* which are assigned a 0% *risk weight* under the *standardised approach*.

[**Note:** *BCD* Annex VIII Part 3 point 28 (part)]

The financial collateral comprehensive method: General

5.4.23 R ■ BIPRU 5.4.24 R – ■ BIPRU 5.4.66 R set out the calculation of the effects of *credit risk mitigation* under the *financial collateral comprehensive method*.

5.4.24 R In valuing financial collateral for the purposes of the *financial collateral comprehensive method*, volatility adjustments must be applied to the market value of collateral, as set out in ■ BIPRU 5.4.30 R to ■ BIPRU 5.4.64R, in order to take account of price volatility.

[**Note:** *BCD* Annex VIII Part 3 point 30]

5.4.25 R Subject to the treatment for currency mismatches in the case of *financial derivative instrument* set out in ■ BIPRU 5.4.26 R, where collateral is denominated in a currency that differs from that in which the underlying *exposure* is denominated, an adjustment reflecting currency volatility must

be added to the volatility adjustment appropriate to the collateral as set out in ■ BIPRU 5.4.30 R to ■ BIPRU 5.4.64R.

[**Note:** *BCD* Annex VIII Part 3 point 31]

5.4.26 R In the case of *financial derivative instrument* covered by netting agreements recognised under ■ BIPRU 13, a volatility adjustment reflecting currency volatility must be applied when there is a mismatch between the collateral currency and the settlement currency. Even in the case where multiple currencies are involved in the transactions covered by the netting agreement, only a single volatility adjustment may be applied.

[**Note:** *BCD* Annex VIII Part 3 point 32]

5.4.27 R In the case of a *firm* using the *financial collateral comprehensive method*, where an *exposure* takes the form of securities or *commodities* sold, posted or lent under a *repurchase transaction* or under a *securities or commodities lending or borrowing transaction*, and *margin lending transactions* the *exposure* value must be increased by the volatility adjustment appropriate to such securities or *commodities* as prescribed in ■ BIPRU 5.4.30 R to ■ BIPRU 5.4.64R.

[**Note**: *BCD* Article 78(1), third sentence]

The financial collateral comprehensive method: Calculating adjusted values

5.4.28 R

(1) The volatility-adjusted value of the collateral to be taken into account is calculated as follows in the case of all transactions except those transactions subject to recognised master netting agreements to which the provisions set out in ■ BIPRU 5.6.5 R to ■ BIPRU 5.6.29 R are to be applied:

$C_{VA} = C \times (1-H_C-H_{FX})$

(2) The volatility-adjusted value of the *exposure* to be taken into account is calculated as follows:

$E_{VA} = E \times (1+H_E)$, and in the case of *financial derivative instruments* $E_{VA} = E$.

(3) The fully adjusted value of the *exposure*, taking into account both volatility and the risk-mitigating effects of collateral is calculated as follows:

$E^* = \max \{0, [E_{VA} - C_{VAM}]\}$

Where:

(a) E is the *exposure* value as would be determined under the *standardised approach* if the *exposure* was not collateralised.

(b) E_{VA} is the volatility-adjusted *exposure* amount.

(c) C_{VA} is the volatility-adjusted value of the collateral.

(d) C_{VAM} is C_{VA} further adjusted for any maturity mismatch in accordance with the provisions of ■ BIPRU 5.8.

(e) H_E is the volatility adjustment appropriate to the *exposure* (E), as calculated under ■ BIPRU 5.4.30 R to ■ BIPRU 5.4.64R.

(f) H_C is the volatility adjustment appropriate for the collateral, as calculated under ■ BIPRU 5.4.30 R to ■ BIPRU 5.4.64R.

(g) H_{FX} is the volatility adjustment appropriate for currency mismatch, as calculated under ■ BIPRU 5.4.30 R to ■ BIPRU 5.4.64R.

(h) E^* is the fully adjusted *exposure* value taking into account volatility and the risk-mitigating effects of the collateral.

(4) For the purpose of (3)(a), for a *firm* calculating *risk weighted exposure amounts* under the *standardised approach* the *exposure* value of an off-balance sheet items listed in ■ BIPRU 3.7 must be 100% of its value rather than the *exposure* value indicated in ■ BIPRU 3.2.1 R and ■ BIPRU 3.7.2 R.

[**Note:** *BCD* Annex VIII Part 3 point 33]

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The financial collateral comprehensive method: Calculation of volatility adjustments to be applied: General

5.4.29 R ■ BIPRU 5.4.30 R – ■ BIPRU 5.4.64R set out the calculation of volatility adjustments under the *financial collateral comprehensive method*.

5.4.30 R Volatility adjustments may be calculated in two ways: the *supervisory volatility adjustments approach* and the *own estimates of volatility adjustments approach*.

[**Note:** *BCD* Annex VIII Part 3 point 34]

5.4.31 R A *firm* may choose to use the *supervisory volatility adjustments approach* or the *own estimates of volatility adjustments approach* independently of the choice it has made between the *standardised approach* and the *IRB approach* for the calculation of *risk weighted exposure amounts*. However, if a *firm* seeks to use the *own estimates of volatility adjustments approach*, it must do so for the full range of instrument types, excluding immaterial portfolios where it may use the *supervisory volatility adjustments approach*.

[**Note:** *BCD* Annex VIII Part 3 point 35 (part)]

5.4.32 R Where the collateral consists of a number of recognised items, the volatility adjustment must be

$(H = \Sigma_i \alpha_i H_i)$

where:

(1) a_i is the proportion of an item to the collateral as a whole; and

(2) H_i is the volatility adjustment applicable to that item.

[**Note:** *BCD* Annex VIII Part 3 point 35 (part)]

The financial collateral comprehensive method: Supervisory volatility adjustments approach

5.4.33 R ■ BIPRU 5.4.34 R – ■ BIPRU 5.4.43 R set out the calculation of volatility adjustments under the *supervisory volatility adjustments approach*.

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5.4.34 R The volatility adjustments to be applied under the *supervisory volatility adjustments approach* (assuming daily revaluation) are those set out in the tables in ■ BIPRU 5.4.35 R – ■ BIPRU 5.4.38 R.

[**Note:** *BCD* Annex VIII Part 3 point 36]

Table: Volatility adjustments for debt securities described in BIPRU 5.4.2R(2) and (3) – (4)

5.4.35 R This table belongs to ■ BIPRU 5.4.34 R.

Credit quality step with which the credit assessment of the *debt security* is associated	Residual Maturity	Volatility adjustments for *debt securities* issued by entities described in BIPRU 5.4.2 R (2)			Volatility adjustments for *debt securities* issued by entities described in BIPRU 5.4.2 R (3) and (4)		
		20 day liquidation period (%)	10 day liquidation period (%)	5 day liquidation period (%)	20 day liquidation period (%)	10 day liquidation period (%)	5 day liquidation period (%)
1	≤ 1 year	0.707	0.5	0.354	1.414	1	0.707
	> 1 ≤ 5 years	2.828	2	1.414	5.657	4	2.828
	> 5 years	5.657	4	2.828	11.314	8	5.657
2–3	≤ 1 year	1.414	1	0.707	2.828	2	1.414
	> 1 ≤ 5 years	4.243	3	2.121	8.485	6	4.243
	> 5 years	8.485	6	4.243	16.971	12	8.485
4	≤ 1 year	21.213	15	10.607	N/A	N/A	N/A
	> 1 ≤ 5 years	21.213	15	10.607	N/A	N/A	N/A
	> 5 years	21.213	15	10.607	N/A	N/A	N/A

Table: Volatility adjustments for debt securities described in BIPRU 5.4.2R(5)

5.4.36 R This table belongs to ■ BIPRU 5.4.34 R.

Credit quality step with which the credit assessment of a short term debt security is associated	Volatility adjustments for *debt securities* issued by entities described in BIPRU 5.4.2 R (2) with short-term credit assessments			Volatility adjustments for *debt securities* issued by entities described in BIPRU 5.4.2 R (3) and (4) with short-term credit assessments		
	20 day liquidation period (%)	10 day liquidation period (%)	5 day liquidation period (%)	20 day liquidation period (%)	10 day liquidation period (%)	5 day liquidation period (%)
1	0.707	0.5	0.354	1.414	1	0.707
2–3	1.414	1	0.707	2.828	2	1.414

Table: Volatility adjustments for other collateral or exposure types

5.4.37 R This table belongs to ■ BIPRU 5.4.34 R.

	Other collateral or *exposure* types		
	20 day liquidation period (%)	10 day liquidation period (%)	5 day liquidation period (%)
Main index equities, main index *convertible* bonds	21.213	15	10.607
Other equities or *convertible* bonds listed on a *recognised investment exchange* or *designated investment exchange*	35.355	25	17.678
Cash	0	0	0
Gold	21.213	15	10.607

Table: Volatility adjustments for currency mismatch

5.4.38 R This table belongs to ■ BIPRU 5.4.34 R.

Volatility adjustment for currency mismatch		
20 day liquidation period (%)	10 day liquidation period (%)	5 day liquidation period (%)
11.314	8	5.657

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5.4.39 R

(1) For *secured lending transactions* the liquidation period is 20 business days.

(2) For *repurchase transactions* (except insofar as such transactions involve the transfer of *commodities* or guaranteed rights relating to title to *commodities*) and securities lending or borrowing transactions the liquidation period is 5 business days.

(3) For other *capital market-driven transactions*, the liquidation period is 10 business days.

[**Note:** *BCD* Annex VIII Part 3 point 37]

5.4.40 R

In the tables in ■ BIPRU 5.4.35 R – ■ BIPRU 5.4.38 R and in ■ BIPRU 5.4.41 R to ■ BIPRU 5.4.43 R, the *credit quality step* with which a credit assessment of the *debt security* is associated is the *credit quality step* with which the external credit assessment is associated under the *standardised approach*. For the purposes of this *rule*, ■ BIPRU 5.4.7 R also applies.

[**Note:** *BCD* Annex VIII Part 3 point 38]

5.4.41 R

For non-eligible *securities* or for *commodities* lent or sold under *repurchase transactions* or *securities or commodities lending or borrowing transactions*, the volatility adjustment is the same as for non-main index equities listed on a *recognised investment exchange* or a *designated investment exchange*.

[**Note:** *BCD* Annex VIII Part 3 point 39]

5.4.42 R

For eligible units in *CIUs* the volatility adjustment is the weighted average volatility adjustments that would apply, having regard to the liquidation period of the transaction as specified in ■ BIPRU 5.4.39 R, to the assets in which the fund has invested. If the assets in which the fund has invested are not known to the *firm*, the volatility adjustment is the highest volatility adjustment that would apply to any of the assets in which the fund has the right to invest.

[**Note:** *BCD* Annex VIII Part 3 point 40]

5.4.43 R

For unrated *debt securities* issued by *institutions* and satisfying the eligibility criteria in ■ BIPRU 5.4.5 R the volatility adjustments are the same as for *securities* issued by *institutions* or *corporates* with an external credit assessment associated with *credit quality steps* 2 or 3.

[**Note:** *BCD* Annex VIII Part 3 point 41]

The financial collateral comprehensive method: Own estimates of volatility adjustments approach: General

5.4.44 R

■ BIPRU 5.4.45 R – ■ BIPRU 5.4.60 R deal with the calculation of volatility adjustments under the *own estimates of volatility adjustments approach*.

5.4.45 R

A *firm* complying with the requirements set out in ■ BIPRU 5.4.50 R to ■ BIPRU 5.4.60 R may use the *own estimates of volatility adjustments approach*

for calculating the volatility adjustments to be applied to collateral and *exposures*.

[**Note:** *BCD* Annex VIII Part 3 point 42]

5.4.46 R When *debt securities* have a credit assessment from an *eligible ECAI* equivalent to investment grade or better, a *firm* may calculate a volatility estimate for each category of *security*.

[**Note:** *BCD* Annex VIII Part 3 point 43]

5.4.47 R In determining relevant categories, a *firm* must take into account the type of issuer of the *security* the external credit assessment of the *securities*, their residual maturity, and their modified duration. Volatility estimates must be representative of the *securities* included in the category by the *firm*.

[**Note:** *BCD* Annex VIII Part 3 point 44]

5.4.48 R For *debt securities* having a credit assessment from an *eligible ECAI* equivalent to below investment grade and for other eligible collateral the volatility adjustments must be calculated for each individual item.

[**Note:** *BCD* Annex VIII Part 3 point 45]

5.4.49 R A *firm* using the *own estimates of volatility adjustments approach* must estimate volatility of the collateral or foreign exchange mismatch without taking into account any correlations between the unsecured *exposure*, collateral and/or exchange rates.

[**Note:** *BCD* Annex VIII Part 3 point 46]

The financial collateral comprehensive method: Own estimates of volatility adjustments approach: Quantitative Criteria

5.4.50 R In calculating the volatility adjustments, a 99th percentile one-tailed confidence interval must be used.

[**Note:** *BCD* Annex VIII Part 3 point 47]

5.4.51 R The liquidation period is 20 *business days* for *secured lending transactions*; 5 *business days* for *repurchase transactions* except insofar as such transactions involve the transfer of *commodities* or guaranteed rights relating to title to commodities and *securities lending or borrowing transactions*; and 10 *business days* for other *capital market-driven transactions*.

[**Note:** *BCD* Annex VIII Part 3 point 48]

5.4.52 R A *firm* may use volatility adjustment numbers calculated according to shorter or longer liquidation periods, scaled up or down to the liquidation period set out in ■ BIPRU 5.4.51 R for the type of transaction in question, using the square root of time formula:

$(HM = HN)\sqrt{T_M/T_N}$

where:

(1) T_M is the relevant liquidation period;

(2) H_M is the volatility adjustment under T_M ; and

(3) H_N is the volatility adjustment based on the liquidation period T_N.

[**Note:** *BCD* Annex VIII Part 3 point 49]

5.4.53 R A *firm* must take into account the illiquidity of lower-quality assets. The liquidation period must be adjusted upwards in cases where there is doubt concerning the liquidity of the collateral. A *firm* must also identify where historical data may understate potential volatility, e.g. a pegged currency. Such cases must be dealt with by means of stress scenario assessments.

[**Note:** *BCD* Annex VIII Part 3 point 50]

5.4.54 R The historical observation period (sample period) for calculating volatility adjustments must be a minimum length of one year. For a *firm* that uses a weighting scheme or other methods for the historical observation period, the effective observation period must be at least one year (that is, the weighted average time lag of the individual observations must not be less than 6 months).

[**Note:** *BCD* Annex VIII Part 3 point 51]

5.4.55 G The *appropriate regulator* may also require a *firm* to calculate its volatility adjustments using a shorter observation period if, in the *appropriate regulator's* judgement, this is justified by a significant upsurge in price volatility.

5.4.56 R A *firm* must update its data sets at least once every three months and must also reassess them whenever market prices are subject to material changes. This implies that volatility adjustments must be computed at least every three months.

[**Note:** *BCD* Annex VIII Part 3 point 52]

The financial collateral comprehensive method: Own estimates of volatility adjustments approach: Qualitative Criteria

5.4.57 R The volatility estimates must be used in the day-to-day risk management process of a *firm* including in relation to its internal *exposure* limits.

[**Note:** *BCD* Annex VIII Part 3 point 53]

5.4.58 R If the liquidation period used by a *firm* in its day-to-day risk management process is longer than that set out in ■ BIPRU 5.4 for the type of transaction in question, the *firm's* volatility adjustments must be scaled up in accordance with the square root of time formula set out in ■ BIPRU 5.4.52 R.

[**Note:** BCD Annex VIII Part 3 point 54]

5.4.59 R A *firm* must have established procedures for monitoring and ensuring compliance with a documented set of policies and controls for the operation

of its system for the estimation of volatility adjustments and for the integration of such estimations into its risk management process.

[**Note:** *BCD* Annex VIII Part 3 point 55]

5.4.60 R An independent review of a *firm's* system for the estimation of volatility adjustments must be carried out regularly in the *firm's* own internal auditing process. A review of the overall system for the estimation of volatility adjustments and for integration of those adjustments into the *firm's* risk management process must take place at least once a year and must specifically address, at a minimum:

(1) the integration of estimated volatility adjustments into daily risk management;

(2) the validation of any significant change in the process for the estimation of volatility adjustments;

(3) the verification of the consistency, timeliness and reliability of data sources used to run the system for the estimation of volatility adjustments, including the independence of such data sources; and

(4) the accuracy and appropriateness of the volatility assumptions.

[**Note:** *BCD* Annex VIII Part 3 point 56]

The financial collateral comprehensive method: Scaling up of volatility adjustments

5.4.61 R The volatility adjustments set out in ■ BIPRU 5.4.34 R to ■ BIPRU 5.4.43 R are the volatility adjustments to be applied where there is daily revaluation. Similarly, where a *firm* uses its own estimates of the volatility adjustments in accordance with ■ BIPRU 5.4.45 R to ■ BIPRU 5.4.60 R, these must be calculated in the first instance on the basis of daily revaluation. If the frequency of revaluation is less than daily, larger volatility adjustments must be applied. These must be calculated by scaling up the daily revaluation volatility adjustments, using the following 'square root of time' formula:

$(H = H_M\sqrt{(N_R + (T_M - 1))/(T_M)})$

where:

(1) H is the volatility adjustment to be applied;

(2) H_M is the volatility adjustment where there is daily revaluation;

(3) N_R is the actual number of business days between revaluations; and

(4) T_M is the liquidation period for the type of transaction in question.

[**Note:** *BCD* Annex VIII Part 3 point 57]

The financial collateral comprehensive method: Conditions for applying a 0% volatility adjustment

5.4.62 R In relation to *repurchase transaction* and *securities lending or borrowing transactions*, where a *firm* uses the *supervisory volatility adjustments approach* or the *own estimates of volatility adjustments approach* and where

the conditions set out in (1) – (8) are satisfied, a *firm* may, instead of applying the volatility adjustments calculated under ■ BIPRU 5.4.30 R to ■ BIPRU 5.4.61 R, apply a 0% volatility adjustment:

(1) both the *exposure* and the collateral are cash or *debt securities* issued by central governments or *central banks* within the meaning of ■ BIPRU 5.4.2 R (2) and eligible for a 0% *risk weight* under the *standardised approach*;

(2) both the *exposure* and the collateral are denominated in the same currency;

(3) either the maturity of the transaction is no more than one day or both the *exposure* and the collateral are subject to daily marking-to-market or daily remargining;

(4) it is considered that the time between the last marking-to-market before a failure to remargin by the counterparty and the liquidation of the collateral is no more than four business days;

(5) the transaction is settled across a settlement system proven for that type of transaction;

(6) the documentation covering the agreement is standard market documentation for *repurchase transactions* or securities lending or borrowing transactions in the *securities* concerned;

(7) the transaction is governed by documentation specifying that if the counterparty fails to satisfy an obligation to deliver cash or *securities* or to deliver margin or otherwise defaults, then the transaction is immediately terminable; and

(8) the counterparty is a *core market participant*.

[**Note:** *BCD* Annex VIII Part 3 point 58 (part)]

5.4.63 R The option in ■ BIPRU 5.4.62 R is not available in respect of a *firm* using the *master netting agreement internal models approach*.

[**Note:** *BCD* Annex VIII Part 3 point 58 (part)]

5.4.64 R *Core market participant* means the following entities:

(1) the entities mentioned in ■ BIPRU 5.4.2 R (2) *exposures* to which are assigned a 0% *risk weight* under the *standardised approach* to credit risk;

(2) institutions;

(3) other financial companies (including insurance companies) *exposures* which are assigned a 20% *risk weight* under the *standardised approach*;

(4) regulated *CIUs* that are subject to capital or leverage requirements;

(5) regulated pension funds; and

(6) a *recognised clearing house* or *designated clearing house*.

[**Note:** *BCD* Annex VIII Part 3 point 58 (part)]

5.4.65 R [deleted]

Financial collateral comprehensive method: Calculating risk-weighted exposure amounts

5.4.66 R Under the *standardised approach* E^* as calculated under ■ BIPRU 5.4.28 R must be taken as the *exposure* value for the purposes of ■ BIPRU 3.2.20 R to ■ BIPRU 3.2.26 R. In the case of off-balance sheet items listed in ■ BIPRU 3.7, E^* must be taken as the value to which the percentages indicated in ■ BIPRU 3.2.1 R and ■ BIPRU 3.7.2 R must be applied to arrive at the *exposure* value.

[**Note:** *BCD* Annex VIII Part 3 point 60]

5.5 Other funded credit risk mitigation

Deposits with third parties: Eligibility

5.5.1 R Cash on deposit with, or *cash assimilated instruments* held by, a third party *institution* in a non-custodial arrangement and pledged to a *lending firm* may be recognised as eligible credit protection.

[**Note**: *BCD* Annex VIII Part 1 point 23]

Deposits with third parties: Minimum requirements

5.5.2 R To be eligible for the treatment set out at ■ BIPRU 5.5.3 R, the protection referred to in ■ BIPRU 5.5.1 R must satisfy the following conditions:

(1) the borrower's claim against the third party *institution* is openly pledged or assigned to the *lending firm* and such pledge or assignment is legally effective and enforceable in all relevant jurisdictions;

(2) the third party *institution* is notified of the pledge or assignment;

(3) as a result of the notification, the third party *institution* is able to make payments solely to the *lending firm* or to other parties with the *lending firm's* consent; and

(4) the pledge or assignment is unconditional and irrevocable.

[**Note**: *BCD* Annex VIII Part 2 point 12]

Deposits with third parties: Calculating the effects of the credit risk mitigation

5.5.3 R Where the conditions set out in ■ BIPRU 5.5.2 R are satisfied, credit protection falling within the terms of ■ BIPRU 5.5.1 R may be treated as a guarantee by the third party *institution*.

[**Note**: *BCD* Annex VIII Part 3 point 79]

Life insurance policies: Eligibility

5.5.4 R Life insurance policies pledged to a *lending firm* may be recognised as eligible credit protection.

[**Note**: *BCD* Annex VIII Part 1 point 24]

Life insurance policies: Minimum requirements

5.5.5 R For life insurance policies pledged to a *lending firm* to be recognised the following conditions must be met:

(1) the party providing the life insurance must be a *Solvency II firm* listed in paragraphs (a), (d) or (e) of the definition in the *Glossary*, or is subject to supervision by a competent authority of a third country which applies supervisory and regulatory arrangements at least equivalent to those applied in the UK;

(2) the life insurance policy is openly pledged or assigned to the *lending firm*;

(3) the party providing the life insurance is notified of the pledge or assignment and as a result may not pay amounts payable under the contract without the consent of the *lending firm*;

(4) the *surrender value* is declared by the company providing the life insurance and is non-reducible;

(4A) the *surrender value* must be paid in a timely manner upon request;

(4B) the *surrender value* must not be requested without the consent of the *lending firm*;

(5) the *lending firm* must have the right to cancel the policy and receive the surrender value in a timely way in the event of the default of the borrower;

(6) the *lending firm* is informed of any non-payments under the policy by the policyholder;

(7) the credit protection must be provided for the maturity of the loan. Where this is not possible because the insurance relationship ends before the loan relationship expires, the *lending firm* must ensure that the amount deriving from the insurance contract serves the *lending firm* as security until the end of the duration of the credit agreement; and

(8) the pledge or assignment must be legally effective and enforceable in all jurisdictions which are relevant at the time of the conclusion of the credit agreement.

[**Note**: *BCD* Annex VIII Part 2 point 13 (part)]

5.5.6 R Where it is not possible for a *firm* to meet the condition set out in BIPRU 5.5.5 R (7), because the insurance relationship ends before the loan relationship expires, the *firm* must ensure that the amount deriving from the insurance contract serves the *firm* as security until the end of the duration of the credit agreement.

[**Note**: *BCD* Annex VIII Part 2 point 13 (part)]

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Life insurance policies: Calculating the effects of the credit risk mitigation

5.5.7 R

(1) Where the conditions set out in ■ BIPRU 5.5.5 R are satisfied, the portion of the *exposure* collateralised by the current *surrender value* of credit protection falling within the terms of ■ BIPRU 5.5.4 R must be either:

(a) subject to the *risk weights* specified in (3) where the *exposure* is subject to the *standardised approach* to credit risk; or

(b) assigned an *LGD* of 40% where the *exposure* is subject to the *IRB approach* but not subject to the *firm's* own estimates of *LGD*.

(2) In case of a currency mismatch, the current *surrender value* must be reduced according to ■ BIPRU 5.7.17 R and ■ BIPRU 5.7.18R, the value of the credit protection being the current *surrender value* of the life insurance policy.

(3) For the purpose of (1)(a), the following *risk weights* must be assigned on the basis of the *risk weight* assigned to a senior unsecured *exposure* to the company providing the life insurance:

(a) a *risk weight* of 20%, where the senior unsecured *exposure* to the company providing the life insurance is assigned a *risk weight* of 20%;

(b) a *risk weight* of 35%, where the senior unsecured *exposure* to the company providing the life insurance is assigned a *risk weight* of 50%;

(c) a *risk weight* of 70%, where the senior unsecured *exposure* to the company providing the life insurance is assigned a *risk weight* of 100%; and

(d) a *risk weight* of 150%, where the senior unsecured *exposure* to the company providing the life insurance is assigned a *risk weight* of 150%.

[**Note**: *BCD* Annex VIII Part 3 point 80]

Instruments purchased on request: Eligibility

5.5.8 R

Instruments issued by third party *institutions* which will be repurchased by that *institution* on request may be recognised as eligible credit protection.

[**Note**: *BCD* Annex VIII Part 1 point 25]

Instruments purchased on request: Calculating the effects of the credit risk mitigation

5.5.9 R

Instruments eligible under ■ BIPRU 5.5.8 R may be treated as a guarantee by the issuing *institution*.

[**Note**: *BCD* Annex VIII Part 3 point 81]

5.5.10 R

For the purposes of ■ BIPRU 5.5.9 R, the value of the credit protection recognised is the following:

(1) where the instrument will be repurchased at its face value, the value of the protection is that amount; or

(2) where the instrument will be repurchased at market price, the value of the protection is the value of the instrument valued in the same way as the *debt securities* specified in ■ BIPRU 5.4.5 R.

[**Note**: *BCD* Annex VIII Part 3 point 82]

Credit linked notes

5.5.11 R Investments in credit linked notes issued by a *lending firm* may be treated as cash collateral.

[**Note**: *BCD* Annex VIII Part 3 point 3]

5.6 Master netting agreements

Eligibility

5.6.1 R

(1) For a *firm* adopting the *financial collateral comprehensive method*, the effects of bilateral netting contracts covering *repurchase transactions*, *securities or commodities lending or borrowing transactions*, and/or other *capital market-driven transactions* with a counterparty may be recognised.

(2) Without prejudice to ■ BIPRU 14 to be recognised the collateral taken and *securities* or *commodities* borrowed within such agreements must comply with the eligibility requirements for collateral set out at ■ BIPRU 5.4.2 R to ■ BIPRU 5.4.8 R.

[**Note:** *BCD* Annex VIII Part 1 point 5]

Minimum requirements

5.6.2 R

For master netting agreements covering *repurchase transactions* and/or *securities or commodities lending or borrowing transactions* and/or other *capital market-driven transactions* to be recognised for the purposes of ■ BIPRU 5, they must:

(1) be legally effective and enforceable in all relevant jurisdictions, including in the event of the bankruptcy or insolvency of the counterparty;

(2) give the non-defaulting party the right to terminate and close-out in a timely manner all transactions under the agreement upon the event of default, including in the event of the bankruptcy or insolvency of the counterparty; and

(3) provide for the netting of gains and losses on transactions closed out under a master agreement so that a single net amount is owed by one party to the other.

[**Note:** *BCD* Annex VIII Part 2 point 4]

5.6.3 R

In addition the minimum requirements for the recognition of financial collateral under the *financial collateral comprehensive method* set out in ■ BIPRU 5.4.9 R must be fulfilled.

[**Note:** *BCD* Annex VIII Part 2 point 5]

Calculation of the fully adjusted exposure value: the supervisory volatility adjustments approach and the own estimates of volatility adjustments approach

5.6.4 R ■ BIPRU 5.6.5 R to ■ BIPRU 5.6.11 R set out the calculation of the fully adjusted *exposure* value under the *supervisory volatility adjustments approach* and the *own estimates of volatility adjustments approach*.

5.6.5 R In calculating the 'fully adjusted *exposure* value' (E^*) for the *exposures* subject to an eligible master netting agreement covering *repurchase transactions* and/or *securities or commodities lending or borrowing transactions* and/or other *capital market-driven transactions*, a *firm* must calculate the volatility adjustments to be applied in the manner set out in ■ BIPRU 5.6.6 R to ■ BIPRU 5.6.11 R either using the *supervisory volatility adjustments approach* or the *own estimates of volatility adjustments approach* as set out in ■ BIPRU 5.4.30 R to ■ BIPRU 5.4.64R for the *financial collateral comprehensive method*. For the use of the *own estimates of volatility adjustments approach* the same conditions and requirements apply as under the *financial collateral comprehensive method*.

[**Note:** *BCD* Annex VIII Part 3 point 5]

5.6.6 R A *firm* must calculate the net position in each type of *security* or *commodity* by subtracting from the total value of the *securities* or *commodities* of that type lent, sold or provided under the master netting agreement, the total value of *securities* or *commodities* of that type borrowed, purchased or received under the agreement.

[**Note:** *BCD* Annex VIII Part 3 point 6]

5.6.7 R For the purposes of ■ BIPRU 5.6.6 R, type of *security* means *securities* which are issued by the same entity, have the same issue date, the same maturity and are subject to the same terms and conditions and are subject to the same liquidation periods as indicated in ■ BIPRU 5.4.30 R to ■ BIPRU 5.4.64R.

[**Note**: *BCD* Annex VIII Part 3 point 7]

5.6.8 R A *firm* must calculate the net position in each currency other than the settlement currency of the master netting agreement by subtracting from the total value of *securities* denominated in that currency lent, sold or provided under the master netting agreement added to the amount of cash in that currency lent or transferred under the agreement, the total value of *securities* denominated in that currency borrowed, purchased or received under the agreement added to the amount of cash in that currency borrowed or received under the agreement.

[**Note**: *BCD* Annex VIII Part 3 point 8]

5.6.9 R A *firm* must apply the volatility adjustment appropriate to a given type of *security* or cash position to the absolute value of the positive or negative net position in the *securities* of that type.

[**Note**: *BCD* Annex VIII Part 3 point 9]

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5.6.10 R A *firm* must apply the foreign exchange risk (fx) volatility adjustment to the net positive or negative position in each currency other than the settlement currency of the master netting agreement.

[**Note**: *BCD* Annex VIII Part 3 point 10]

5.6.11 R E^* must be calculated according to the following formula:

$E^* = \max \{0, [(\Sigma(E) - \Sigma(C)) + \Sigma(|\text{net position in each } security| \times H_{sec}) + (\Sigma|E_{fx}| \times H_{fx})]\}$

where:

(1) (where *risk weighted exposure amounts* are calculated under the *standardised approach*) E is the *exposure* value for each separate *exposure* under the agreement that would apply in the absence of the credit protection;

(2) C is the value of the *securities* or *commodities* borrowed, purchased or received or the cash borrowed or received in respect of each such *exposure*;

(3) ∑(E) is the sum of all Es under the agreement;

(4) ∑(C) is the sum of all Cs under the agreement;

(5) E_{fx} is the net position (positive or negative) in a given currency other than the settlement currency of the agreement as calculated under ■ BIPRU 5.6.8 R;

(6) H_{sec} is the volatility adjustment appropriate to a particular type of *security*;

(7) H_{fx} is the foreign exchange volatility adjustment; and

(8) E^* is the fully adjusted *exposure* value.

[**Note**: *BCD* Annex VIII Part 3 point 11]

Calculation of the fully adjusted exposure value: the master netting agreement internal models approach

5.6.12 R ■ BIPRU 5.6.16 R to ■ BIPRU 5.6.28 G apply to a *firm* that has a *master netting agreement internal models approach permission* and set out the calculation of the effects of *credit risk mitigation* under the *master netting agreement internal models approach*.

5.6.13 G A *firm* that wishes to use the *master netting agreement internal models approach* will need to apply to the *appropriate regulator* for a *master netting agreement internal models approach permission*. ■ BIPRU 1.3 sets out the requirements and procedures relating to those applications.

5.6.14 G A *master netting agreement internal models approach permission* will amend, to the extent set out in the *master netting agreement internal models approach permission*, ■ BIPRU 5.6.1 R so as to provide that, with the exceptions provided in ■ BIPRU 5.6, a *firm* must use the *master netting*

agreement internal models approach for the purposes of the calculations specified in ■ BIPRU 5.6.

5.6.15 G A *firm* which has been granted a *VaR model waiver* will still need to make an application to the *appropriate regulator* for a *master netting agreement internal models approach permission*. However, the application should generally be straightforward as a *firm* which is able to satisfy the requirements for a *VaR model waiver* should usually also be able to satisfy the requirements for a *master netting agreement internal models approach permission*.

[**Note**: *BCD* Annex VIII Part 3 point 14]

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5.6.16 R The *master netting agreement internal models approach* is an alternative to using the *supervisory volatility adjustments approach* or the *own estimates of volatility adjustments approach* in calculating volatility adjustments for the purpose of calculating the 'fully adjusted exposure value' (E^*) resulting from the application of an eligible master netting agreement covering *repurchase transactions*, *securities or commodities lending or borrowing transactions* and/or other *capital market-driven transactions* other than derivative transactions. The *master netting agreement internal models approach* takes into account correlation effects between security positions subject to a master netting agreement as well as the liquidity of the instruments concerned. The internal model used for the *master netting agreement internal models approach* must provide estimates of the potential change in value of the unsecured *exposure* amount ($\sum E - \sum C$).

[**Note**: *BCD* Annex VIII Part 3 point 12 (part)]

5.6.17 R A *firm* may also use the internal model used for the *master netting agreement internal models approach* for *margin lending transactions* if the transactions are covered under the *firm's master netting agreement internal models approach permission* and the transactions are covered by a bilateral master netting agreement that meets the requirements set out in ■ BIPRU 13.7.

[**Note**: *BCD* Annex VIII Part 3 point 12 (part)]

5.6.18 R A *firm* may use the *master netting agreement internal models approach* independently of the choice it has made between the *standardised approach* and the *IRB approach* for the calculation of *risk weighted exposure amounts*. However, if a *firm* uses the *master netting agreement internal models approach*, it must do so for all counterparties and *securities*, excluding immaterial portfolios where it may use the *supervisory volatility adjustments approach* or the *own estimates of volatility adjustments approach* as set out in ■ BIPRU 5.4.30 R to ■ BIPRU 5.4.64R.

[**Note**: *BCD* Annex VIII Part 3 point 13]

5.6.19 R (1) A *firm* must be able to satisfy the *appropriate regulator* that the *firm's* risk management system for managing the risks arising on the transactions covered by the master netting agreement is conceptually sound and implemented with integrity and that, in particular, the minimum qualitative standards in (2) – (11) are met.

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(2) The internal risk-measurement model used for calculation of potential price volatility for the transactions is closely integrated into the daily risk-management process of the *firm* and serves as the basis for reporting risk *exposure*s to senior management of the *firm*.

(3) The *firm* has a risk control unit that is independent from business trading units and reports directly to senior management. The unit must be responsible for designing and implementing the *firm's* risk-management system. It must produce and analyse daily reports on the output of the risk-measurement model and on the appropriate measures to be taken in terms of position limits.

(4) The daily reports produced by the risk-control unit are reviewed by a level of management with sufficient authority to enforce reductions of positions taken and of overall risk *exposure*.

(5) The *firm* has sufficient staff skilled in the use of sophisticated models in the risk control unit.

(6) The *firm* has established procedures for monitoring and ensuring compliance with a documented set of internal policies and controls concerning the overall operation of the risk-measurement system.

(7) The *firm's* models have a proven track record of reasonable accuracy in measuring risks demonstrated through the back-testing of its output using at least one year of data.

(8) The *firm* frequently conducts a rigorous programme of stress testing and the results of these tests are reviewed by senior management and reflected in the policies and limits it sets.

(9) The *firm* must conduct, as part of its regular internal auditing process, an independent review of its risk-measurement system. This review must include both the activities of the business trading units and of the independent risk-control unit.

(10) At least once a year, the *firm* must conduct a review of its risk management system.

(11) The internal model used for the *master netting agreement internal models approach* must meet the requirements set out in ■ BIPRU 13.6.65 R to ■ BIPRU 13.6.67 R.

[**Note**: *BCD* Annex VIII Part 3 point 16]

5.6.19A G This paragraph provides *guidance* in relation to ■ BIPRU 5.6.19R (8). In carrying out the stress testing programme, a *firm* should evaluate the simultaneous impact of individual stress scenarios on its *counterparty exposures*, its *positions* and the aggregate amount of margin calls that it would receive. A *firm's* stress scenarios should take into account the possibility that the liquidation period may be substantially longer than 5 days for *repurchase transactions* and securities lending or borrowing transactions, and 10 days for other types of *securities financing transactions*.

5.6.20 R The calculation of the potential change in value must be subject to the following minimum standards:

(1) at least daily calculation of the potential change in value;

(2) a 99th percentile, one-tailed confidence interval;

(3) a 5-day equivalent liquidation period, except in the case of transactions other than securities *repurchase transaction* or *securities lending or borrowing transactions* where a 10-day equivalent liquidation period should be used;

(4) an effective historical observation period of at least one year except where a shorter observation period is justified by a significant upsurge in price volatility; and

(5) three-monthly data set updates.

[**Note**: *BCD* Annex VIII Part 3 point 17]

5.6.21 R The internal risk-measurement model must capture a sufficient number of risk factors in order to capture all material price risks.

[**Note**: *BCD* Annex VIII Part 3 point 18]

5.6.22 R A *firm* may use empirical correlations within risk categories and across risk categories provided that it is able to satisfy the *appropriate regulator* that the *firm's* system for measuring correlations is sound and implemented with integrity.

[**Note**: *BCD* Annex VIII Part 3 point 19]

5.6.23 G The *appropriate regulator* will not grant a *master netting agreement internal models approach permission* if it is not satisfied that the standards in ■ BIPRU 5.6.19 R to ■ BIPRU 5.6.22 R are met.

5.6.24 R The fully adjusted *exposure* value (E^*) for a *firm* using the *master netting agreement internal models approach* must be calculated according to the following formula:

$E^* = \max \{0, [(\sum E - \sum C) + (VaR \text{ output of the internal models})]\}$

where

(1) (where *risk weighted exposure amounts* are calculated under the *standardised approach*) E is the *exposure* value for each separate *exposure* under the agreement that would apply in the absence of the credit protection;

(2) C is the value of the *securities* borrowed, purchased or received or the cash borrowed or received in respect of each such *exposure*;

(3) ∑ (E) is the sum of all Es under the agreement; and

(4) ∑ (C) is the sum of all Cs under the agreement.

[**Note**: *BCD* Annex VIII Part 3 point 20]

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5.6.25 R In calculating *risk weighted exposure amounts* using the *master netting agreement internal models approach*, a *firm* must use the previous *business day's* model output.

[**Note**: *BCD* Annex VIII Part 3 point 21]

5.6.26 G No changes should be made to the internal model used for the *master netting agreement internal models approach* unless the change is not material. Material changes to such a model will require a variation of the *master netting agreement internal models approach permission*. Materiality is measured against the model as it was at the time that the *master netting agreement internal models approach permission* was originally granted or, any later date set out in the *master netting agreement internal models approach permission* for this purpose. If a *firm* is considering making material changes to such a model then it should notify the *appropriate regulator* at once.

5.6.27 G If a *firm* ceases to meet the requirements of ■ BIPRU 5 in relation to the *master netting agreement internal models approach*, the *firm* should notify the *appropriate regulator* at once.

5.6.28 G The *appropriate regulator* is likely to revoke a *master netting agreement internal models approach permission* if a *firm* ceases to meet the requirements of ■ BIPRU 5 in relation to the *master netting agreement internal models approach*.

Calculation of risk weighted exposure amounts under the standardised approach

5.6.29 R

(1) A *firm* must under the *standardised approach* calculate *risk weighted exposure amounts* for *repurchase transactions* and/or *securities or commodities lending or borrowing transactions* and/or other *capital market-driven transactions* covered by master netting agreements under this *rule*.

(2) E^* as calculated under ■ BIPRU 5.6.5 R to ■ BIPRU 5.6.25 R must be taken as the *exposure* value of the *exposure* to the counterparty arising from the transactions subject to the master netting agreement for the purposes of ■ BIPRU 3.2.20 R to ■ BIPRU 3.2.26 R.

[**Note**: *BCD* Annex VIII Part 3 point 22]

5.7 Unfunded credit protection

Eligibility

5.7.1 R The following parties may be recognised as eligible providers of *unfunded credit protection*:

(1) central governments and *central banks*;

(2) regional governments or local authorities;

(3) *multilateral development banks*;

(4) *international organisations exposures* which are assigned a 0% *risk weight* under the *standardised approach*;

(5) *public sector entities*, *claims* on which are treated as claims on *institutions* or central governments under the *standardised approach*;

(6) *institutions*;

(7) other corporate entities, including *parent undertakings*, *subsidiary undertakings* and affiliate corporate entities of the *firm*, that have a credit assessment by an *eligible ECAI* associated with *credit quality step* 2 or above under the *rules* for the *risk weighting* of *exposures* to *corporates* under the *standardised approach*.

[**Note**: *BCD* Annex VIII Part 1 point 26]

Types of credit derivatives

5.7.2 R The following types of credit derivatives, and instruments that may be composed of such credit derivatives or that are economically effectively similar, may be recognised as eligible;

(1) credit default swaps;

(2) total return swaps; and

(3) credit linked notes to the extent of their cash funding.

[**Note**: *BCD* Annex VIII Part 1 point 30]

5.7.3 R Where a *firm* buys credit protection through a total return swap and records the net payments received on the swap as net income, but does not record offsetting deterioration in the value of the asset that is protected (either

through reductions in fair value or by an addition to reserves), the credit protection must not be recognised as eligible.

[**Note**: *BCD* Annex VIII Part 1 point 31]

Internal hedges

5.7.4 R When a *firm* conducts an internal hedge using a credit derivative – i.e. hedges the credit risk of an *exposure* in the *non-trading book* with a credit derivative booked in the *trading book* – in order for the protection to be recognised as eligible for the purposes of ■ BIPRU 4.10 or ■ BIPRU 5 the credit risk transferred to the *trading book* must be transferred out to a third party or parties. In such circumstances, subject to the compliance of such transfer with the requirements for the recognition of *credit risk mitigation* set out in ■ BIPRU 4.10 or ■ BIPRU 5, the *rules* for the calculation of *risk weighted exposure amounts* and *expected loss* amounts where *unfunded credit protection* is acquired set out in ■ BIPRU 4.10 or ■ BIPRU 5 must be applied.

[**Note**: *BCD* Annex VIII Part 1 point 32]

Minimum requirements: General

5.7.5 R ■ BIPRU 5.7.6 R to ■ BIPRU 5.7.10 R deal with requirements common to guarantees and credit derivatives.

5.7.6 R Subject to ■ BIPRU 5.7.9 R, for the credit protection deriving from a guarantee or credit derivative to be recognised the following conditions must be met:

(1) the credit protection must be direct;

(2) the extent of the credit protection must be clearly defined and incontrovertible;

(3) the credit protection contract must not contain any clause, the fulfilment of which is outside the direct control of the lender, that:

(a) would allow the protection provider unilaterally to cancel the protection;

(b) would increase the effective cost of protection as a result of deteriorating credit quality of the protected *exposure*;

(c) could prevent the protection provider from being obliged to pay out in a timely manner in the event that the original obligor fails to make any payments due; or

(d) could allow the maturity of the credit protection to be reduced by the protection provider; and

(4) it must be legally effective and enforceable in all jurisdictions which are relevant at the time of the conclusion of the credit agreement.

[**Note**: *BCD* Annex VIII Part 2 point 14]

5.7.7 G For the purposes of ■ BIPRU 5.7.6 R (3)(a), payment of premiums and other monies due under the contract is within the control of the *lending firm*. So a clause that allows the protection provider unilaterally to cancel the contract

after a reasonable period due to non payment of such monies will not mean that the condition in that *rule* is not met.

Minimum requirements: Operational requirements

5.7.8 R A *firm* must be able to satisfy the *appropriate regulator* that it has systems in place to manage potential concentration of risk arising from the *firm's* use of guarantees and credit derivatives. The *firm* must be able to demonstrate how its strategy in respect of its use of credit derivatives and guarantees interacts with its management of its overall risk profile.

[**Note**: *BCD* Annex VIII Part 2 point 15]

Minimum requirements: Sovereign and other public sector counter-guarantees

5.7.9 R Where an *exposure* is protected by a guarantee which is counter-guaranteed by a central government or *central bank*, a regional government or local authority or a *public sector entity* claims on which are treated as claims on the central government in whose jurisdiction they are established under the *standardised approach*, a *multilateral development bank* or an *international organisation*,to which a 0% *risk weight* is assigned under or by virtue of the *standardised approach*, or a *public sector entity*, claims on which are treated as claims on *credit institutions* under the *standardised approach*, the *exposure* may be treated as protected by a guarantee provided by the entity in question provided the following conditions are satisfied:

(1) the counter-guarantee covers all credit risk elements of the claim;

(2) both the original guarantee and the counter-guarantee meet the requirements for guarantees set out in ■ BIPRU 5.7.6 R, ■ BIPRU 5.7.8 R and ■ BIPRU 5.7.11 R, except that the counter-guarantee need not be direct; and

(3) the *firm* is able to satisfy the *appropriate regulator* that the cover is robust and that nothing in the historical evidence suggests that the coverage of the counter-guarantee is less than effectively equivalent to that of a direct guarantee by the entity in question.

[**Note**: *BCD* Annex VIII Part 2 point 16]

5.7.10 R The treatment of ■ BIPRU 5.7.9 R applies, also, to an *exposure* which is not counter-guaranteed by an entity listed in that *rule* if the *exposure's* counter-guarantee is in its turn directly guaranteed by one of the listed entities and the conditions listed in ■ BIPRU 5.7.9 R are satisfied.

[**Note**: *BCD* Annex VIII Part 2 point 17]

Additional requirements for guarantees

5.7.11 R For a guarantee to be recognised the following conditions must also be met:

(1) on the qualifying default of and/or non-payment by the counterparty, the *lending firm* must have the right to pursue, in a timely manner, the guarantor for any monies due under the claim in respect of which the protection is provided;

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(2) payment by the guarantor must not be subject to the *lending firm* first having to pursue the obligor;

(3) in the case of *unfunded credit protection* covering residential mortgage loans, the requirements in ■ BIPRU 5.7.6 R (3)(c) and in this *rule* have only to be satisfied within 24 months;

(4) the guarantee must be an explicitly documented obligation assumed by the guarantor;

(5) subject to (6), the guarantee must cover all types of payments the obligor is expected to make in respect of the claim; and

(6) where certain types of payment are excluded from the guarantee, the recognised value of the guarantee must be adjusted to reflect the limited coverage.

[**Note**: *BCD* Annex VIII Part 2 point 18]

5.7.12 R In the case of guarantees provided by or counter-guaranteed by entities referred to in ■ BIPRU 5.7.9 R, the requirements in ■ BIPRU 5.7.11 R (1) – ■ (3) will be satisfied where either of the following conditions are met:

(1) the *lending firm* has the right to obtain in a timely manner a provisional payment by the guarantor calculated to represent a robust estimate of the amount of the economic *loss*, including losses resulting from the non-payment of interest and other types of payment which the borrower is obliged to make, likely to be incurred by the *lending firm* proportional to the coverage of the guarantee; or

(2) the *lending firm* is able to demonstrate to the *appropriate regulator* that the loss-protecting effects of the guarantee, including losses resulting from the non-payment of interest and other types of payments which the borrower is obliged to make, justify such treatment.

[**Note**: *BCD* Annex VIII Part 2 point 19]

Additional requirements for credit derivatives

5.7.13 R For a credit derivative to be met the following conditions must also be met.

(1) Subject to (2), the credit events specified under the credit derivative must at a minimum include:

(a) the failure to pay the amounts due under the terms of the underlying obligation that are in effect at the time of such failure (with a grace period that is closely in line with or shorter than the grace period in the underlying obligation);

(b) the bankruptcy, insolvency or inability of the obligor to pay its debts, or its failure or admission in writing of its inability generally to pay its debts as they become due, and analogous events; and

(c) the restructuring of the underlying obligation involving forgiveness or postponement of principal, interest or fees that results in a credit loss event (i.e. value adjustment or other similar debit to the profit and loss account).

(2) Where the credit events specified under the credit derivative do not include restructuring of the underlying obligation as described in (1)(c), the credit protection may nonetheless be recognised subject to a reduction in the recognised value as specified in ■ BIPRU 5.7.16 R.

(3) In the case of credit derivatives allowing for cash settlement a robust valuation process must be in place in order to estimate loss reliably. There must be a clearly specified period for obtaining post-credit-event valuations of the underlying obligation.

(4) If the protection purchaser's right and ability to transfer the underlying obligation to the protection provider is required for settlement, the terms of the underlying obligation must provide that any required consent to such transfer may not be unreasonably withheld.

(5) The identity of the parties responsible for determining whether a credit event has occurred must be clearly defined. This determination must not be the sole responsibility of the protection provider. The protection buyer must have the right/ability to inform the protection provider of the occurrence of a credit event.

[**Note**: *BCD* Annex VIII Part 2 point 20]

5.7.14 R A mismatch between the underlying obligation and the reference obligation under the credit derivative (i.e. the obligation used for the purposes of determining cash settlement value or the deliverable obligation) or between the underlying obligation and the obligation used for purposes of determining whether a credit event has occurred is permissible only if the following conditions are met:

(1) the reference obligation or the obligation used for purposes of determining whether a credit event has occurred, as the case may be, ranks pari passu with or is junior to the underlying obligation; and

(2) the underlying obligation and the reference obligation or the obligation used for purposes of determining whether a credit event has occurred, as the case may be, share the same obligor (i.e., the same legal entity) and there are in place legally enforceable cross-default or cross-acceleration clauses.

[**Note**: *BCD* Annex VIII Part 2 point 21]

Unfunded credit protection: Valuation

5.7.15 R ■ BIPRU 5.7.16 R to ■ BIPRU 5.7.19 R set out the provisions applying to the valuation of *unfunded credit protection*.

5.7.16 R (1) The value of *unfunded credit protection* (G) is the amount that the protection provider has undertaken to pay in the event of the default

or non-payment of the borrower or on the occurrence of other specified credit events.

(2) In the case of credit derivatives which do not include as a credit event restructuring of the underlying obligation involving forgiveness or postponement of principal, interest or fees that result in a credit loss event (e.g. value adjustment, the making of a value adjustment or other similar debit to the profit and loss account):

(a) where the amount that the protection provider has undertaken to pay is not higher than the *exposure* value, the value of the credit protection calculated under (1) must be reduced by 40%; or

(b) where the amount that the protection provider has undertaken to pay is higher than the *exposure* value, the value of the credit protection must be no higher than 60% of the *exposure* value.

[**Note**: *BCD* Annex VIII Part 3 point 83]

5.7.17 R Where *unfunded credit protection* is denominated in a currency different from that in which the *exposure* is denominated (a currency mismatch) the value of the credit protection must be reduced by the application of a volatility adjustment H_{FX} as follows:

$G^* = G \times (1-H_{FX})$

where:

(1) G is the nominal amount of the credit protection;

(2) G^* is G adjusted for any *foreign currency* risk; and

(3) H_{fx} is the volatility adjustment for any currency mismatch between the credit protection and the underlying obligation.

[**Note**: *BCD* Annex VIII Part 3 point 84 (part)]

5.7.18 R Where there is no currency mismatch:

$G^* = G$

[**Note**: *BCD* Annex VIII Part 3 point 84 (part)]

5.7.19 R The volatility adjustments to be applied for any currency mismatch may be calculated based on the *supervisory volatility adjustments approach* or the *own estimates of volatility adjustments approach* as set out in ■ BIPRU 5.4.30 R to ■ BIPRU 5.4.65 R.

[**Note**: *BCD* Annex VIII Part 3 point 85]

Calculating risk weighted exposure amounts and expected loss amounts

5.7.20 R ■ BIPRU 5.7.21 R to ■ BIPRU 5.7.28 R set out the provisions applying to the calculation of *risk weighted exposure amounts*.

Calculating risk weighted exposure amounts: Partial protection – tranching

5.7.21 R Where a *firm* transfers a part of the risk of a loan in one or more *tranches*, BIPRU 9 applies. Materiality thresholds on payments below which no payment shall be made in the event of loss are considered to be equivalent to retained first loss positions and to give rise to a *tranched* transfer of risk.

[**Note**: *BCD* Annex VIII Part 3 point 86]

Calculating risk-weighted exposure amounts : The standardised approach

5.7.22 R ■ BIPRU 5.7.23 R to ■ BIPRU 5.7.25 R set out the provisions applying to the calculation of *risk weighted exposure amounts* under the *standardised approach* in the case of *unfunded credit protection*.

Calculating risk weighted exposure amounts: standardised approach: Full protection

5.7.23 R For the purposes of ■ BIPRU 3.2.20 R to ■ BIPRU 3.2.26 R, g shall be the *risk weight* to be assigned to an *exposure*, the *exposure* value (E) of which is fully protected by *unfunded credit protection* (G_A), where:

(1) g is the *risk weight* of *exposures* to the protection provider as specified under the *standardised approach*;

(2) G_A is the value of G^* as calculated under ■ BIPRU 5.7.17 R further adjusted for any maturity mismatch as laid down in ■ BIPRU 5.8; and

(3) E is the *exposure* value according to ■ BIPRU 3.2.1 R to ■ BIPRU 3.2.3 R and ■ BIPRU 13; for this purpose the *exposure* value of an off-balance sheet item listed in ■ BIPRU 3.7.2 R shall be 100% of its value rather than the *exposure* value indicated in ■ BIPRU 3.2.1 R.

[**Note**: *BCD* Annex VIII Part 3 point 87]

Calculating risk weighted exposure amounts: Standardised approach: Partial protection – equal seniority

5.7.24 R Where the protected amount is less than the *exposure* value and the protected and unprotected portions are of equal seniority – i.e. the *firm* and the protection provider share losses on a pro-rata basis, proportional regulatory capital relief is afforded. For the purposes of ■ BIPRU 3.2.20 R to ■ BIPRU 3.2.26 R *risk weighted exposure amounts* must be calculated in accordance with the following formula:

$(E-G_A) \times r + G_A \times g$

where:

(1) E is the *exposure* value; according to ■ BIPRU 3.2.1 R to ■ BIPRU 3.2.3 R and ■ BIPRU 13; for this purpose, the *exposure* value of an off-balance sheet item listed in ■ BIPRU 3.7.2 R shall be 100% of its value rather than the *exposure* value indicated in ■ BIPRU 3.2.1 R;

(2) G_A is the value of G^* as calculated under ■ BIPRU 5.7.17 R further adjusted for any maturity mismatch as laid down in ■ BIPRU 5.8;

(3) r is the *risk weight* of *exposures* to the obligor as specified under the *standardised approach*; and

(4) g is the *risk weight* of *exposures* to the protection provider as specified under the *standardised approach*.

[**Note**: *BCD* Annex VIII Part 3 point 88]

Calculating risk weighted exposure amounts: standardised approach: Sovereign guarantees

5.7.25 R A *firm* may apply the treatment provided for in ■ BIPRU 3.4.5 R to ■ BIPRU 3.4.7 R to *exposures* or parts of *exposures* guaranteed by the central government or *central bank*, where the guarantee is denominated in the domestic currency of the borrower and the *exposure* is funded in that currency.

[**Note**: *BCD* Annex VIII Part 3 point 89]

Calculating risk-weighted exposure amounts and expected loss amounts: Basket CRM techniques

5.7.26 R ■ BIPRU 5.7.27 R to ■ BIPRU 5.7.28 R set out the provisions applying to the calculation of *risk weighted exposure amount* and *expected loss* amounts where basket *credit risk mitigation* techniques are used.

First-to-default credit derivatives

5.7.27 R Where a *firm* obtains credit protection for a number of *exposures* under terms that the first default among the *exposures* will trigger payment and that this credit event will terminate the contract, the *firm* may modify the calculation of the *risk weighted exposure amount* and, as relevant, the *expected loss* amount of the *exposure* which would in the absence of the credit protection produce the lowest *risk weighted exposure amount* under the *standardised approach* or the *IRB approach* as appropriate in accordance with ■ BIPRU 4.10 or ■ BIPRU 5, but only if the *exposure* value is less than or equal to the value of the credit protection.

[**Note**: *BCD* Annex VIII Part 6 point 1]

Nth-to-default credit derivatives

5.7.28 R Where the nth default among the *exposures* triggers payment under the credit protection provided by a credit derivative, a *firm* purchasing the protection may only recognise the protection for the calculation of *risk weighted exposure amounts* and, as relevant, *expected loss* amounts if protection has also been obtained for defaults 1 to n-1 or when n-1 defaults have already occurred. In such cases the methodology must follow that set out in ■ BIPRU 5.7.27 R for first-to-default derivatives appropriately modified for nth-to-default products.

[**Note**: *BCD* Annex VIII Part 6 point 2]

5.8 Maturity mismatches

5.8.1 R For the purposes of calculating *risk weighted exposure amounts*, a maturity mismatch occurs when the residual maturity of the credit protection is less than that of the protected *exposure*. Protection of less than three months residual maturity, the maturity of which is less than the maturity of the underlying *exposure*, must not be recognised.

[**Note**: *BCD* Annex VIII Part 4 point 1]

5.8.2 R Where there is a maturity mismatch the credit protection must not be recognised where the original maturity of the protection is less than 1 year.

[**Note**: *BCD* Annex VIII Part 4 point 2 (part)]

Definition of maturity

5.8.3 R Subject to a maximum of 5 years, the effective maturity of the underlying is the longest possible remaining time before the obligor is scheduled to fulfil its obligations. Subject to ■ BIPRU 5.8.4 R, the maturity of the credit protection is the time to the earliest date at which the protection may terminate or be terminated.

[**Note**: *BCD* Annex VIII Part 4 point 3]

5.8.4 R Where there is an option to terminate the protection which is at the discretion of the protection seller, the maturity of the protection must be taken to be the time to the earliest date at which that option may be exercised. Where there is an option to terminate the protection which is at the discretion of the protection buyer and the terms of the arrangement at origination of the protection contain a positive incentive for the *firm* to call the transaction before contractual maturity, the maturity of the protection must be taken to be the time to the earliest date at which that option may be exercised; otherwise such an option may be considered not to affect the maturity of the protection.

[**Note**: *BCD* Annex VIII Part 4 point 4]

5.8.5 R Where a credit derivative is not prevented from terminating prior to expiration of any grace period required for a default on the underlying obligation to occur as a result of a failure to pay the maturity of the protection must be reduced by the amount of the grace period.

[**Note**: *BCD* Annex VIII Part 4 point 5]

5

Valuation of protection: Transactions subject to funded credit protection – financial collateral simple method

5.8.6 R ■ BIPRU 5.8.7 R sets out the calculation for the valuation of transactions subject to *funded credit protection* under the *financial collateral simple method*.

5.8.7 R Where there is a mismatch between the maturity of the *exposure* and the maturity of the protection, the collateral must not be recognised.

[**Note**: *BCD* Annex VIII Part 4 point 6]

Valuation of protection: Transactions subject to funded credit protection – financial collateral comprehensive method

5.8.8 R ■ BIPRU 5.8.9 R sets out the calculation for the valuation of transactions subject to *funded credit protection* under the *financial collateral comprehensive method*.

5.8.9 R

(1) The maturity of the credit protection and that of the *exposure* must be reflected in the adjusted value of the collateral according to the following formula:

$C_{VAM} = C_{VA} \times (t-t^*)/(T-t^*)$

where:

(a) C_{VA} is the volatility adjusted value of the collateral as specified in ■ BIPRU 5.4.28 R or the amount of the *exposure*, whichever is the lowest;

(b) t is the number of years remaining to the maturity date of the credit protection calculated in accordance with ■ BIPRU 5.8.3 R to ■ BIPRU 5.8.5 R, or the value of T, whichever is the lower;

(c) T is the number of years remaining to the maturity date of the *exposure* calculated in accordance with ■ BIPRU 5.8.3 R to ■ BIPRU 5.8.5 R, or 5 years, whichever is the lower; and

(d) t^* is 0.25.

(2) C_{VAM} must be taken as C_{VA} further adjusted for maturity mismatch to be included in the formula for the calculation of the fully adjusted value of the *exposure* (E^*) set out at ■ BIPRU 5.4.28 R.

[**Note**: *BCD* Annex VIII Part 4 point 7]

Valuation of protection: Transactions subject to unfunded credit protection

5.8.10 R ■ BIPRU 5.8.11 R sets out the calculation for the valuation of transactions subject to *unfunded credit protection*.

5.8.11 R

(1) The maturity of the credit protection and that of the *exposure* must be reflected in the adjusted value of the credit protection according to the following formula:

$G_A = G^* \times (t-t^*)/(T-t^*)$

where:

(a) G^* is the amount of the protection adjusted for any currency mismatch;

(b) G_A is G^* adjusted for any maturity mismatch;

(c) t is the number of years remaining to the maturity date of the credit protection calculated in accordance with ■ BIPRU 5.8.3 R to ■ BIPRU 5.8.5 R, or the value of T, whichever is the lower;

(d) T is the number of years remaining to the maturity date of the *exposure* calculated in accordance with ■ BIPRU 5.8.3 R to ■ BIPRU 5.8.5 R, or 5 years, whichever is the lower; and

(e) t^* is 0.25.

(2) G_A is then taken as the value of the protection for the purposes of ■ BIPRU 5.7.16 R to ■ BIPRU 5.7.25 R.

[**Note**: *BCD* Annex VIII Part 4 point 8]

5.9 Combinations of credit risk mitigation in the standardised approach

5.9.1 R In the case where a *firm* calculating *risk weighted exposure amounts* under the *standardised approach* has more than one form of *credit risk mitigation* covering a single *exposure* (e.g. a *firm* has both collateral and a guarantee partially covering an *exposure*), the *firm* must subdivide the *exposure* into parts covered by each type of *credit risk mitigation* tool (e.g. a part covered by collateral and a portion covered by guarantee) and the *risk weighted exposure amount* for each portion must be calculated separately in accordance with the provisions of the *standardised approach* and ■ BIPRU 5.

[**Note**: *BCD* Annex VIII Part 5 point 1]

5.9.2 R When credit protection provided by a single protection provider has differing maturities, a similar approach to that described in ■ BIPRU 5.9.1 R must be applied.

[**Note**: *BCD* Annex VIII Part 5 point 2]

Chapter 7

Market risk

7.1 Application, purpose, general provisions and non-standard transactions

Application

7.1.1 R This chapter applies to a *BIPRU firm*.

Purpose

7.1.2 G Pursuant to the third paragraph of article 95(2) of the *UK CRR*, the purpose of this chapter is to apply requirements that correspond to Annexes I, III, IV and V of the *Capital Adequacy Directive*.

General provisions: Obligation to calculate PRR

7.1.3 R A *firm* must calculate a *PRR* in respect of:

(1) all its *trading book positions*;

(2) all *positions* falling within ■ BIPRU 7.5.3 R (Scope of the foreign exchange PRR calculation), whether or not in the *trading book*; and

(3) all *positions* in *commodities* (including *physical commodities*) whether or not in the *trading book*;

even if no treatment is provided for that *position* in the other sections of this chapter.

7.1.4 R A *firm* must calculate a *PRR* for any *position* falling into ■ BIPRU 7.1.3 R using:

(1) the *PRR* calculations contained in ■ BIPRU 7; or

(2) another method provided the *firm* is able to demonstrate that in all circumstances the calculation being employed results in a higher *PRR* for the *position* than would be required under (1).

General provisions: Non-trading book items

7.1.5 G *Positions* in instruments which are *non-trading book* items should be treated under ■ BIPRU 3 (Standardised credit risk), ■ BIPRU 4 (The IRB approach) or ■ BIPRU 13 (Financial derivatives, SFTs and long settlement transactions) unless deducted as an *illiquid asset*. If they fall into ■ BIPRU 7.1.3R(2) or ■ (3) they also give rise to a *PRR charge*.

General provisions: Frequency of calculation

7.1.6 R A *firm* must be able to monitor its total *PRR* on an intra-day basis, and, before executing any trade, must be able to re-calculate *PRR* to the level of detail necessary to establish whether or not the *firm's capital resources* exceed its *capital resources requirement*.

7.1.7 G A *firm* may rely on intra-day limits for the purposes of ■ BIPRU 7.1.6R.

Purpose of rules for non-standard transactions and instruments for which no PRR treatment has been specified

7.1.8 G The methodologies which have been developed for calculating *PRR charges* have been based on existing instruments and assume instruments with standard characteristics. However, as a result of innovation and because there are instruments which, although based on a standard contract, contain structural features which would make the *rules* in the rest of this chapter inappropriate, flexible *rules* are required. The *rules* in this section about transactions for which no *PRR* treatment has been specified and non-standard transactions are designed to address this.

Instruments for which no PRR treatment has been specified

7.1.9 R Where a *firm* has a *position* for which no *PRR* treatment has been specified, it must calculate the *PRR* for that *position* in accordance with ■ BIPRU 7.1.12R-■ BIPRU 7.1.13R.

7.1.10 R If ■ BIPRU 7.1.9 R applies, a *firm* must document its policies and procedures for calculating the *PRR* for that *position* of that type in its *trading book policy statement*.

7.1.11 G Under ■ BIPRU 1.2.30 R (2) a *firm* should notify the *appropriate regulator* as soon as is reasonably practicable if its *trading book policy statement* is subject to significant changes. Therefore if a *firm* makes a change in accordance with ■ BIPRU 7.1.10R it should consider whether it is necessary to report it to the *appropriate regulator*.

7.1.12 R A *firm* may calculate the *PRR* for a *position* falling into ■ BIPRU 7.1.9R by applying by analogy the *rules* relating to the calculation of the *interest rate PRR*, the *equity PRR*, the *commodity PRR*, the *foreign currency PRR*, the *option PRR* or the *collective investment undertaking PRR* if doing so is appropriate and if the *position* and *PRR item* are sufficiently similar to those that are covered by those *rules*.

7.1.13 R Where a *firm* has a *position* for which no *PRR* treatment has been specified and it is not applying ■ BIPRU 7.1.12R, it must calculate a *PRR* of an appropriate percentage of the current value of the *position* calculated under ■ GENPRU 1.3 (Valuation).

Instruments in non-standard form

7.1.14 R

(1) If a *firm* has a *position*:

(a) in a *PRR item* in non-standard form; or

(b) that is part of a non-standard arrangement; or

(c) that, taken together with other *positions* (whether or not they are subject to *PRR charges* under ■ BIPRU 7), gives rise to a non-standard *market risk*;

the *firm* must notify the *appropriate regulator* of that fact and of details about the *position*, *PRR item*, arrangements and type of risk concerned.

(2) Except as (1) provides to the contrary, (1) applies to a *position* that is subject to a *PRR* under ■ BIPRU 7.1.3R.

(3) The question of what is non-standard for the purposes of (1) must be judged by reference to the standards:

(a) prevailing at the time the *rule* is being applied; and

(b) of *firms* generally who carry on business which gives rise to *PRRs* under ■ BIPRU 7 rather than merely by reference to the *firm's* own business.

7.1.15 R

If a firm has a *position* or combination of *positions* falling into ■ BIPRU 7.1.14R and the *PRR* relating to that *position* or *positions* materially underestimates the *market risk* incurred by the *firm* to which they give rise, the *firm* must calculate the *PRR* for that *position* or *positions* under ■ BIPRU 7.1.13R.

Meaning of appropriate percentage for non-standard transactions

7.1.16 E

(1) In ■ BIPRU 7.1.13R and, to the extent that that *rule* applies ■ BIPRU 7.1.13R, ■ BIPRU 7.1.15R, an "appropriate percentage" is:

(a) 100%; or

(b) a percentage which takes account of the characteristics of the *position* concerned and of discussions with the *appropriate regulator* or a predecessor regulator under the Banking Act 1987 or the Financial Services Act 1986.

(2) Compliance with (1) may be relied on as tending to establish compliance with ■ BIPRU 7.1.13R or, insofar as it incorporates the requirements relating to an appropriate percentage, ■ BIPRU 7.1.15R.

(3) Contravention of (1) may be relied on as tending to establish contravention with ■ BIPRU 7.1.13 R or, insofar as it incorporates the requirements relating to an appropriate percentage, ■ BIPRU 7.1.15 R.

Stress testing and scenario analyses of trading book positions

7.1.17 R

A *firm* must conduct a regular programme of stress testing and scenario analysis of its *trading book positions*, both at the trading desk level and on a *firm*-wide basis. The results of these tests must be reviewed by senior management and reflected in the policies and limits the *firm* sets.

7.1.17A G The *firm's* stress testing programme should be comprehensive in terms of both risk and *firm* coverage, and appropriate to the size and complexity of *trading book positions* held.

7.1.18 R In carrying out the stress tests and scenario analyses required by ■ BIPRU 7.1.17 R, a *firm* must incorporate and take into account any other relevant stress tests and scenario analyses that it is required to carry out under any other provision of the *Handbook*, and in particular under ■ BIPRU 7.10.72 R where the *firm* has a *VaR model permission*.

7.1.19 G This paragraph gives *guidance* in relation to the stress testing programme that a *firm* must carry out in relation to its *trading book positions*.

(1) The frequency of the stress testing of *trading book positions* should be determined by the nature of the *positions*.

(2) The stress testing should include shocks which reflect the nature of the portfolio and the time it could take to hedge out or manage risks under severe market conditions.

(3) The *firm* should have procedures in place to assess and respond to the results of the stress testing programme. In particular, stress testing should be used to evaluate the *firm's* capacity to absorb losses or to identify steps to be taken by the *firm* to reduce risk.

(4) As part of its stress testing programme, the *firm* should consider how prudent valuation principles (see ■ GENPRU 1.3) will be met in a stressed scenario.

7.1.20 G The stress testing and scenario analysis under ■ BIPRU 7.1.17 R should be taken into account under the *overall Pillar 2 rule*.

7.2 Interest rate PRR

General rule

7.2.1 R

(1) A *firm* must calculate its *interest rate PRR* under ■ BIPRU 7.2 by:

(a) identifying which *positions* must be included within the *interest rate PRR* calculation;

(b) deriving the net *position* in each debt *security* in accordance with ■ BIPRU 7.2.36R-■ BIPRU 7.2.41R;

(c) including these net *positions* in the *interest rate PRR* calculation for *general market risk* and the *interest rate PRR* calculation for *specific risk*; and

(d) summing all *PRRs* calculated for *general market risk* and *specific risk*.

(2) A *firm* must calculate its *interest rate PRR* by adding the amount calculated under (1) to the amount calculated under the basic *interest rate PRR* calculation under ■ BIPRU 7.3.45R.

(3) All net *positions*, irrespective of their signs, must be converted on a daily basis into the *firm's base currency* at the prevailing spot exchange rate before their aggregation.

(4) Net *positions* must be classified according to the currency in which they are denominated. A *firm* must calculate the capital requirement for *general market risk* and *specific risk* in each individual currency separately.

7.2.2 G

The *interest rate PRR* calculation divides the interest rate risk into the risk of loss from a general move in market interest rates, and the risk of loss from an individual debt *security's* price changing for reasons other than a general move in market interest rates. These are called *general market risk* and *specific risk* respectively.

Scope of the interest rate PRR calculation

7.2.3 R

A *firm's interest rate PRR* calculation must:

(1) include all *trading book positions* in debt *securities*, preference *shares* and *convertibles*, except:

(a) *positions* in *convertibles* which have been included in the *firm's equity PRR* calculation;

(b) *positions* fully deducted as a *material holding* under the calculations under the *capital resources table*, in which case the *firm* may exclude them; or

(c) *positions* hedging an *option* which is being treated under ■ BIPRU 7.6.26R (Table: Appropriate treatment for equities, debt securities or currencies hedging options);

(2) include notional *positions* arising from *trading book positions* in the instruments listed in the table in ■ BIPRU 7.2.4R; and

(3) (if the *firm* is the transferor of *debt securities* or guaranteed rights relating to title to *debt securities* in a *repurchase agreement* or the lender of *debt securities* in a *debt securities* lending agreement) include such *debt securities* if those *debt securities* meet the criteria for inclusion in the *trading book*.

7.2.4 R Table: Instruments which result in notional positions

This table belongs to ■ BIPRU 7.2.3R(2)

Instrument	See
Futures, *forwards* or *synthetic futures* on debt *securities*	BIPRU 7.2.13 R
Futures, *forwards* or *synthetic futures* on debt indices or baskets	BIPRU 7.2.14R
Interest rate *futures* or *forward rate agreements* (*FRAs*)	BIPRU 7.2.18 R
Interest rate *swaps* or *foreign currency swaps*	BIPRU 7.2.21R
Deferred start interest rate *swaps* or *foreign currency swaps*	BIPRU 7.2.24R
The interest rate leg of an *equity swap* (unless the *firm* calculates the *interest rate PRR* on the instrument using the basic *interest rate PRR* calculation in BIPRU 7.3 (Equity PRR and basic *interest rate PRR* for equity derivatives))	BIPRU 7.2.27R
The cash leg of a *repurchase agreement* or a *reverse repurchase agreement*	BIPRU 7.2.30R
Cash borrowings or deposits	BIPRU 7.2.31 R
Options on a debt *security*, a basket of debt *securities*, a debt *security* index, an interest rate or an interest rate *future* or *swap* (including an *option* on a *future* on a debt *security*) (unless the *firm* calculates a *PRR* on the *option* under BIPRU 7.6 (Option PRR))	BIPRU 7.2.32R
Dual currency bonds	BIPRU 7.2.33R
Foreign currency futures or *forwards*	BIPRU 7.2.34R
Gold *futures* or *forwards*	BIPRU 7.2.34R
Forwards, *futures* or *options* (except cliquets) on an *equity*, basket of	BIPRU 7.2.34R

Instrument	See
equities or *equity* index (unless the *firm* calculates the *interest rate PRR* on the instrument using the basic *interest rate PRR* calculation in BIPRU 7.3)	
Credit derivatives	BIPRU 7.11
A *warrant* must be treated in the same way as an *option*	

7.2.5 G ■ BIPRU 7.2.3R(1) includes a *trading book position* in debt *security*, preference *share* or *convertible* that is subsequently repo'd under a *repurchase agreement* or lent under a stock lending agreement. Clearly, if the *security* had initially been obtained via a *reverse repurchase agreement* or stock borrowing agreement, the *security* would not have been included in the *PRR* calculation in the first place.

7.2.6 G ■ BIPRU 7.2.3R(1) includes *net underwriting positions* or *reduced net underwriting position* in debt *securities*.

7.2.7 G *Firms* are reminded that the table in ■ BIPRU 7.6.5R (Table: Appropriate PRR calculation for an option or warrant) divides *options* and *warrants* on interest rates, debt *securities* and interest rate *futures* and *swaps* into:

(1) those which must be treated under ■ BIPRU 7.6 (Option PRR); and

(2) those which must be treated under either ■ BIPRU 7.2 or ■ BIPRU 7.6, the *firm* being able to choose whether ■ BIPRU 7.2 or ■ BIPRU 7.6 is used.

7.2.8 G Cliquets on *equities*, baskets of *equities* or *equity* indices do not attract an *interest rate PRR*. The table in ■ BIPRU 7.2.4R excludes them from the scope of the *interest rate PRR* calculation in ■ BIPRU 7.2 and ■ BIPRU 7.3.45R excludes them from the basic *interest rate PRR* calculation in ■ BIPRU 7.3 (Equity PRR and basic interest rate PRR for equity derivatives).

7.2.9 G The table in ■ BIPRU 7.2.4R shows that *equity derivatives* are excluded from ■ BIPRU 7.2's *PRR* calculation if they have been included in the basic *interest rate PRR* calculation in ■ BIPRU 7.3 (see ■ BIPRU 7.3.45R).

Derivation of notional positions: General approach

7.2.10 G ■ BIPRU 7.2.11 R - ■ BIPRU 7.2.35R convert the instruments listed in the table in ■ BIPRU 7.2.4R into notional *positions* in:

(1) the underlying debt *security*, where the instrument depends on the price (or yield) of a specific debt *security*; or

(2) notional debt *securities* to capture the pure interest rate risk arising from future payments and receipts of cash (including notional payments and receipts) which, because they are designed to represent

pure *general market risk* (and not *specific risk*), are called *zero-specific-risk securities*; or

(3) both (1) and (2).

7.2.11 R

(1) For the purposes of calculating *interest rate PRR*, unless specified otherwise, a *firm* must derive the value of notional *positions* as follows:

(a) notional *positions* in actual debt *securities* must be valued as the nominal amount underlying the contract at the current market price of the debt *security*; and

(b) *positions* in *zero-specific-risk securities* must be valued using one of the two methods in (2).

(2) A *firm* must use one of the following two methods for all *positions* arising under (1)(b) and must use the same method for all *positions* denominated in the same currency:

(a) the present value approach, under which the *zero-specific-risk security* is assigned a value equal to the present value of all the future cash flows that it represents; or

(b) the alternative approach, under which the *zero-specific-risk security* is assigned a value equal to:

(i) the market value of the underlying notional *equity position* in the case of an *equity derivative*;

(ii) the notional principal amount in the case of an interest rate or *foreign currency swap*; or

(iii) the notional amount of the future cash flow that it represents in the case of any other *CRD financial instrument*.

7.2.12 R

A *firm* must use ■ BIPRU 7.2.11R(2)(a) in respect of any *positions* that it includes in the *interest rate duration method*.

Derivation of notional positions: Futures, forwards or synthetic futures on a debt security

7.2.13 R

Futures, *forwards* or *synthetic futures* on a single debt *security* must be treated as follows:

(1) a purchased *future*, *synthetic future* or *forward* is treated as:

(a) a notional long *position* in the underlying debt *security* (or the cheapest to deliver (taking into account the conversion factor) where the contract can be satisfied by delivery of one from a range of *securities*); and

(b) a notional short *position* in a zero coupon *zero-specific-risk security* with a maturity equal to the expiry date of the *future* or *forward*; and

(2) a sold *future*, *synthetic future* or *forward* is treated as:

(a) a notional short *position* in the underlying *security* (or the cheapest to deliver (taking into account the conversion factor)

where the contract can be satisfied by delivery of one from a range of *securities*); and

(b) a notional long *position* in a zero coupon *zero-specific-risk security* with a maturity equal to the expiry date of the *future*, *synthetic future* or *forward*.

Derivation of notional positions: Futures, forwards or synthetic futures on a basket or index of debt securities

7.2.14 R *Futures*, *forwards* or *synthetic futures* on a basket or index of debt *securities* must be converted into *forwards* on single debt *securities* as follows (and then the resulting *positions* must be treated under ■ BIPRU 7.2.13R):

(1) *futures*, *synthetic futures* or *forwards* on a single currency basket or index of debt *securities* must be treated as either:

(a) a series of *forwards*, one for each of the constituent debt *securities* in the basket or index, of an amount which is a proportionate part of the total underlying the contract according to the weighting of the relevant debt *security* in the basket; or

(b) a single *forward* on a notional debt *security*; and

(2) *futures*, *synthetic futures* or *forwards* on multiple currency baskets or indices of debt *securities* must be treated as either:

(a) a series of *forwards* (using the method described in (1)(a)); or

(b) a series of *forwards*, each one on a notional debt *security* to represent one of the currencies in the basket or index, of an amount which is a proportionate part of the total underlying the contract according to the weighting of the relevant currency in the basket.

7.2.15 G Under ■ BIPRU 7.2.14R(2)(b), a *forward* on basket of three Euro denominated debt *securities* and two Dollar denominated debt *securities* would be treated as a *forward* on a single notional Euro denominated debt *security* and a *forward* on a single notional Dollar denominated debt *security*.

7.2.16 R The notional debt *securities* in ■ BIPRU 7.2.14R are assigned a *specific risk position risk adjustment* and a *general market risk position risk adjustment* equal to the highest that would apply to the debt *securities* in the basket or index.

7.2.17 G The debt *security* with the highest *specific risk position risk adjustment* within the basket might not be the same as the one with the highest *general market risk position risk adjustment*. ■ BIPRU 7.2.16R requires a *firm* to select the highest percentages even where they relate to different debt *securities* in the basket or index, and regardless of the proportion of those debt *securities* in the basket or index.

Derivation of notional positions: Interest rate futures and forward rate agreements (FRAs)

7.2.18 R Interest rate *futures* or *FRAs* must be treated as the two notional *positions* (one long, one short) shown in the table in ■ BIPRU 7.2.19R.

7.2.19 R Table: Interest rate futures and FRAs

This table belongs to ■ BIPRU 7.2.18R

	A short *position* in a zero coupon *zero-specific-risk security*	A long *position* in a zero coupon *zero-specific-risk security*
Where the *firm* buys an interest rate *future* or sells an *FRA*	Maturity equals the expiry date of the *future* (or settlement date of the *FRA*)	Maturity equals the expiry date of the *future* (or settlement date of the *FRA*) plus the maturity of the notional borrowing/deposit
Where the *firm* sells an interest rate *future* or buys an *FRA*	Maturity equals the expiry date of the *future* (or settlement date of the *FRA*) plus the maturity of the notional borrowing/deposit	Maturity equals the expiry date of the *future* (or settlement date of the *FRA*)

7.2.20 G

(1) The following example illustrates ■ BIPRU 7.2.18R and ■ BIPRU 7.2.19R in conjunction with ■ BIPRU 7.2.11R (the last *rule* determines the value of notional *positions*). A *firm* sells £1mn notional of a 3v6 *FRA* at 6%. This results in:

(a) a short *position* in a *zero-specific-risk security* with a zero coupon, three month maturity, and a nominal amount of £1million; and

(b) a long *position* in a *zero-specific-risk security* with a zero coupon, six month maturity, and nominal amount of £1,015,000 (i.e. notional plus interest at 6% over 90 days).

(2) If a *firm* were to apply the approach in ■ BIPRU 7.2.11R(2)(a) the two nominal amounts would have to be present valued.

Derivation of notional positions: Interest rate swaps or foreign currency swaps

7.2.21 R Interest rate *swaps* or *foreign currency swaps* without deferred starts must be treated as the two notional *positions* (one long, one short) shown in the table in ■ BIPRU 7.2.22R.

7.2.22 R Table: Interest rate and foreign currency swaps

This table belongs to ■ BIPRU 7.2.21R

	Paying leg (which must be treated as a short *position* in a *zero-specific-risk security*)	Receiving leg (which must be treated as a long *position* in a *zero-specific-risk security*)
Receiving fixed and paying floating	Coupon equals the floating rate and maturity equals the reset date	Coupon equals the fixed rate of the *swap* and maturity equals the maturity of the *swap*
Paying fixed and receiving floating	Coupon equals the fixed rate of the *swap* and maturity equals the maturity of the *swap*	Coupon equals the floating rate and maturity equals the reset date
Paying floating and receiving floating	Coupon equals the floating rate and maturity equals the reset date	Coupon equals the floating rate and maturity equals the reset date

7.2.23 G For a *foreign currency swap*, the two notional *zero-specific-risk securities* would be denominated in different currencies. A *foreign currency swap* is also included in the *foreign currency PRR* calculation.

Derivation of notional positions: Deferred start interest rate swaps or foreign currency swaps

7.2.24 R Interest rate *swaps* or *foreign currency swaps* with a deferred start must be treated as the two notional *positions* (one long, one short) shown in the table in ■ BIPRU 7.2.25R.

7.2.25 R Table: Deferred start interest rate and foreign currency swaps

This table belongs to ■ BIPRU 7.2.24R

	Paying leg (which must be treated as a short *position* in a *zero-specific-risk security* with a coupon equal to the fixed rate of the *swap*)	Receiving leg (which must be treated as a long *position* in a *zero-specific-risk security* with a coupon equal to the fixed rate of the *swap*)
Receiving fixed and paying floating	maturity equals the start date of the *swap*	maturity equals the maturity of the *swap*
Paying fixed and receiving floating	maturity equals the maturity of the *swap*	maturity equals the start date of the *swap*

7.2.26 G An example of ■ BIPRU 7.2.24R is as follows. A *firm* enters into a five year *swap* which starts in two year's time. The *firm* has contracted to receive 6% and pay six month Libor on a principal amount of £1 million. This results in a long *position* in a 7 year debt *security* and a short *position* in a 2 year debt *security*. Both have a coupon of 6%. ■ BIPRU 7.2.24R deals with the capital treatment of the delayed start date; once the *swap* has started, ■ BIPRU 7.2.21R applies.

Derivation of notional positions: Swaps where only one leg is an interest rate leg (e.g. equity swaps)

7.2.27 R A *firm* must treat a *swap* with only one interest rate leg as a notional *position* in a *zero-specific-risk security*:

(1) with a coupon equal to that on the interest rate leg;

(2) with a maturity equal to the date that the interest rate will be reset; and

(3) which is a long *position* if the *firm* is receiving interest payments and short if making interest payments.

7.2.28 G ■ BIPRU 7.2.27R includes *equity swaps*, *commodity swaps* and any other *swap* where only one leg is an interest rate leg.

Derivation of notional positions: Cash legs of repurchase agreements and reverse repurchase agreements

7.2.29 G *Firms* are reminded that for the purposes of ■ BIPRU 7.2.30R, a *repurchase agreement* includes a sell/buy back or stock lending; and a *reverse repurchase agreement* includes a buy/sell back or a stock borrowing.

7.2.30 R The forward cash leg of a *repurchase agreement* or *reverse repurchase agreement* must be treated as a notional *position* in a *zero-specific-risk security* which:

(1) is a short notional *position* in the case of a *repurchase agreement*; and a long notional *position* in the case of a *reverse repurchase agreement*;

(2) has a value equal to the market value of the cash leg;

(3) has a maturity equal to that of the *repurchase agreement* or *reverse repurchase agreement*; and

(4) has a coupon equal to:

(a) zero, if the next interest payment date coincides with the maturity date; or

(b) the interest rate on the contract, if any interest is due to be paid before the maturity date.

Derivation of notional positions: Cash borrowings and deposits

7.2.31 R A cash borrowing or deposit must be treated as a notional *position* in a zero coupon *zero-specific-risk security* which:

(1) is a short *position* in the case of a borrowing and a long *position* in the case of a deposit;

(2) has a value equal to the market value of the borrowing or deposit;

(3) has a maturity equal to that of the borrowing or deposit, or the next date the interest rate is reset (if earlier); and

(4) has a coupon equal to:

(a) zero, if the next interest payment date coincides with the maturity date; or

(b) the interest rate on the borrowing or deposit, if any interest is due to be paid before the maturity date.

Derivation of notional positions: Options and warrants

7.2.32 R (1) Where included in the *PRR* calculation in ■ BIPRU 7.2 (see the table in ■ BIPRU 7.2.4R), *options* and *warrants* must be treated in accordance with this *rule*.

(2) An *option* or *warrant* on a debt *security*, a basket of debt *securities* or a debt *security* index must be treated as a *position* in that debt *security*, basket or index.

(3) An *option* on an interest rate must be treated as a *position* in a zero coupon *zero-specific-risk security* with a maturity equal to the sum of the time to expiry of the *option* and the length of the period for which the interest rate is fixed.

(4) An *option* on a *future* - where the *future* is based on an interest rate or debt *security* - must be treated as:

(a) a long *position* in that *future* for purchased call *options* and written put *options*; and

(b) a short *position* in that *future* for purchased put *options* and written call *options*.

(5) An *option* on a *swap* must be treated as a deferred starting *swap*.

Derivation of notional positions: Bonds where the coupons and principal are paid in different currencies

7.2.33 R Where a debt *security* pays coupons in one currency, but will be redeemed in a different currency, it must be treated as:

(1) a debt *security* denominated in the coupon's currency; and

(2) a *foreign currency forward* to capture the fact that the debt *security's* principal will be repaid in a different currency from that in which it pays coupons, specifically:

(a) a notional forward sale of the coupon currency and purchase of the redemption currency, in the case of a long *position* in the debt *security*; or

(b) a notional forward purchase of the coupon currency and sale of the redemption currency, in the case of a short *position* in the debt *security*.

Derivation of notional positions: Interest rate risk on other futures, forwards and options

7.2.34 R Other *futures*, *forwards*, *options* and *swaps* treated under ■ BIPRU 7.2 must be treated as *positions* in *zero-specific-risk securities*, each of which:

(1) has a zero coupon;

(2) has a maturity equal to that of the relevant contract; and

(3) is long or short according to the table in ■ BIPRU 7.2.35R.

7.2.35 R Table: Interest rate risk on other futures, forwards, options and swaps

This table belongs to ■ BIPRU 7.2.34R.

Instrument	Notional *positions*		
foreign currency forward or *future*	a long *position* denominated in the currency purchased	and	a short *position* denominated in the currency sold
Gold *forward* or *future*	a long *position* if the *forward* or *future* involves an actual (or notional) sale of gold	or	a short *position* if the *forward* or *future* involves an actual (or notional) purchase of gold
Equity forward or *future*, or *option* (unless the *interest rate PRR* is calculated under the basic *interest rate PRR* calculation in BIPRU 7.3)	A long *position* if the contract involves an actual (or notional) sale of the underlying *equity*	or	A short *position* if the contract involves an actual (or notional) purchase of the underlying *equity*

Deriving the net position in each debt security: General

7.2.36 R The net *position* in a debt *security* is the difference between the value of the *firm's* long *positions* (including notional *positions*) and the value of its short *positions* (including notional *positions*) in the same debt *security*.

Deriving the net position in each debt security: Netting positions in the same debt security

7.2.37 R

(1) A *firm* must not net *positions* (including notional *positions*) unless those *positions* are in the same debt *security*. This *rule* sets out the circumstances in which debt *securities* may be treated as the same for these purposes.

(2) Subject to (3) long and short *positions* are in the same debt *security*, and a debt *security* is the same as another if and only if:

(a) they enjoy the same rights in all respects; and

(b) are fungible with each other.

(3) Long and short *positions* in different tranches of the same debt *security* may be treated as being in the same debt *security* for the purpose of (1) where:

(a) the tranches enjoy the same rights in all respects; and

(b) the tranches become fungible within 180 days and thereafter the debt *security* of one tranche can be delivered in settlement of the other tranche.

Deriving the net position in each debt security: Netting the cheapest to deliver security with other deliverable securities

7.2.38 R A *firm* may net a short notional *position* in the cheapest to deliver *security* arising from a short *future* or *forward* (see ■ BIPRU 7.2.13R(2)(a)) under which the seller has a choice of which debt *security* it may use to settle its obligations against a long *position* in any deliverable *security* up to a maximum of 90% of the common nominal amounts. The residual long and short nominal amounts must be treated as separate long and short *positions*.

7.2.39 R The netting permitted by ■ BIPRU 7.2.38R only relates to where the *firm* has sold the *future* or *forward*. It does not relate to where the *firm* has bought a *future* or *forward*.

Deriving the net position in each debt security: Netting zero-specific-risk securities with different maturities

7.2.40 R A *firm* may net a notional long *position* in a *zero-specific-risk security* against a notional short *position* in a *zero-specific-risk security* if:

(1) they are denominated in the same currency;

(2) their coupons do not differ by more than 15 basis points; and

(3) they mature:

(a) on the same day, if they have residual maturities of less than one month;

(b) within 7 days of each other, if they have residual maturities of between one month and one year; and

(c) within 30 days of each other, if they have residual maturities in excess of one year.

Deriving the net position in each debt security: Reduced net underwriting positions in debt securities

7.2.41 R A *firm* must not net a *reduced net underwriting position* in a debt *security* with any other debt *security position*.

7.2.42 G ■ BIPRU 7.2.41R only relates to *reduced net underwriting position*.

Deriving the net position in the correlation trading portfolio

7.2.42A R A *correlation trading portfolio* may only consist of *securitisation positions* and nth-to-default credit derivatives that meet the following criteria:

(1) the *positions* are neither *resecuritisation positions*, nor *options* on a *securitisation position*, nor any other derivatives of *securitisation exposures* that do not provide a pro-rata share in the proceeds of a *securitisation tranche*;

(2) all reference instruments are either single-name instruments, including single-name credit derivatives, for which a liquid two-way market exists, or commonly traded indices based on reference entities which meet this criterion;

(3) the *positions* do not fall under the exposure classes outlined in ■ BIPRU 3.2.9 R (8) (retail claims or contingent retail claims) and ■ BIPRU 3.2.9 R (9) (claims or contingent claims secured on real estate property); and

(4) the *positions* do not reference a claim on a *special purpose vehicle*.

7.2.42B R *Positions* which are not *securitisation positions* or nth-to-default credit derivatives may be included in the *correlation trading portfolio* only if they hedge other such *positions* in this portfolio and a liquid two-way market exists for the relevant *position* or its reference entities.

7.2.42C R For the purposes of ■ BIPRU 7.2.42A R (2) and ■ BIPRU 7.2.42B R, a two-way market may be deemed to exist only where there are independent, bona fide offers to buy and sell, so that a price reasonably related to the last sales price or current bona fide competitive bid and offer quotations can be determined within one *business day* and settled at that price within a relatively short time conforming to trade custom.

7.2.42D R A *firm* must calculate both the net long and the net short *positions* in the *correlation trading portfolio* by applying ■ BIPRU 7.2.36 R and ■ BIPRU 7.2.37 R or, where applicable, ■ BIPRU 7.11.13 R to ■ BIPRU 7.11.17 R.

Specific risk calculation

7.2.43 R

(1) A *firm* must calculate the *specific risk* portion of the *interest rate PRR* for each debt *security* by multiplying the market value of the individual net *position* (ignoring the sign) by the *appropriate position risk adjustment* from the table in ■ BIPRU 7.2.44R or as specified by ■ BIPRU 7.2.45R - ■ BIPRU 7.2.48L R or by ■ BIPRU 7.11.13 R - ■ BIPRU 7.11.17 R.

(2) Notional *positions* in *zero-specific-risk securities* do not attract *specific risk*.

(3) For the purpose of (1), a *firm* may cap the product of multiplying the individual net *position* by the *appropriate position risk adjustment* at the maximum possible default-risk-related loss. For a short *position* in a credit derivative, a *firm* may calculate the maximum possible

default-risk-related loss as a change in value due to the underlying names immediately becoming default-risk-free.

7.2.44 R Table: specific risk position risk adjustments

This table belongs to ■ BIPRU 7.2.43R.

Issuer	Residual maturity	Position risk adjustment
Debt *securities* issued or guaranteed by central governments, issued by *central banks*, *international organisations*, *multilateral development banks* or *United Kingdom* regional governments or local authorities which would qualify for *credit quality step* 1 or which would receive a 0% *risk weight* under the *standardised approach* to credit risk.	Any	0%
(A) Debt *securities* issued or guaranteed by central governments, issued by *central banks*, *international organisations*, *multilateral development banks* or *United Kingdom* regional governments or local authorities which would qualify for *credit quality step* 2 or 3 under the *standardised approach* to credit risk.	Zero to six months	0.25%
	over 6 and up to and including 24 months	1%
	Over 24 months	1.6%
(B) Debt *securities* issued or guaranteed by *institutions* which would qualify for *credit quality step* 1 or 2 under the *standardised approach* to credit risk.		
(C) Debt *securities* issued or guaranteed by *institution* which would qualify for *credit quality step* 3 under BIPRU 3.4.34 R (Exposures to institutions: Credit assessment based method) or which would do so if it had an original effective maturity of three months or less.		
(D) Debt *securities* issued or guaranteed by *corporates* which would qualify for *credit quality step* 1, 2 or 3 under the *standardised approach* to credit risk.		
(E) Other *qualifying debt securities* (see BIPRU 7.2.49R)		
(A) Debt *securities* issued or guaranteed by central governments, issued by *central banks*, *international organisations*, *multilateral development banks* or *United Kingdom* regional governments or local authorities or *institutions* which would qualify for *credit quality step* 4 or 5 under the *standardised approach* to credit risk.	Any	8%
(B) Debt *securities* issued or guaranteed by *corporates* which would qualify for *credit quality step* 4 under the *standardised approach* to credit risk.		
(C) Exposures for which a credit assessment by a *nominated ECAI* is not available.		

Issuer	Residual maturity	*Position risk adjustment*
(A) Debt *securities* issued or guaranteed by central governments, issued by *central banks*, *international organisations*, *multilateral development banks* or *United Kingdom* regional governments or local authorities or *institution* which would qualify for *credit quality step* 6 under the *standardised approach* to credit risk.	Any	12%
(B) Debt *securities* issued or guaranteed by *corporate* which would qualify for *credit quality step* 5 or 6 under the *standardised approach* to credit risk.		
(C) An instrument that shows a particular risk because of the insufficient solvency of the issuer of liquidity. This paragraph applies even if the instrument would otherwise qualify for a lower *position risk adjustment* under this table.		
Note: The question of what a *corporate* is and of what category a debt *security* falls into must be decided under the *rules* relating to the *standardised approach* to credit risk.		

[**Note:** *CAD* Annex I point 14 Table 1]

7.2.45 R To the extent that a *firm* applies the *IRB approach*, to qualify for a *credit quality step* for the purpose of the table in BIPRU 7.2.44R the obligor of the exposure must have an internal rating with a *PD* equivalent to or lower than that associated with the appropriate *credit quality step* under the *standardised approach* to credit risk.

7.2.46 R A debt *security* issued by a non-qualifying issuer must receive a *specific risk position risk adjustment* of 8% or 12% according to the table in BIPRU 7.2.44R. However a *firm* must apply a higher *specific risk position risk adjustment* to such a *debt security* and/or not recognise offsetting for the purposes of defining the extent of *general market risk* between such a *security* and any other debt *securities* to the extent that doing otherwise would not be a prudent treatment of *specific risk* or *general market risk*.

7.2.46A G BIPRU 7.2.43 R includes both actual and notional *positions*. However, notional *positions* in a *zero-specific-risk security* do not attract *specific risk*. For example:

(1) interest-rate *swaps*, *foreign-currency swaps*, *FRAs*, interest-rate *futures*, *foreign-currency forwards*, *foreign-currency futures*, and the cash leg of *repurchase agreements* and *reverse repurchase agreements* create notional *positions* which will not attract *specific risk*; while

(2) *futures*, *forwards* and *swaps* which are based on the price (or yield) of one or more debt *securities* will create at least one notional *position* that attracts *specific risk*.

Specific risk: securitisations and resecuritisations

7.2.47 R [deleted]

7.2.47A G [deleted]

7.2.47B G [deleted]

7.2.47C G [deleted]

7.2.48 G [deleted]

7.2.48A R

(1) Subject to (3), a *firm* must calculate the *specific risk* portion of the *interest rate PRR* for each *securitisation* and *resecuritisation position* by multiplying the market value of the individual net *position* (ignoring the sign) by the *appropriate position risk adjustment* from the table in ■ BIPRU 7.2.48D R or ■ BIPRU 7.2.48E R, or in accordance with ■ BIPRU 7.2.48F R, as applicable.

(2) In calculating the *specific risk* capital charge of an individual net *securitisation* or *resecuritisation position*, a *firm* may cap the product of the weight and the individual net position at the maximum possible default-risk-related loss. For a short position, that limit may be calculated as a change in value due to the underlying names immediately becoming default-risk-free.

(3) For a transitional period ending on 31 December 2013, where a *firm* holds *securitisation* and *resecuritisation positions*, other than *positions* included in the *correlation trading portfolio*, it must calculate:

(a) the total *specific risk* capital charges that would apply just to the net long *positions*; and

(b) the total *specific risk* capital charges that would apply just to the net short *positions*.

The total *specific risk* capital charge for *securitisation* and *resecuritisation positions* will be the higher of (3)(a) and (3)(b).

7.2.48B R The *firm* must report to the *appropriate regulator* the total sum of its weighted net long and net short *securitisation* and *resecuritisation positions*, broken down by types of underlying assets.

7.2.48C R When calculating the *PRR* of a *protection seller* in *securitisation* and *resecuritisation* credit derivatives, a *firm* must apply ■ BIPRU 7.11.3 R.

7.2.48D R Table: specific risk position risk adjustments - standardised approach

Credit quality step	1	2	3	4 (only for credit assessments other than short-term credit assessments)	All other credit quality steps
Securitisations	1.6%	4%	8%	28%	100%
Resecuritisations	3.2%	8%	18%	52%	100%

A *firm* may only apply the *position risk adjustments* in this table where it would have to calculate a *risk weighted exposure amount* in accordance with the *standardised approach* to *securitisation* and *resecuritisation positions* if such *positions* were in its *non-trading book* under BIPRU 9. The *appropriate position risk adjustment* is calculated as 8% of the *risk weight* that would apply to the *position* under the *standardised approach* in BIPRU 9.11.2 R, subject to the requirements of BIPRU 9.9 to BIPRU 9.11, where appropriate.

7.2.48E R Table: specific risk Position Risk Adjustments - IRB approach

Credit Quality Step		Securitisation positions			Resecuritisation positions	
Credit assessments other than short term	Short-term credit assessments	A	B	C	D	E
1	1	0.56%	0.96%	1.6%	1.6%	2.4%
2		0.64%	1.20%	2%	2%	3.2%
3		0.8%	1.44%	2.8%	2.8%	4%
4	2	0.96%	1.6%		3.2%	5.2%
5		1.60%	2.8%		4.8%	8%
6		2.8%	4%		8%	12%
7	3	4.8%	6%		12%	18%
8		8%			16%	28%
9		20%			24%	40%
10		34%			40%	52%
11		52%			60%	68%
all other unrated		100%				

A *firm* may only apply the *position risk adjustments* in this table where it would have to calculate a *risk weighted exposure amount* in accordance with the *IRB approach* to *securitisation* and *resecuritisation positions* if such *positions* were in its *non-trading book* under BIPRU 9. The *appropriate position risk adjustment* is calculated as 8% of the *risk weight* that would apply to the *position* under the *IRB approach* in BIPRU 9.12.11 R, subject to the requirements in BIPRU 9.12 where appropriate.

7.2.48F R

(1) A *firm* may use the *supervisory formula method* to calculate the *appropriate position risk adjustment* for *specific risk* where:

(a) the *firm* is permitted to apply the *supervisory formula method* to the same *position* if it was held in its *non-trading book* in accordance with ■ BIPRU 9.12; or

(b) otherwise, the *firm* is expressly permitted by its *VaR model permission* to apply the *supervisory formula method* to calculate the *appropriate position risk adjustment* for *specific risk*.

(2) The *appropriate position risk adjustment* under the *supervisory formula method* must be calculated by multiplying the *risk weight* calculated according to ■ BIPRU 9.12.21 R by 8%.

(3) Where relevant, estimates of *PDs* and *LGDs* as inputs to the *supervisory formula method* must be determined in accordance with ■ BIPRU 4.

(4) Where expressly permitted by its *VaR model permission*, a *firm* may use the approach outlined in ■ BIPRU 7.10.55A R to ■ BIPRU 7.10.55S G (Incremental Risk Charge) to determine *PDs* and *LGDs* as inputs to the *supervisory formula method*.

7.2.48G R Where a *securitisation position* in the *trading book* is subject to an increased *risk weight* in accordance with ■ BIPRU 9.15, the *appropriate position risk adjustment* must be calculated as 8% of the *risk weight* that would apply to the *position* in accordance with ■ BIPRU 9.15.

7.2.48H G *Originators*, investors and *sponsors* of *securitisations* in the *trading book* will have to meet the requirements of ■ BIPRU 9.3.1A R, ■ BIPRU 9.3.15 R to ■ BIPRU 9.3.20 R and ■ BIPRU 9.15.

7.2.48I G

(1) Subject to ■ BIPRU 7.2.48J G, ■ BIPRU 9.15.9 R and ■ BIPRU 9.15.10 R, where the investor, *originator* or *sponsor* of a *securitisation* fails to meet any of the requirements in ■ BIPRU 9.3.18 R to ■ BIPRU 9.3.20 R (Disclosure requirements) and ■ BIPRU 9.15.11 R to ■ BIPRU 9.15.16 R (investor due diligence requirements) in any material respect by reason of its negligence or omission, the *appropriate regulator* will use its powers under section 55J (Variation etc. on the Authority's own initiative) of the *Act* to impose an additional capital charge in accordance with ■ BIPRU 7.2.48 GR. The additional capital charge imposed will be progressively increased with each relevant, subsequent infringement of the requirements in ■ BIPRU 9.3.18 R to ■ BIPRU 9.3.20 R and ■ BIPRU 9.15.11 R to ■ BIPRU 9.15.16A R, up to a maximum of 1250% *risk weight*.

(2) Subject to ■ BIPRU 9.3.22 G, ■ BIPRU 9.15.9 R and ■ BIPRU 9.15.10 R, where a *credit institution* fails to meet in any material respect the requirements in ■ BIPRU 9.15.16A R (Group level requirements), the *appropriate regulator* may consider using its powers under section 55J (Variation etc on the Authority's own initiative) of the *Act* in the manner described in (1). In order to calculate the *risk weights* that would apply to the *credit institution*, the *appropriate regulator* may treat the *securitisation* investments of the *subsidiary undertaking* as if they were *securitisation positions* held directly by the *credit institution*.

7.2.48J G When calculating the additional capital charge it will impose under ■ BIPRU 7.2.48G R, the *appropriate regulator* will take into account the exemption of certain *securitisations* from the scope of ■ BIPRU 9.15.3 R under

■ BIPRU 9.15.9 R and ■ BIPRU 9.15.10 R and, if those exemptions are relevant, it will reduce the capital charge it would otherwise impose.

7.2.48K R A *securitisation exposure* in the *trading book* that would be subject to deduction in accordance with ■ GENPRU 2.2. (Capital resources) or to a 1250% *risk weight* in accordance with ■ BIPRU 9 (Securitisation) is subject to a capital charge that is no less than that set out under those provisions, capped at the maximum possible default-risk-related loss. Unrated liquidity facilities are subject to a capital charge that is no less than that set out in ■ BIPRU 9.

Specific risk: correlation trading portfolio

7.2.48L R

(1) Where a *firm* holds a *position* in the *correlation trading portfolio*, it must calculate:

(a) The total *specific risk* capital charges that would apply just to the net long *positions* of the *correlation trading portfolio*; and

(b) The total *specific risk* capital charges that would apply just to the net short *positions* of the *correlation trading portfolio*.

(2) The higher of (1)(a) and (1)(b) will be the *specific risk* capital charge for the *correlation trading portfolio*.

(3) In calculating the *specific risk* capital charge of an individual net *position* in the *correlation trading portfolio*, a *firm* may cap the product of multiplying the individual net *position* by the *appropriate position risk adjustment* at the maximum possible default-risk-related loss. For a short *position*, a *firm* may calculate the maximum possible default-risk-related loss as a change in value due to the underlying names immediately becoming default-risk-free.

Definition of a qualifying debt security

7.2.49 R A debt *security* is a *qualifying debt security* if:

(1) it qualifies for a *credit quality step* under the *standardised approach* to credit risk corresponding at least to investment grade; or

(2) it has a *PD* which, because of the solvency of the issuer, is not higher than that of the debt *securities* referred to under (1) under the *IRB approach*; or

(3) it is a debt *security* for which a credit assessment by a *nominated ECAI* is unavailable and which meets the following conditions:

(a) it is considered by the *firm* to be sufficiently liquid;

(b) it is of investment quality, according to the *firm's* own discretion, at least equivalent to that of the debt *securities* referred to under (1); and

(c) it is listed on at least one *regulated market* or *designated investment exchange*; or

(4) it is a debt *security* issued by an *institution* subject to the capital adequacy requirements set out in the*UK CRR* or, as may be applicable, *GENPRU* and *BIPRU*, that satisfies the following conditions:

(a) it is considered by the *firm* to be sufficiently liquid;

(b) its investment quality is, according to the *firm's* own discretion, at least equivalent to that of the assets referred to under (1) above; or

(5) it is a debt *security* issued by an *institution* that is deemed to be of equivalent or higher credit quality than that associated with *credit quality step* 2 under the *standardised approach* to credit risk and that is subject to supervision and regulatory arrangements comparable to those under *GENPRU* and *BIPRU*.

7.2.50 R A *firm* must not treat a *debt security* as a *qualifying debt security* if it would be prudent to consider that the debt *security* concerned is subject to too high a degree of *specific risk* for it to be treated as a *qualifying debt security*.

7.2.51 G The manner in which a *firm* assesses a debt *security* for the purpose of treatment as a *qualifying debt security* will be subject to scrutiny by the *appropriate regulator*. The *appropriate regulator* may take action to overturn the *firm's* judgement if it considers that the debt *security* should not be treated as a qualifying debt security.

General market risk calculation: General

7.2.52 R A *firm* must calculate the *general market risk* portion of the *interest rate PRR* for each currency using either:

(1) the *interest rate simplified maturity method*;

(2) the *interest rate maturity method*; or

(3) the *interest rate duration method*.

7.2.53 R ■ BIPRU 7.2.52R(3) is subject to ■ BIPRU 7.2.54R.

7.2.54 R A *firm* must not use the *interest rate duration method* for index-linked *securities*. Instead, these *securities* must:

(1) be attributed a coupon of 3%; and

(2) be treated separately under either the *interest rate simplified maturity method* or the *interest rate maturity method*.

General market risk calculation: Simplified maturity method

7.2.55 G The *interest rate simplified maturity method* weights individual net *positions* to reflect their price sensitivity to changes in interest rates. The weights are related to the coupon and the residual maturity of the instrument (or the next interest rate re-fix date for floating rate items).

7.2.56 R Under the *interest rate simplified maturity method*, the portion of the *interest rate PRR* for *general market risk* equals the sum of each individual net *position* (long or short) multiplied by the *appropriate position risk adjustment* in the table in ■ BIPRU 7.2.57R. A *firm* must assign its net *positions* to the appropriate maturity bands in the table in ■ BIPRU 7.2.57R on the basis of residual maturity in the case of fixed-rate instruments and on the basis of the period until the interest rate is next set in the case of instruments on which the interest rate is variable before final maturity.

7.2.57 R Table: general market risk Position Risk Adjustments

This table belongs to ■ BIPRU 7.2.56R.

Zone	Maturity band		*position risk adjustment*
	Coupon of 3% or more	Coupon of less than 3%	
One	0 ≤ 1 month	0 ≤ 1 month	0.00%
	> 1 ≤ 3 months	> 1 ≤ 3 months	0.20%
	> 3 ≤ 6 months	> 3 ≤ 6 months	0.4%
	> 6 ≤ 12 months	> 6 ≤ 12 months	0.7%
Two	> 1 ≤ 2 years	> 1.0 ≤ 1.9 years	1.25%
	> 2 ≤ 3 years	> 1.9 ≤ 2.8 years	1.75%
	> 3 ≤ 4 years	> 2.8 ≤ 3.6 years	2.25%
Three	> 4 ≤ 5 years	> 3.6 ≤ 4.3 years	2.75%
	> 5 ≤ 7 years	> 4.3 ≤ 5.7 years	3.25%
	> 7 ≤ 10 years	> 5.7 ≤ 7.3 years	3.75%
	> 10 ≤ 15 years	> 7.3 ≤ 9.3 years	4.5%
	> 15 ≤ 20 years	> 9.3 ≤ 10.6 years	5.25%
	> 20 years	> 10.6 ≤ 12.0 years	6.00%
		> 12.0 ≤ 20.0 years	8.00%
		> 20 years	12.50%

General market risk calculation: The maturity method

7.2.58 G The *interest rate maturity method* builds on the *interest rate simplified maturity method* by partially recognising offsetting *positions*. ■ BIPRU 7.2.61G provides an illustration of the *interest rate maturity method*.

7.2.59 R Under the *interest rate maturity method*, the portion of the *interest rate PRR* for *general market risk* is calculated as follows:

(1) Step 1: each net *position* is allocated to the appropriate maturity band in the table in ■ BIPRU 7.2.57R and multiplied by the corresponding *position risk adjustment*;

(2) Step 2: weighted long and short *positions* are matched within:

(a) the same maturity band;

(b) the same zone (using unmatched *positions* from (a)); and

(c) different zones (using unmatched *positions* from (b) and matching between zones 1 and 2 and 2 and 3 before zone 1 and 3); and

(3) Step 3: the portion of the *interest rate PRR* for *general market risk* is the sum of:

(a) 10% of the total amount matched within maturity bands;

(b) 40% of the amount matched within zone 1 under (2)(b);

(c) 30% of the amount matched within zones 2 & 3 under (2)(b);

(d) 40% of the amounts matched between zones 1 and 2, and between zones 2 and 3;

(e) 150% of the amount matched between zones 1 and 3; and

(f) 100% of the weighted *positions* remaining unmatched after (2)(c).

7.2.60 G The table in ■ BIPRU 7.2.57R distinguishes between debt *securities* with a coupon of less than 3% and those with coupon in excess of 3%. However, this does not mean that the *firm* has to do a separate *general market risk* calculation for each; it merely ensures that when allocating debt *securities* to a particular band, their coupons are taken into account as well as their maturities. So for example, a 21 year 6% debt *security* falls into the same band as an 11 year 2% debt *security*. They are both weighted at 6%, and can be matched under ■ BIPRU 7.2.59R(2)(a) (the first part of step two of the *interest rate maturity method* calculation) because they fall within the same band.

7.2.61 G This paragraph sets out an example of a calculation under the *interest rate maturity method*. In this example, a *firm* with a £ sterling *base currency* is processing its euro denominated *positions*.

Weight each position

Zone	Totals of: net longs within the band	Totals of: net shorts within the band	PRA		Weighted longs within each band	Weighted shorts within each band
1	€100	€50	0.00%		0	0
	€250	€0	0.20%		**0.50**	0
	€200	€0	0.40%		**0.80**	0
	€0	€0	0.70%		0	0
2	€140	€0	1.25%		**1.75**	0
	€200	€300	1.75%		**3.50**	**5.25**
	€0	€400	2.25%		0	**9**
3	€0	€0	2.75%		0	0
	€200	€200	3.25%		**6.50**	**6.50**
	€300	€0	3.75%		**11.25**	0
	€200	€300	4.50%		**9**	**13.50**
	€0	€14.30	5.25%		0	**0.75**
	€300	€0	6.00%		**18.00**	0
	€0	€0	8.00%		0	0
	€0	€0	12.50%		0	0

Match weighted positions

same band Long	same band Short	same zones Long	same zones Short	different zones Long	different zones Short
				1.30	
0.50		0.50			
0.80		0.80			
1.75		1.75			
3.50	5.25		1.75		9.00
	9		9		
6.50	6.50				
11.25		11.25		24.00	
9	13.50		4.50		
	0.75		0.75		
18.00		18.00			
19 matched		7 matched		9 matched	

Calculate the general market risk

Matched within bands	19	@	10%	=	1.9
Matched within zone 1	0	@	40%	=	0
Matched within zones 2&3	7	@	30%	=	2.1
Matched between zones 1&2 and 2&3	9	@	40%	=	3.6
Matched between zones 1&3	0	@	150%	=	0
Unmatched after 2(c)	16.30	@	100%	=	16.30
					total = € 23.90
					general market risk PRR (if €1=£0.60) **= £14.34**

General market risk calculation: Duration method

7.2.62 G The *interest rate duration method* produces a more accurate measure of interest rate risk than the maturity methods but it is also more complex to calculate.

7.2.63 R (1) A *firm* must use the following formula to calculate modified duration for the purpose of the *interest rate duration method*:

$$\text{Modified duration} = \frac{D}{(1+r)}$$

(2) For the purposes of the formula in (1):

$$D = \frac{\sum_{t=1}^{m} \frac{tC_t}{(1+r)^t}}{\sum_{t=1}^{m} \frac{C_t}{(1+r)^t}}$$

(3) For the purpose of the formulae in (1) and (2):

(a) C_t=cash payment at time t

(b) m=total maturity

(c) r=yield to maturity. In the case of a fixed-rate debt *security* a *firm* must take the current mark to market of the debt *security* and thence calculate its yield to maturity, which is the implied discount rate for that instrument. In the case of a floating rate instrument, a *firm* must take the current mark to market of the debt *security* and thence calculate its yield on the assumption that the principal is due on the date that the interest rate can next be changed.

(d) t=time

7.2.64 R Under the *interest rate duration method*, the portion of the *interest rate PRR* for *general market risk* is calculated as follows:

(1) Step 1: allocate each net *position* to the appropriate duration zone in the table in ■ BIPRU 7.2.65R and multiply it by:

(a) its modified duration (using the formula in ■ BIPRU 7.2.63R); and

(b) the appropriate assumed interest rate change in the table in ■ BIPRU 7.2.65R;

(2) Step 2: match weighted long and short *positions*:

(a) within zones; and

(b) across zones (using unmatched *positions* from (2)(a) and following the process in ■ BIPRU 7.2.59R (2)(c)); and

(3) Step 3: calculate the portion of the *interest rate PRR* for *general market risk* as the sum of:

(a) 100% of the weighted *positions* remaining unmatched after (2)(b);

(b) 2% of the matched weighted *position* in each zone;

(c) 40% of the matched weighted *position* between zones 1 and 2, and between zones 2 and 3; and

(d) 150% of the matched weighted *position* between zones 1 and 3.

7.2.65 R Table: Assumed interest rate change in the interest rate duration method

This table belongs to ■ BIPRU 7.2.64R

Zone	Modified Duration	Assumed interest rate change (percentage points)
1	0 ≤ 12 months	1.00
2	> 12 months ≤ 3.6 years	0.85
3	> 3.6 years	0.70

7.2.66 R If a *firm* uses the *interest rate duration method* it must do so on a consistent basis.

7.3 Equity PRR and basic interest rate PRR for equity derivatives

General rule

7.3.1 R

(1) A *firm* must calculate its *equity PRR* by:

(a) identifying which *positions* must be included within the *PRR* calculation (see BIPRU 7.3.2R);

(b) deriving the net *position* in each *equity* in accordance with BIPRU 7.3.23R;

(c) including each of those net *positions* in either the *simplified equity method* (see BIPRU 7.3.29R) or, subject to BIPRU 7.3.27R, the *standard equity method* (see BIPRU 7.3.32R); and

(d) summing the *PRR* on each net *position* as calculated under the *simplified equity method* and *standard equity method*.

(2) All net *positions*, irrespective of their signs, must be converted on a daily basis into the *firm's base currency* at the prevailing spot exchange rate before their aggregation.

Scope of the equity PRR calculation

7.3.2 R

A *firm's equity PRR* calculation must:

(1) include all *trading book positions* in *equities*, unless:

(a) the *position* is fully deducted as a *material holding* under the calculations under the *capital resources table*, in which case the *firm* may exclude it; or

(b) the *position* is hedging an *option* or *warrant* which is being treated under BIPRU 7.6.26R (Table: Appropriate treatment for equities, debt securities or currencies hedging options);

(2) include notional *positions* arising from *trading book positions* in the instruments listed in the table in BIPRU 7.3.3R; and

(3) (if the *firm* is the transferor of *equities* or guaranteed rights relating to title to *equities* in a *repurchase agreement* or the lender of *equities* in an *equities* lending agreement) include such *equities* if those *equities* meet the criteria for inclusion in the *trading book*.

7.3.3 R

Table: Instruments which result in notional positions

This table belongs to BIPRU 7.3.2R(2)

Instrument		See
Depository receipts		BIPRU 7.3.12R
Convertibles where:	(a) the *convertible* is trading at a market price of less than 110% of the underlying *equity*; and the first date at which conversion can take place is less than three months ahead, or the next such date (where the first has passed) is less than a year ahead; or (b) the conditions in (a) are not met but the *firm* includes the *convertible* in its *equity PRR* calculation rather than including it in its *interest rate PRR* calculation set out in BIPRU 7.2 (Interest rate PRR).	BIPRU 7.3.13R
Futures, *forwards*, *CFDs* and *synthetic futures* on a single *equity*		BIPRU 7.3.14R
Futures, *forwards*, *CFDs* and *synthetic futures* on a basket of *equities* or *equity* index		BIPRU 7.3.15R
equity legs of an *equity swap*		BIPRU 7.3.19R
Options or *warrants* on a single *equity*, an *equity future*, a basket of *equities* or an *equity* index (unless the *firm* calculates a *PRR* on the *option* or *warrant* under BIPRU 7.6).		BIPRU 7.3.21R

7.3.4 G ■ BIPRU 7.3.2R(1) includes a *trading book position* in an *equity* that is subsequently repo'd under a *repurchase agreement* or lent under a stock lending agreement. Clearly, if the *equity* had initially been obtained via a *reverse repurchase agreement* or stock borrowing agreement, the *equity* would not have been included in the *trading book* in the first place.

7.3.5 G ■ BIPRU 7.3.2R(1) includes *net underwriting positions* or *reduced net underwriting positions* in *equities*. ■ BIPRU 7.3.27R requires a *firm* to use the *simplified equity method* in the case of *reduced net underwriting positions*. In the case of *net underwriting positions* that have not been reduced according to ■ BIPRU 7.8.27R (Calculating the reduced net underwriting position), there is no such restriction; a *firm* can choose which of the two *equity* methods to use.

7.3.6 G *Firms* are reminded that the table in ■ BIPRU 7.6.5R (Table: Appropriate PRR calculation for an option or warrant) divides *equity options* and *warrants* into:

(1) those which must be treated under ■ BIPRU 7.6 (Option PRR); and

(2) those which must be treated under either ■ BIPRU 7.3 or ■ BIPRU 7.6, the *firm* being able to choose whether ■ BIPRU 7.3 or ■ BIPRU 7.6 is used.

7.3.7 G The table in ■ BIPRU 7.3.3R does not require every *convertible* to be included in ■ BIPRU 7.3 's *PRR* calculation. Where a *convertible* is not included in this *PRR* calculation, ■ BIPRU 7.2.3R (1) (Scope of the interest rate PRR calculation) requires that it be included in the ■ BIPRU 7.2 *PRR* calculation.

7.3.8 G Some of the instruments listed in the table in ■ BIPRU 7.3.3R are also included in a *firm's interest rate PRR* calculation. For simplicity, a *firm* may use the *interest rate PRR* calculation in ■ BIPRU 7.3 rather than the calculation in ■ BIPRU 7.2 (Interest rate PRR). ■ BIPRU 7.3.44G explains this in more detail.

Derivation of notional positions: General approach

7.3.9 G ■ BIPRU 7.3.10R - ■ BIPRU 7.3.21R convert the instruments listed in the table in ■ BIPRU 7.3.3R into notional *positions* in individual *equities*, *equity* baskets or *equity* indices.

7.3.10 R Unless specified otherwise, the value of each notional *equity position* equals the quantity of that *equity* underlying the instrument multiplied by the current market value of the *equity*.

7.3.11 G

(1) An example of ■ BIPRU 7.3.10R is as follows. The current market value of a particular *equity* is £2.50. If a *firm* contracts to sell this *equity* in five year's time for £3 it would treat the notional short *equity position* as having a value of £2.50 when calculating the *equity PRR*.

(2) In effect, the forward *position* has been treated as being equivalent to a spot *position* for the purposes of calculating *equity PRR*. To capture the risk that the forward price changes relative to the spot price, forward *equity positions* are included in the *firm's interest rate PRR* calculation (see ■ BIPRU 7.3.45R or the table in ■ BIPRU 7.2.4R (Table: Instruments which result in notional positions)).

Derivation of notional positions: Depository receipts

7.3.12 R A depository receipt must be treated as a notional *position* in the underlying *equity*.

Derivation of notional positions: Convertibles

7.3.13 R Where a *convertible* is included in ■ BIPRU 7.3's *PRR* calculation (see the table in ■ BIPRU 7.3.3R):

(1) it must be treated as a *position* in the *equity* into which it converts; and

(2) the *firm's equity PRR* must be adjusted by making:

(a) an addition equal to the current value of any loss which the *firm* would make if it did convert to *equity*; or

(b) a deduction equal to the current value of any profit which the *firm* would make if it did convert to *equity* (subject to a maximum deduction equal to the *PRR* on the notional *position* underlying the *convertible*).

Derivation of notional positions: Futures, forwards and CFDs on a single equity

7.3.14 R A *future* (including a *synthetic future*), *forward* or *CFD* on a single *equity* must be treated as a notional *position* in that *equity*.

Derivation of notional positions: Futures, forwards and CFDs on equity indices or baskets

7.3.15 R A *future* (including a *synthetic future*), *forward* or *CFD* on an *equity* index or basket must be treated as either:

(1) a *position* in each of the underlying *equities*; or

(2) the *positions* shown in the table in ■ BIPRU 7.3.16R.

7.3.16 R Table: Instruments which result in notional positions

This table belongs to ■ BIPRU 7.3.15R(2)

	Under the *simplified equity method* (BIPRU 7.3.29R)	Under the *standard equity method* (BIPRU 7.3.32R)		
Only one country in the index or basket (see BIPRU 7.3.32R)	One *position* in the index or basket	One *position* in the index or basket		
More than one country in the index or basket	One *position* in the index or basket	Several notional basket *positions*, one for each country	or	One notional basket *position* in a separate, notional country

7.3.17 G An example of ■ BIPRU 7.3.16R is as follows. A *firm* decides to treat a FTSE Eurotop 300 *future* under the *standard equity method*, and furthermore, chooses to treat it as one notional *position*. The table in ■ BIPRU 7.3.16R requires that this notional *position* be treated as if it were from a separate notional country rather than any of the countries to which the underlying *equities* are from.

7.3.18 R The notional *positions* created under ■ BIPRU 7.3.15R have the following values:

(1) where only one notional *position* is created, it has a value equal to the total market value of the *equities* underlying the contract; or

(2) where more than one notional *position* is created, each one has a value which reflects the relevant *equity's* or country's contribution to the total market value of the *equities* underlying the contract.

Derivation of notional positions: Equity legs of equity swaps

7.3.19 R The *equity* leg of an *equity swap* must be treated as a *position* in the underlying *equity*, *equity* basket or *equity* index, which is:

(1) long, if the *firm* has contracted to receive any increase and pay any decrease in the value of the underlying *equities* or *equity* index; and

(2) short, if the *firm* has contracted to receive any decrease and pay any increase in the value of the underlying *equities* or *equity* index.

7.3.20 G The interest rate leg of an *equity swap* is included in a *firm's interest rate PRR* calculation (see the table in ■ BIPRU 7.2.4R (Table: Instruments which result in notional positions)) unless it is treated under ■ BIPRU 7.3.45R.

7

Derivation of notional positions: Options

7.3.21 R If included in ■ BIPRU 7.3's *PRR* calculation (see the table in ■ BIPRU 7.3.3R), *options* must be treated as follows:

(1) an *option* on a single *equity* must be treated as a notional *position* in that *equity*;

(2) an *option* on a basket of *equities* or *equity* index must be treated as a *future* on that basket or index; and

(3) an *option* on an *equity future* must be treated as:

(a) a long *position* in that *future*, for purchased call *options* and written put *options*; and

(b) a short *position* in that *future*, for purchased put *options* and written call *options*.

Deriving the net position in each equity

7.3.22 R The net *position* in each *equity* is the difference between the value of the *firm's* long *positions* (including notional *positions*) and the value of its short *positions* (including notional *positions*) in the same *equity*.

7.3.23 R (1) When deriving the net *position* in each *equity*, a *firm* must not net long and short *positions* except in accordance with this *rule*.

(2) Subject to (3), a *firm* may net long and short *positions* in the same *equity*. Two *equities* are the same if and only if they:

(a) enjoy the same rights in all respects; and

(b) are fungible with each other.

(3) Long and short *positions* in different tranches of the same *equity* may be treated as being in the same *equity* for the purpose of (1), where:

(a) the tranches enjoy the same rights in all respects; and

(b) the tranches become fungible with each other within 180 days, and thereafter the *equity* of one tranche can be delivered in settlement of the other tranche.

7.3.24 R A *firm* must not net a *reduced net underwriting position* with any other *equity position*.

7.3.25 G ■ BIPRU 7.3.24R only relates to *reduced net underwriting position*.

Simplified and standard equity methods

7.3.26 G ■ BIPRU 7.3.1R (1) requires that the net *position* in each *equity* be included in either the *simplified equity method* or the *standard equity method*, subject to the restriction in ■ BIPRU 7.3.27R. A *firm* does not have to use the same method for all *equities*.

7.3.27 R A *firm* must use the *simplified equity method* for *reduced net underwriting positions*.

7.3.28 G A *firm* may use either method for a *net underwriting position*; ■ BIPRU 7.3.27R only relates to *reduced net underwriting positions*.

Simplified equity method

7.3.29 R Under the *simplified equity method*, the *PRR* for each *equity*, *equity* index, or *equity* basket equals the market value of the net *position* (ignoring the sign) multiplied by the *appropriate position risk adjustment* from the table in ■ BIPRU 7.3.30R. The result must be converted into the *firm's base currency* at current spot *foreign currency* rates.

7.3.30 R Table: simplified equity method *position risk adjustments*

This table belongs to ■ BIPRU 7.3.29R

Instrument	*Position risk adjustment*
Single *equities*	16%
Qualifying equity indices (see BIPRU 7.3.38R)	8%
All other *equity* indices or baskets	16%

If it is necessary to distinguish between the *specific risk position risk adjustment* and the *general market risk position risk adjustment*, the *specific risk position risk adjustment* for the first and third rows is 8% and that for the second row is 0%. The rest of the *position risk adjustment* in the second column is the *general market risk position risk adjustment*

Standard equity method

7.3.31 G The *standard equity method* divides the risk of loss from a *firm's equity positions* into the risk of loss from a general move in a country's *equity* market and the risk of loss from an individual *equity's* price changing

relative to that country's *equity* market. These are called *general market risk* and *specific risk* respectively.

7.3.32 R Under the *standard equity method*, a *firm* must:

(1) group *equity positions* into country portfolios as follows:

(a) a *position* in an individual *equity* belongs to:

(i) the country it is listed in;

(ii) any of the countries it is listed in, if more than one; or

(iii) the country it was issued from, if unlisted;

(b) a *position* in an *equity* basket or index that is treated under ■ BIPRU 7.3.15R(2), is allocated to one or more country portfolios based on the countries to which the underlying *equities* belong to under (a) or a notional country provided for in the table in ■ BIPRU 7.3.16R; and

(2) sum:

(a) the *PRRs* for *specific risk* calculated under ■ BIPRU 7.3.33R; and

(b) the *PRRs* for *general market risk* for each country portfolio as calculated under ■ BIPRU 7.3.41R and ■ BIPRU 7.3.42R.

Standard equity method: Specific risk

7.3.33 R Under the *standard equity method*, a *firm* must calculate a *PRR* for *specific risk* based on the net *position* in each *equity*, *equity* index or *equity* basket by multiplying its market value (ignoring the sign) by the *appropriate position risk adjustment* from the table in ■ BIPRU 7.3.34R.

7.3.34 R Table: *position risk adjustment* for specific risk under the standard equity method

This table belongs to ■ BIPRU 7.3.33R

Instrument	*Position risk adjustment*
Qualifying equity indices (see BIPRU 7.3.38R)	0%
All *equities*, and other *equity* indices or *equity* baskets	8%

Definition of a qualifying equity

7.3.35 R [deleted]

7.3.36 G [deleted]

7.3.37 G [deleted]

Definition of a qualifying equity index

7.3.38 R A *qualifying equity index* is one which is traded on a *recognised investment exchange* or a *designated investment exchange* and:

(1) is listed in the table in ■ BIPRU 7.3.39R; or

(2) is not listed in the table in ■ BIPRU 7.3.39R, but is constructed in such a way that:

(a) it contains at least 20 *equities*;

(b) no single *equity* represents more than 20% of the total index; and

(c) no five *equities* combined represent more than 60% of the total index.

7.3.39 R Table: Qualifying equity indices

This table belongs to ■ BIPRU 7.3.38R

Country or territory	Name of index
Australia	All Ordinaries
Austria	Austrian Traded Index
Belgium	BEL 20
Canada	TSE 35, TSE 100, TSE 300
France	CAC 40, SBF 250
Germany	DAX
European	Dow Jones Stoxx 50 Index, FTSE Euro-top 300, MSCI Euro Index
Hong Kong	Hang Seng 33
Italy	MIB 30
Japan	Nikkei 225, Nikkei 300, TOPIX
Korea	Kospi
Netherlands	AEX
Singapore	Straits Times Index
Spain	IBEX 35
Sweden	OMX
Switzerland	SMI
UK	FTSE 100, FTSE Mid 250, FTSE All Share
US	S&P 500, Dow Jones Industrial Average, NASDAQ Composite, Russell 2000

Standard equity method: General market risk: General

7.3.40 R Under the *standard equity method*, a *firm* must apply approach one, as set out in ■ BIPRU 7.3.41R, to each country portfolio (or part portfolio) unless the conditions in ■ BIPRU 7.3.42R(3) are met, in which case the *firm* may instead apply approach two, as set out in ■ BIPRU 7.3.42R, to the relevant country portfolios (or part portfolios).

Standard equity method: General market risk: Approach One: No offset between different country portfolios

7.3.41 R Under approach one as referred to in ■ BIPRU 7.3.40R, the *PRR* for *general market risk* equals the net value (ignoring the sign) of the country portfolio multiplied by 8%.

Standard equity method: General market risk: Approach Two: Limited offset between different country portfolios

7.3.42 R

(1) Under approach two as referred to in ■ BIPRU 7.3.40R, the *PRR* for *general market risk* is calculated using the following formula:

$$\sqrt{(8\% * CP_1)^2 + (8\% * CP_2)^2 + (8\% * CP_3)^2 \ldots\ldots\ldots\ldots (8\% * CP_n)^2}$$

(2) In the formula in (1) CP_i denotes the net value of $_i$th country portfolio (converted to the *firm's base currency* using current spot *foreign currency* rates).

(3) The conditions referred to in ■ BIPRU 7.3.40R that must be met for a *firm* to be able to use approach two as referred to in ■ BIPRU 7.3.40R are as follows:

(a) at least four country portfolios are included (that is: n 4);

(b) only country portfolios for countries which are full members of the *OECD*, Hong Kong or Singapore are included;

(c) no individual country portfolio comprises more than 30% of the total gross value of country portfolios included; and

(d) the total net value of country portfolios included equals zero, that is:

$$\sum_{1}^{n} CP_i = 0$$

7.3.43 G In order to meet ■ BIPRU 7.3.42R(3)(d), it is likely that part of a country portfolio will have to be excluded from approach two under ■ BIPRU 7.3.42R (and therefore included in approach one under ■ BIPRU 7.3.41R), even if that country portfolio meets ■ BIPRU 7.3.42R(3)(a) - ■ (c).

Basic interest rate calculation for equity instruments

7.3.44 G A basic *interest rate PRR* calculation is included in ■ BIPRU 7.3 for a *firm* that does not wish to use the calculation in ■ BIPRU 7.2 (Interest rate PRR). However, it tends to result in higher charges than the methods in ■ BIPRU 7.2, largely because the *interest rate PRR* is calculated on each notional *equity position* separately and then summed without offsetting long and short *positions*.

7.3.45 R This *rule* applies to a *firm* that does not include a *forward*, *future*, *option* or *swap* on an *equity*, basket of *equities* or *equity* index in the calculation of its *interest rate PRR* calculation under ■ BIPRU 7.2 (Interest rate PRR). However it does not apply to cliquet as defined in ■ BIPRU 7.6.18R (Table: Option PRR: methods for different types of option). A *firm* must calculate the *interest rate PRR* for a *position* being treated under this *rule* as follows:

(1) multiply the market value of the notional *equity position* underlying the instrument by the appropriate percentage from the table in ■ BIPRU 7.3.47R; and

(2) sum the results from (1), ignoring the sign.

7.3.46 G Cliquets on *equities*, baskets of *equities* or *equity* indices do not attract an *interest rate PRR*. ■ BIPRU 7.3.45R excludes them from the basic *interest rate PRR* calculation and the table in ■ BIPRU 7.2.4R (Table: Instruments which result in notional positions) excludes them from the scope of the *interest rate PRR* calculation in ■ BIPRU 7.2 (Interest rate PRR).

7.3.47 R Table: Percentages used in the basic interest rate PRR calculation for equity instruments

This table belongs to ■ BIPRU 7.3.45R(1)

Time to expiration	Percentage (%)
0 ≤ 3 months	0.20
> 3 ≤ 6 months	0.40
> 6 ≤ 12 months	0.70
> 1 ≤ 2 years	1.25
> 2 ≤ 3 years	1.75
> 3 ≤ 4 years	2.25
> 4 ≤ 5 years	2.75
> 5 ≤ 7 years	3.25
> 7 ≤ 10 years	3.75
> 10 ≤ 15 years	4.50
> 15 ≤ 20 years	5.25
> 20 years	6.00

Additional capital charge in relation to equity indices

7.3.48 R If a *firm* nets off *positions* in one or more of the *equities* constituting an *equity* index *future*, *forward* or *CFD* against one or more *positions* in the *equity* index *future*, *forward* or *CFD* itself, the *firm* must apply an additional *equity PRR* to the netted *position* to cover the risk of loss caused by the value of the *future*, *forward* or *CFD* not moving fully in line with that of its constituent *equities*. The same applies if a *firm* holds opposite *positions* in a *future*, *forward* or *CFD* on an *equity* index that are not identical in respect of either their maturity or their composition or both.

7.4 Commodity PRR

General rule

7.4.1 R A *firm* must calculate its *commodity PRR* by:

(1) identifying which *commodity position* must be included within the scope of the *PRR* calculation (see ■ BIPRU 7.4.2R);

(2) expressing each such *position* in terms of the standard unit of measurement of the *commodity* concerned;

(3) expressing the spot price in each *commodity* in the *firm's base currency* at current spot foreign exchange rates;

(4) calculating an individual *PRR* for each *commodity* (see ■ BIPRU 7.4.20R); and

(5) summing the resulting individual *PRRs*.

Scope of the commodity PRR calculation

7.4.2 R A *firm's commodity PRR* calculation must, regardless of whether the *positions* concerned are *trading book* or *non-trading book positions*:

(1) include *physical commodity positions*;

(2) (if the *firm* is the transferor of *commodities* or guaranteed rights relating to title to *commodities* in a *repurchase agreement* or the lender of *commodities* in a *commodities* lending agreement) include such *commodities*;

(3) include notional *positions* arising from *positions* in the instruments listed in the table in ■ BIPRU 7.4.4R; and

(4) exclude *positions* constituting a *stock financing* transaction.

7.4.3 R Gold *positions* are excluded from the scope of the *commodity PRR*. Instead, they are included within the scope of the foreign exchange *PRR* (■ BIPRU 7.5).

7.4.4 R Table: Instruments which result in notional positions

This table belongs to ■ BIPRU 7.4.2R(3)

Instrument	See
Forwards, *futures*, *CFDs*, *synthetic futures* and *options* on a single *commodity* (unless the *firm* calculates a *PRR* on the *option* under BIPRU 7.6 (Option PRR))	BIPRU 7.4.8R
A commitment to buy or sell a single *commodity* at an average of spot prices prevailing over some future period	BIPRU 7.4.10R
Forwards, *futures*, *CFDs*, *synthetic futures* and *options* on a *commodity* index (unless the *firm* calculates an *PRR* on the *option* under BIPRU 7.6)	BIPRU 7.4.13R - BIPRU 7.4.14R
Commodity swaps	BIPRU 7.4.16R - BIPRU 7.4.17R
A warrant relating to a *commodity* must be treated as an *option* on a *commodity*.	

7.4.5 G ■ BIPRU 7.4.2R includes a *trading book position* in a *commodity* that is subsequently repo'd under a *repurchase agreement* or lent under a stock lending agreement. Clearly, if the *commodity* had initially been obtained via a *reverse repurchase agreement* or stock borrowing agreement, the *commodity* would not have been included in the *trading book* in the first place.

7.4.6 G *Firms* are reminded that the table in ■ BIPRU 7.6.5R (Table: Appropriate PRR calculation for an option or warrant) divides *commodity options* into:

(1) those which must be treated under ■ BIPRU 7.6; and

(2) those which must be treated under either ■ BIPRU 7.4 or ■ BIPRU 7.6 (Option PRR), the *firm* being able to choose whether ■ BIPRU 7.4 or ■ BIPRU 7.6 is used.

Derivation of notional positions: General

7.4.7 G ■ BIPRU 7.4.8R - ■ BIPRU 7.4.19G convert the instruments listed in the table in ■ BIPRU 7.4.4R into notional *positions* in the relevant *commodities*. These notional *positions* are expressed in terms of quantity (tonnes, barrels, etc), not value. The maturity of the *position* is only relevant where the *firm* is using the *commodity maturity ladder approach* or the *commodity extended maturity ladder approach*.

Derivation of notional positions: Futures, forwards, CFDs and options on a single commodity

7.4.8 R Where a *forward*, *future*, *CFD*, *synthetic future* or *option* (unless already included in the *firm's option PRR* calculation) settles according to:

(1) the difference between the price set on trade date and that prevailing at contract expiry, the notional *position*:

(a) equals the total quantity underlying the contract; and

(b) has a maturity equal to the expiry date of the contract; and

(2) the difference between the price set on trade date and the average of prices prevailing over a certain period up to contract expiry, there is a notional *position* for each of the reference dates used in the averaging period to calculate the average price, which:

(a) equals a fractional share of the total quantity underlying the contract; and

(b) has a maturity equal to the relevant reference date.

7.4.9 G (1) The following example illustrates ■ BIPRU 7.4.8R (2).

(2) A *firm* buys a Traded Average Price Option (TAPO - a type of Asian option) allowing it to deliver 100 tonnes of Grade A copper and receive $1,750 in June. If there were 20 *business days* in June the short notional *positions* will each:

(a) equal 5 tonnes per day (1/20 of 100 tonnes); and

(b) have a maturity equal to one of the *business days* in June (one for each day).

(3) In this example as each *business day* in June goes by the quantity per day for the remaining days does not change (5 tonnes per day) only the days remaining changes. Therefore, halfway through June there are ten, 5 tonne short notional *positions* remaining each for the ten remaining *business days* in June.

Derivation of notional positions: Buying or selling a single commodity at an average of spot prices prevailing in the future

7.4.10 R Commitments to buy or sell at the average spot price of the *commodity* prevailing over some period between trade date and maturity must be treated as a combination of:

(1) a *position* equal to the full amount underlying the contract with a maturity equal to the maturity date of the contract which is:

(a) long, where the *firm* will buy at the average price; or

(b) short, where the *firm* will sell at the average price; and

(2) a series of notional *positions*, one for each of the reference dates where the contract price remains unfixed, each of which:

(a) is long if the *position* under (1) is short, or short if the *position* under (1) is long;

(b) equals a fractional share of the total quantity underlying the contract; and

(c) has a maturity date of the relevant reference date.

7.4.11 G The following guidance provides an example of ■ BIPRU 7.4.10R. In January, a *firm* agrees to buy 100 tonnes of copper for the average spot price prevailing during the 20 *business days* in February, and will settle on 30 June. After entering into this agreement, the *firm* faces the risk that the average price

for February increases relative to that for 30 June. Therefore, as highlighted in the table below:

(1) the short *positions* reflect the fact that this could occur because any one of the remaining forward prices for February increase; and

(2) the long *position* reflects the fact that this loss could occur because the forward price for 30 June falls.

7.4.12 G Table: Example of buying at the average spot price prevailing in the future

This table belongs to ■ BIPRU 7.4.11G

	Application of BIPRU 7.4.10R(1)	Application of BIPRU 7.4.10R(2)
From trade date to start of averaging period	Long *position* in 100 tonnes of copper with a maturity of 30 June.	A series of 20 notional short *positions* each equal to 5 tonnes of copper. Each *position* is allocated a maturity equal to one of the *business days* in February (one for each day).
During averaging period	Long *position* in 100 tonnes of copper with a maturity of 30 June.	As each *business day* goes by in February the price for 5 tonnes of copper is fixed and so there will be one less notional short *position*.
After averaging period	Long *position* in 100 tonnes of copper with a maturity of 30 June.	No short *positions*.

Derivation of notional positions: CFDs and options on a commodity index

7.4.13 R *Commodity* index *futures* and *commodity* index *options* (unless the *option* is included in the *firm's option PRR* calculation), must be treated as follows:

(1) Step 1: the total quantity underlying the contract must be either:

(a) treated as a single notional *commodity position* (separate from all other *commodities*); or

(b) divided into notional *positions*, one for each of the constituent *commodities* in the index, of an amount which is a proportionate part of the total underlying the contract according to the weighting of the relevant *commodity* in the index;

(2) Step 2: each notional *position* determined in Step 1 must then be included:

(a) when using the *commodity simplified approach* (■ BIPRU 7.4.24R), without adjustment; or

(b) when using the *commodity maturity ladder approach* (■ BIPRU 7.4.25R) or the *commodity extended maturity ladder approach* (■ BIPRU 7.4.32R), with the adjustments in ■ BIPRU 7.4.14R.

7.4.14 R Table: Treatment of commodity index futures and commodity index options

This table belongs to ■ BIPRU 7.4.13R(2)(b)

Construction of index	Notional *position* (or *positions*) and maturity
Spot level of index is based on the spot price of each constituent *commodity*	Each quantity determined in Step 1 as referred to in BIPRU 7.4.13R is assigned a maturity equal to the expiry date of the contract.
Spot level of index is based on an average of the forward prices of each constituent *commodity*	Each quantity determined in Step 1 as referred to in BIPRU 7.4.13R is divided (on a pro-rata basis) into a series of forward *positions* to reflect the impact of each forward price on the level of the index. The maturity of each forward *position* equals the maturity of the relevant forward price determining the level of the index when the contract expires.

7

7.4.15 G

(1) An example of using ■ BIPRU 7.4.13R and the table in ■ BIPRU 7.4.14R is as follows.

(2) A *firm* is long a three-month *commodity* index *future* where the spot level of the index is based on the one, two and three month forward prices of aluminium, copper, tin, lead, zinc and nickel (18 prices in total).

(3) Step 1: the *firm* should decide whether to treat the full quantity underlying the contract as a single notional *commodity position* or disaggregate it into notional *positions* in aluminium, copper, tin, lead, zinc and nickel. In this case the *firm* decides to disaggregate the contract into notional *positions* in aluminium, copper, tin, lead, zinc and nickel.

(4) Step 2: if the *firm* uses the *commodity simplified approach*, nothing more need be done to arrive at the notional *position*. In this case the *firm* uses the *commodity maturity ladder approach* and so subdivides each *position* in each metal into three because the level of the index is based on the prevailing one, two and three month forward prices. Since the *future* will be settled in three months' time at the prevailing level of the index, the three *positions* for each metal will have maturities of four, five and six months respectively.

Derivation of notional positions: Commodity swaps

7.4.16 R A *firm* must treat a *commodity swap* as a series of notional *positions*, one *position* for each payment under the *swap*, each of which:

(1) equals the total quantity underlying the contract;

(2) has a maturity corresponding to the payment date; and

(3) is long or short according to ■ BIPRU 7.4.17R.

7.4.17 R Table: Treatment of commodity swaps

This table belongs to ■ BIPRU 7.4.16R

	Receiving amounts which are unrelated to any *commodity's* price	Receiving the price of *commodity* 'b'
Paying amounts which are unrelated to any *commodity's* price	N/A	Long *positions* in *commodity* 'b'
Paying the price of *commodity* 'a'	Short *positions* in *commodity* 'a'	Short *positions* in *commodity* 'a' and long *positions* in *commodity* 'b'

7.4.18 G The table in ■ BIPRU 7.4.17R shows that where the legs of the *swap* are in different *commodities*, a series of forward *positions* are created for each *commodity* (that is, a series of short *positions* in *commodity* 'a' and a series of long *positions* in *commodity* 'b').

7.4.19 G The table in ■ BIPRU 7.4.17R also covers the case where one leg is unrelated to any *commodity's* price. This leg may be subject to a *PRR* under another part of ■ BIPRU 7; for example, an interest rate based leg would have to be included in a *firm's interest rate PRR* calculation.

Calculating the PRR for each commodity: General

7.4.20 R A *firm* must calculate a *commodity PRR* for each *commodity* separately using either the *commodity simplified approach* (■ BIPRU 7.4.24R), the *commodity maturity ladder approach* (■ BIPRU 7.4.25R) or the *commodity extended maturity ladder approach* (■ BIPRU 7.4.32R).

7.4.21 R A *firm* must use the same approach for a particular *commodity* but need not use the same approach for all *commodities*.

7.4.22 R

(1) A *firm* must treat *positions* in different grades or brands of the same *commodity*-class as different *commodities* unless they:

(a) can be delivered against each other; or

(b) are close substitutes and have price movements which have exhibited a stable correlation coefficient of at least 0.9 over the last 12 months.

(2) If a *firm* relies on (1)(b) it must then monitor compliance with the conditions in that paragraph on a continuing basis.

7.4.23 R If a *firm* intends to rely on the approach in ■ BIPRU 7.4.22R(1)(b):

(1) it must notify the *appropriate regulator* in writing at least 20 *business days* prior to the date the *firm* starts relying on it; and

(2) the *firm* must, as part of the notification under (1), provide to the *appropriate regulator* the analysis of price movements on which it relies.

Calculating the PRR for each commodity: Simplified approach

7.4.24 R A *firm* which calculates a *commodity PRR* using the *commodity simplified approach* must do so by summing:

(1) 15% of the net *position* multiplied by the spot price for the *commodity*; and

(2) 3% of the gross *position* (long plus short, ignoring the sign) multiplied by the spot price for the *commodity*;

(and for these purposes the excess of a *firm's* long (short) *positions* over its short (long) *positions* in the same *commodity* (including notional *positions* under ■ BIPRU 7.4.4R) is its net *position* in each *commodity*).

Calculating the PRR for each commodity: Maturity ladder approach

7.4.25 R A *firm* using the *commodity maturity ladder approach* must calculate the *commodity PRR* following the steps in ■ BIPRU 7.4.26R and then sum all spread charges, carry charges and outright charges that result. A *firm* must use a separate maturity ladder for each *commodity*.

7.4.26 R

(1) A *firm* must calculate the charges referred to in ■ BIPRU 7.4.25R as follows.

(2) Step 1: offset long and short *positions* maturing:

(a) on the same day; or

(b) (in the case of *positions* arising under contracts traded in markets with daily delivery dates) within 10 *business days* of each other.

(3) Step 2: allocate the *positions* remaining after step 1 to the appropriate maturity band in the table in ■ BIPRU 7.4.28R (*physical commodity positions* are allocated to band 1).

(4) Step 3: match long and short *positions* within each band. In each instance, calculate a spread charge equal to the matched amount multiplied first by the spot price for the *commodity* and then by the spread rate of 3%.

(5) Step 4: carry unmatched *positions* remaining after step 3 to another band where they can be matched, then match them. Do this until all matching possibilities are exhausted. In each instance, calculate:

(a) a carry charge equal to the carried *position* multiplied by the spot price for the *commodity*, the carry rate of 0.6% and the number of bands by which the *position* is carried; and

(b) a spread charge equal to the matched amount multiplied by the spot price for the *commodity* and the spread rate of 3%.

(6) Step 5: calculate the outright charge on the remaining *positions* (which will either be all long *positions* or all short *positions*). The outright charge equals the remaining *position* (ignoring the sign) multiplied by the spot price for the *commodity* and the outright rate of 15%.

7.4.27 G The matched amount in ■ BIPRU 7.4.26R is the lesser (ignoring the sign) of either the total long *position* or the total short *position*. For example, a band with 1000 long and 700 short results in a matched amount of 700. The unmatched amount would be 300.

7.4.28 R Table: Maturity bands for the maturity ladder approach

This table belongs to ■ BIPRU 7.4.26R

Band	Maturity of *position*
Band 1	0 ≤ 1 month
Band 2	> 1 month ≤ 3 months
Band 3	> 3 months ≤ 6 months
Band 4	> 6 months ≤ 1 year
Band 5	> 1 year ≤ 2 years
Band 6	> 2 years ≤ 3 years
Band 7	> 3 years

7.4.29 G ■ BIPRU 7.4.30G is an example illustrating the calculation of the *commodity PRR* on an individual *commodity* using the *commodity maturity ladder approach* (■ BIPRU 7.4.26R). After the *firm* has carried out the pre-processing required by ■ BIPRU 7.4.26R(2) (that is, step 1), it follows steps 2 to 5 as shown below. Because the *firm* is using the *commodity maturity ladder approach* the spread rate is 3%, the carry rate is 0.6% and the outright rate is 15%. The example assumes that the spot price for the *commodity* is £25.

7.4.30 G Table: Example illustrating the commodity maturity ladder approach

This table belongs to ■ BIPRU 7.4.29G

Band	Step 2 Allocate remaining *positions* to appropriate maturity bands	Step 3 Match within bands. Each matched amount incurs a spread charge.	Step 4a Carry across bands. Each carried amount incurs a carry charge.	Step 4b Match within band. Each matched amount incurs a spread charge.	Step 6 Remaining *position*(s) incur an outright charge.
0 ≤ 1 month					
>1 month ≤ 3 months	1000 long 700 short	700 matched	300 carried		
>3 months ≤ 6 months					
>6 months ≤ 1 year					
>1 year ≤ 2 years	600 short	Nothing matched	100 carried	400 matched	200 short remains
>2 years ≤ 3 years					
> 3 years	100 long	Nothing matched			

Spread charges	700*£25*3% + 400*£25*3%	=	£825
Carry charges	300*£25*0.6%*3 + 100*£25*0.6%*2	=	£165
Outright charge	200*£25*15%	=	£750
			£1740

Calculating the PRR for each commodity: Extended maturity ladder approach

7.4.31 R A *firm* may use the *commodity extended maturity ladder approach* to calculate the *commodity PRR* for a particular *commodity* provided the *firm*:

(1) has a diversified *commodities* portfolio;

(2) undertakes significant *commodities* business;

(3) is not yet in a position to use the *VaR model approach* to calculate *commodity PRR*; and

(4) at least twenty *business days* before the date the *firm* uses that approach notifies the *appropriate regulator* in writing of:

(a) its intention to use the *commodity extended maturity ladder approach*; and

(b) the facts and matters relied on to demonstrate that the *firm* meets the criteria in (1) - (3).

7.4.32 R A *firm* using the *commodity extended maturity ladder approach* must calculate its *commodity PRR* by:

(1) following the same steps as in ■ BIPRU 7.4.26R but using the rates from the table in ■ BIPRU 7.4.33R rather than those in ■ BIPRU 7.4.26R; and

(2) summing all spread charges, carry charges and outright charge that result.

7.4.33 R Table: Alternative spread, carry and outright rates

This table belongs to ■ BIPRU 7.4.32R

	Precious metals (excluding gold)	Base metals	Softs (agricultural)	Other (including energy)
Spread rate (%)	2	2.4	3	3
Carry rate (%)	0.3	0.5	0.6	0.6
Outright rate (%)	8	10	12	15

7.4.34 G For the purposes of ■ BIPRU 7.4.31R(1) a *firm* has a diversified *commodity* portfolio where it holds *positions* in more than one *commodity* in each of the categories set out in the table in ■ BIPRU 7.4.33R and holds *positions* across different maturities in those individual *commodities*. A *firm* would not have a diversified *commodity* portfolio if it held *positions* in only one *commodity* in each of the categories set out in the table in ■ BIPRU 7.4.33R. This is because the rates in the table in ■ BIPRU 7.4.33R assume *firms* have *positions* in more than one of that category's *commodities*. Different *commodities* within a given category are likely to exhibit different volatilities, so where a *firm* does not have a diversified *commodity* portfolio

in that category, the rates applying to that category might underestimate the regulatory capital required for a certain *commodity* at certain times.

7.4.35 G What constitutes significant business in ■ BIPRU 7.4.31R(2) will vary from *firm* to *firm*. The more regularly the *firm* undertakes trades in *commodities* and the more consistently it has *positions* in the relevant *commodity*, the more likely it is to be undertaking significant business for the purposes of ■ BIPRU 7.4.31R(2).

7.4.36 R Where a *firm* is:

(1) treating a *commodity* index *derivative* as if it was based on a single separate *commodity* (see ■ BIPRU 7.4.13R(1)(a)); and

(2) using the *commodity extended maturity ladder approach* to calculate the *commodity PRR* for that *commodity*;

it must determine which index constituent incurs the highest rate in the table in ■ BIPRU 7.4.33R and apply that rate to the notional *position* for the purposes of ■ BIPRU 7.4.32R.

7.4.37 G Where an index is only based on precious metals, ■ BIPRU 7.4.13R and ■ BIPRU 7.4.36R allow the *firm* to treat the single notional *position* as precious metal for the purposes of ■ BIPRU 7.4.32R. However, if the index contained a mix of precious metals and base metals the *firm* would have to treat the notional *position* under ■ BIPRU 7.4.36R as a base metal because base metals attract a higher rate than precious metals in the table in ■ BIPRU 7.4.33R.

Liquidity and other risks

7.4.38 R If a short *position* to which ■ BIPRU 7.4 applies falls due before a long *position* to which ■ BIPRU 7.4 applies, a *firm* must also guard against the risk of a shortage of liquidity which may exist in some markets.

7.4.39 G In particular, where ■ BIPRU 7.4.38R applies and the short *position* constitutes a material *position* compared to a *firm's* total *commodity positions*, it should consider a further *commodity PRR* charge in respect of that *position* depending on the likelihood of a shortage of liquidity in that market.

7.4.40 R A *firm* must safeguard against other risks, apart from the delta risk, associated with *commodity options*.

7.4.41 R The interest-rate and foreign-exchange risks not covered by other provisions of ■ BIPRU 7.4 or by the provisions of ■ BIPRU 7.2 (Interest rate PRR) or ■ BIPRU 7.5 (Foreign currency PRR) must be included in the calculation of *general market risk* for traded debt *securities* and in the calculation of *foreign currency PRR*.

7.5 Foreign currency PRR

General rule

7.5.1 R A *firm* must calculate its *foreign currency PRR* by:

(1) identifying which *foreign currency* and gold *positions* to include in the *PRR* calculation;

(2) calculating the net open *position* in each currency in accordance with this section (including where necessary the *base currency* calculated in the same way as it is for *foreign currencies*) and in gold;

(3) calculating the *open currency position* for *foreign currencies* as calculated under ■ BIPRU 7.5.19R and the net gold position (see ■ BIPRU 7.5.20R); and

(4) multiplying the sum of the absolutes of that *open currency position* and that net gold *position* by 8%.

7.5.2 G An example of the operation of ■ BIPRU 7.5.1R is as follows. A *firm* has an *open currency position* of £100 and a net gold *position* of £50. The sum (ignoring the sign) is £150, and so the *foreign currency PRR* is £12.

Scope of the foreign currency PRR calculation

7.5.3 R A *firm's foreign currency PRR* calculation must include the following items regardless of whether they are *trading book* or *non-trading book positions*:

(1) all gold *positions*;

(2) all spot *positions* in *foreign currency* (that is, all asset items less all liability items, including accrued interest, in the *foreign currency* in question);

(3) all forward *positions* in *foreign currency*;

(4) all *CRD financial instruments* and other items which are denominated in a *foreign currency*;

(5) irrevocable guarantees (and similar instruments) that are certain to be called and likely to be irrecoverable to the extent they give rise to a *position* in gold or *foreign currency*; and

(6) notional *positions* arising from the instruments listed in the table in ■ BIPRU 7.5.5R.

7.5.4 R

(1) The following are excluded from a *firm's foreign currency PRR* calculation:

(a) *foreign currency* assets which have been deducted in full from the *firm's capital resources* under the calculations under the *capital resources table*;

(b) *positions* hedging (a);

(c) *positions* that a *firm* has deliberately taken in order to hedge against the adverse effect of the exchange rate on the ratio of its *capital resources* to its *capital resources requirement*; and

(d) transactions to the extent that they fully hedge net future *foreign currency* income or expenses which are known but not yet accrued.

(2) If a *firm* uses an exclusion under (1) it must:

(a) notify the *appropriate regulator* before it makes use of it;

(b) include in the notification in (a) the terms on which the relevant item will be excluded;

(c) not change the terms of the exclusion under (b); and

(d) document its policy on the use of that exclusion in its *trading book policy statement*.

(3) A *position* may only be excluded under (1)(b) or (c) if it is of a non-trading or structural nature.

7.5.5 R

Table: instruments which result in notional foreign currency positions

This table belongs to ■ BIPRU 7.5.3R(6).

Instruments	See
Foreign currency futures, *forwards*, *synthetic futures* and *CFDs*	BIPRU 7.5.11R
Foreign currency swaps	BIPRU 7.5.13R
Foreign currency options or *warrants* (unless the *firm* calculates a *PRR* on the *option* or *warrant* under BIPRU 7.6 (Option PRR)).	BIPRU 7.5.15R
Gold *futures*, *forwards*, *synthetic futures* and *CFDs*	BIPRU 7.5.16R
Gold *options* (unless the *firm* calculates a *PRR* on the *option* under BIPRU 7.6).	BIPRU 7.5.17R
Positions in *CIUs*	BIPRU 7.5.18R

7.5.6 G

Firms are reminded that the table in ■ BIPRU 7.6.5R (Table: Appropriate PRR calculation for an option or warrant) divides *foreign currency options* and *warrants* into:

(1) those which must be treated under ■ BIPRU 7.6 (Option PRR); and

(2) those which must be treated under either ■ BIPRU 7.5 or ■ BIPRU 7.6, the *firm* being able to choose whether ■ BIPRU 7.5 or ■ BIPRU 7.6 is used.

7.5.7 R When determining the currency of denomination *firms* must:

(1) use the currency in which the *firm* accounts for the instrument where an instrument is quoted in more than one currency; and

(2) treat depository receipts as *positions* in the underlying *security*.

7.5.8 G Instruments denominated in a foreign currency include, amongst other things, assets and liabilities (including accrued interest); non-*foreign currency derivative*; *net underwriting positions*; *reduced net underwriting positions*; and irrevocable guarantees (or similar instruments) that are certain to be called.

7.5.9 R Where a contract is based on a basket of currencies, the *firm* can choose either to derive notional *positions* in each of the constituent currencies or treat it as a single notional *position* in a separate notional currency.

Derivation of notional positions: General

7.5.10 G ■ BIPRU 7.5.11R - ■ BIPRU 7.5.18R derive notional currency *positions* for the instruments listed in the table in ■ BIPRU 7.5.5R.

Derivation of notional positions: Foreign exchange forwards, futures, CFDs and synthetic futures

7.5.11 R (1) A *firm* must treat a *foreign currency forward*, *future*, *synthetic future* or *CFD* as two notional currency *positions* as follows:

(a) a long notional *position* in the currency which the *firm* has contracted to buy; and

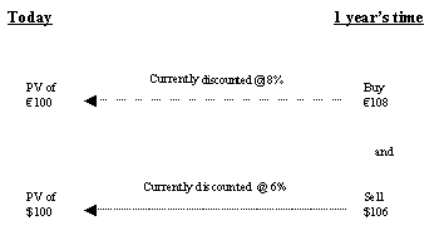
(b) a short notional *position* in the currency which the *firm* has contracted to sell.

(2) In (1) the notional *positions* have a value equal to either:

(a) the contracted amount of each currency to be exchanged in the case of a *forward*, *future*, *synthetic future* or *CFD* held in the *non-trading book*; or

(b) the present value of the amount of each currency to be exchanged in the case of a *forward*, *future*, *synthetic future* or *CFD* held in the *trading book*.

7.5.12 G (1) The following example illustrates ■ BIPRU 7.5.11R. In this example, a *firm* contracts to sell $106 for €108 in one year's time and the present values of each cash flow are $100 and €100 respectively.



(2) In the *non-trading book*, this *forward* would be treated as a combination of a €108 long *position* and a $106 short *position*.

(3) In the *trading book*, this *forward* would be treated as a combination of a €100 long *position* and a $100 short *position*.

(4) *Firms* are reminded that *foreign currency forwards* held in the *trading book* should also be included in the *firm's interest rate PRR* calculation (see ■ BIPRU 7.2.4R (Instruments which result in notional *positions* for the purpose of the *interest rate PRR*)).

7

Derivation of notional positions: Foreign currency swaps

7.5.13 R

(1) A *firm* must treat a *foreign currency swap* as:

(a) a long notional *position* in the currency in which the *firm* has contracted to receive interest and principal; and

(b) a short notional *position* in the currency in which the *firm* has contracted to pay interest and principal.

(2) In (1) the notional *positions* have a value equal to either:

(a) the nominal amount of each currency underlying the *swap* if it is held in the *non-trading book*; or

(b) the present value amount of all cash flows in the relevant currency in the case of a *swap* held in the *trading book*.

7.5.14 G

(1) The following example illustrates ■ BIPRU 7.5.13R. In this example a *firm* enters into a five year *foreign currency swap* where it contracts to pay six month US$ Libor on $100 in return for receiving 6% fixed on €100. The present values of each leg are $100 and €98 respectively.

(2) In the *non-trading book*, this *swap* would be treated as a combination of a €100 long *position* and a $100 short *position*.

(3) In the *trading book*, this *swap* would be treated as a combination of a €98 long *position* and a $100 short *position*.

(4) *Firms* are reminded that *foreign currency swaps* held in the *trading book* should also be included in the *firm's interest rate PRR* calculation (see ■ BIPRU 7.2.4R (Instruments which result in notional *positions* for the purpose of the *interest rate PRR*)).

Derivation of notional positions: Foreign currency options and warrants

7.5.15 R Where included in ■ BIPRU 7.5's *PRR* calculation (see the table in ■ BIPRU 7.5.5R), a *foreign currency option* or *warrant* must be treated as a *foreign currency forward*.

Derivation of notional positions: Gold forwards, futures, synthetic futures and CFDs

7.5.16 R A *forward*, *future*, *synthetic future* or *CFD* on gold must be treated as a notional *position* in gold with a value equal to the amount of gold underlying multiplied by the current spot price for gold.

Derivation of notional positions: Gold options

7.5.17 R If included in the *PRR* calculation under ■ BIPRU 7.5 (see the table in ■ BIPRU 7.5.5R), a gold *option* must be treated as a gold *forward*.

Derivation of notional positions: CIUs

7.5.18 R

(1) This *rule* deals with *positions* in *CIUs*.

(2) The actual *foreign currency positions* of a *CIU* must be included in a *firm's foreign currency PRR* calculation under ■ BIPRU 7.5.1 R.

(3) A *firm* may rely on third party reporting of the *foreign currency positions* in the *CIU*, where the correctness of this report is adequately ensured.

(4) If a *firm* is not aware of the *foreign currency positions* in a *CIU*, the *firm* must assume that the *CIU* is invested up to the maximum extent allowed under the *CIUs* mandate in *foreign currency* and the *firm* must, for *trading book positions*, take account of the maximum indirect exposure that it could achieve by taking leveraged *positions* through the *CIU* when calculating its *foreign currency PRR*. This must be done by proportionally increasing the *position* in the *CIU* up to the maximum exposure to the underlying investment items resulting from the investment mandate.

(5) The assumed *position* of the *CIU* in *foreign currency* calculated in accordance with ■ BIPRU 7.5.18R(4) must be treated as a separate currency according to the treatment of investments in gold, subject to the modification that, if the direction of the *CIUs* investment is available, the total long *position* may be added to the total long open *foreign currency position* and the total short *position* may be added to the total short open *foreign currency position*. No netting is allowed between such *positions* prior to this calculation.

Open currency position

7.5.19 R A *firm* must calculate its *open currency position* by:

(1) calculating the net *position* in each *foreign currency*;

(2) converting each such net *position* into its *base currency* equivalent at current spot rates;

(3) summing all short net *positions* and summing all long net *positions* calculated under (1) and (2); and

(4) selecting the larger sum (ignoring the sign) from (3).

Net gold position

7.5.20 R A *firm* must calculate its net gold *position* by:

(1) valuing all gold *positions* using the prevailing spot price for gold (regardless of the maturity of the *positions*);

(2) offsetting long and short *positions*; and

(3) converting the resulting net *position* into the *base currency* equivalent using the current spot *foreign currency* rate.

7.6 Option PRR

Option PRR calculation

7.6.1 R A *firm* must calculate its *option PRR* by:

(1) identifying which *option positions* must be included within the scope of the *option PRR* calculation under ■ BIPRU 7.6.3R - ■ BIPRU 7.6.5R;

(2) calculating the derived *position* in each *option* in accordance with ■ BIPRU 7.6.9R - ■ BIPRU 7.6.15R;

(3) calculating the *PRR* for each derived *position* in accordance with ■ BIPRU 7.6.16R - ■ BIPRU 7.6.31R;

(4) summing all of the *PRRs* calculated in accordance with (3).

7.6.2 G *Firms* are reminded that the table in ■ BIPRU 7.2.4R (Instruments which result in notional *positions* for the purposes of the *interest rate PRR*) and the table in ■ BIPRU 7.3.3R (Instruments which result in notional *positions* for the purposes of the *equity PRR*) also require an *interest rate PRR* to be calculated for *options* on *equities*, baskets of *equities* or *equities* indices. The interaction between ■ BIPRU 7.6 and the rest of Chapter 7 is illustrated in ■ BIPRU 7.6.33G.

Scope of the option PRR calculation

7.6.3 R Except as permitted under ■ BIPRU 7.6.5R, a *firm's option PRR* calculation must include:

(1) each *trading book position* in an *option* on an *equity*, interest rate or debt *security*;

(2) each *trading book position* in a *warrant* on an *equity* or debt *security*;

(3) each *trading book position* in a *CIU*; and

(4) each *trading book* and *non-trading book position* in an *option* on a *commodity*, currency or gold.

7.6.4 G ■ BIPRU 7.6.3R(2) includes *net underwriting positions* or *reduced net underwriting positions* in *warrants*.

7.6.5 R Table: Appropriate PRR calculation for an option or warrant

This table belongs to ■ BIPRU 7.6.3R

Option type (see BIPRU 7.6.18R) or *warrant*	*PRR* calculation
American *option*, European *option*, Bermudan *option*, Asian *option* or *warrant* for which the *in the money* percentage (see BIPRU 7.6.6R) is equal to or greater than the *appropriate position risk adjustment* (see BIPRU 7.6.7R and BIPRU 7.6.8R)	Calculate either an *option PRR*, or the most appropriate to the underlying *position* of: (a) an *equity PRR*; or (b) an *interest rate PRR*; or (c) a *commodity PRR*; or (d) a *foreign currency PRR*; or (e) a *collective investment undertaking PRR*.
American *option*, European *option*, Bermudan *option*, Asian *option* or *warrant*: (a) for which the *in the money* percentage (see BIPRU 7.6.6R) is less than the *appropriate position risk adjustment* (see BIPRU 7.6.7R and BIPRU 7.6.8R); or (b) that is *at the money*; or (c) that is *out of the money*. All other types of *option* listed in BIPRU 7.6.18R (regardless of whether *in the money*, *at the money* or *out of the money*).	Calculate an *option PRR*

The in the money percentage

7.6.6 R

(1) The *in the money* percentage is calculated in accordance with this *rule*.

(2) For a call *option*:

$$\frac{\text{Current market price of underlying - Strike price of the option}}{\text{Strike price of the } \textit{option}} * 100$$

(3) For a put *option*:

$$\frac{\text{Strike price of option - Current market price of underlying}}{\text{Strike price of the } \textit{option}} * 100$$

(4) In the case of an *option* on a basket of *securities* a *firm* may not treat the *option* as being *in the money* by the relevant percentage so as to enable the *firm* not to apply an *option PRR* under ■ BIPRU 7.6.5R unless the conditions in ■ BIPRU 7.6.5R are satisfied with respect to each kind of underlying investment.

(5) (4) also applies to an *option* on a *CIU* if a *firm* is using one of the *CIU look through methods*.

The appropriate position risk adjustment

7.6.7 R

(1) The *appropriate position risk adjustment* for a *position* is that listed in the table in ■ BIPRU 7.6.8R against the relevant underlying *position*.

(2) If the *firm* uses the *commodity extended maturity ladder approach* or the *commodity maturity ladder approach* for a particular *commodity* under ■ BIPRU 7.4 (Commodity PRR) the *appropriate position risk adjustment* for an *option* on that *commodity* is the outright rate applicable to the underlying *position* (see ■ BIPRU 7.4.26R (Calculating the PRR for each commodity: Maturity ladder approach) and ■ BIPRU 7.4.33R (Table: Alternative spread, carry and outright rates)).

(3) If a *firm* does not have *commodity positions* treated under ■ BIPRU 7.4 or does not have *positions* in the *commodity* in question treated under ■ BIPRU 7.4 the restrictions in ■ BIPRU 7.4 that regulate when a *firm* can and cannot use a particular method of calculating the *commodity PRR* apply for the purpose of establishing the *appropriate position risk adjustment* for the purposes of ■ BIPRU 7.6.

(4) If a *firm* is using one of the *CIU look through methods* for an *option* on a *CIU* the leveraging requirements in ■ BIPRU 7.7 (Position risk requirements for collective investment undertakings) apply (see ■ BIPRU 7.7.11R). For this purpose the amount of the *appropriate position risk adjustments* under ■ BIPRU 7.6.6R(5) is increased by the amount of that leveraging (expressed as a percentage) as calculated under ■ BIPRU 7.7, subject to a maximum *appropriate position risk adjustment* of 32%.

7.6.8 R Table: Appropriate position risk adjustment

This table belongs to ■ BIPRU 7.6.7R

Underlying *position*	*Appropriate position risk adjustment*
Equity	The *position risk adjustment* applicable to the underlying *equity* or *equity* index in the table in BIPRU 7.3.30R (Simplified equity method)
Interest rate	The sum of the *specific risk position risk adjustment* (see BIPRU 7.2.43R to BIPRU 7.2.51G (Specific risk calculation)) and the *general market risk position risk adjustment* (as set out in BIPRU 7.2.57R (General *market risk position risk adjustments*)) applicable to the underlying *position*
Debt *securities*	The sum of the *specific risk position risk adjustment* (see BIPRU 7.2.43R to BIPRU 7.2.51G (Specific risk calculation)) and the *general market risk position risk adjustment* (as set out in the table in BIPRU 7.2.57R (General *market risk position risk adjustments*)) applicable to the underlying *position*
Commodity	18% (unless BIPRU 7.6.7R requires otherwise)
Currency	8%
Gold	8%
CIU	32% (subject to BIPRU 7.6.6R and BIPRU 7.6.7R)

Calculating derived positions

7.6.9 R A *firm* must calculate the derived *position* specified in the table in ■ BIPRU 7.6.13R for each *position* included in its *option PRR* calculation.

Netting positions

7.6.10 R A *firm* may calculate a derived *position* for its net *position* in an *option* or a *warrant*, if the relevant *options* or *warrants* are identical or may be treated as identical under ■ BIPRU 7.6.11R or ■ BIPRU 7.6.12R.

7.6.11 R A *firm* may treat *options* or *warrants* as identical if they have the same strike price, maturity (except for an interest rate cap or floor - see ■ BIPRU 7.6.12R) and underlying.

7.6.12 R A *firm* may treat as identical a purchased interest rate cap (or floor) and a written interest rate cap (or floor) only if they mature within 30 days of each other and all other terms are identical (a cap may not be netted against a floor).

7

Derived positions

7.6.13 R Table: Derived positions

This table belongs to ■ BIPRU 7.6.9R

Underlying	Option (or warrant)	Derived *position*
Equity	*Option* (*warrant*) on a single *equity* or *option* on a *future/forward* on a single *equity*	A notional *position* in the actual *equity* underlying the contract valued at the current market price of the *equity*.
	Option (*warrant*) on a basket of *equities* or *option* on a *future/forward* on a basket of *equities*	A notional *position* in the actual *equities* underlying the contract valued at the current market price of the *equities*.
	Option (*warrant*) on an *equity* index or *option* on a *future/forward* on an *equity* index	A notional *position* in the index underlying the contract valued at the current market price of the index.
Interest rate	*Option* on an interest rate or an interest rate *future/FRA*	A zero coupon *zero-specific-risk security* in the currency concerned with a maturity equal to the sum of the time to expiry of the contract and the length of the period on which the settlement amount of the contract is calculated valued at the notional amount of the contract.

Underlying	Option (or warrant)	Derived *position*
	Option on an interest rate *swap*	A zero coupon *zero-specific-risk security* in the currency concerned with a maturity equal to the length of the *swap* valued at the notional principal amount.
	Interest rate cap or floor	A zero coupon *zero-specific-risk security* in the currency concerned with a maturity equal to the remaining period of the cap or floor valued at the notional amount of the contract.
Debt *securities*	*Option* (*warrant*) on a debt *security* or *option* on a *future/forward* on a debt *security*	The underlying debt *security* with a maturity equal to the time to expiry of the *option* valued as the nominal amount underlying the contract at the current market price of the debt *security*.
	Option (*warrant*) on a basket of debt *securities* or *option* on a *future/forward* on a basket of debt *securities*	A notional *position* in the actual debt *securities* underlying the contract valued at the current market price of the debt *securities*.
	Option (*warrant*) on an index of debt *securities* or *option* on a *future/forward* on an index of debt *securities*	A notional *position* in the index underlying the contract valued at the current market price of the index.
Commodity	*Option* on a *commodity* or *option* on a *future/forward* on a *commodity*	An amount equal to the tonnage, barrels or kilos underlying the *option* with (in the case of a *future/forward* on a *commodity*) a maturity equal to the expiry date of the *forward* or *Futures* contract underlying the *option*. In the case of an *option* on a *commodity* the maturity of the *position* falls into Band 1 in the table in BIPRU 7.4.28R (Table: Maturity bands for the maturity ladder approach).
	Option on a *commodity swap*	An amount equal to the tonnage, barrels or kilos underlying the *option* with a maturity equal to the length of the *swap* valued at the

Underlying	Option (or warrant)	Derived *position*
		notional principal amount.
CIU (These provisions about *CIUs* are subject to BIPRU 7.6.35R)	*Option* (*warrant*) on a single *CIU* or *option* on a *future/forward* on a single *CIU*	A notional *position* in the actual *CIU* underlying the contract valued at the current market price of the *CIU*.
	Option (*warrant*) on a basket of *CIUs* or *option* on a *future/forward* on a basket of *CIUs*	A notional *position* in the actual *CIUs* underlying the contract valued at the current market price of the *CIUs*.
Gold	*Option* on gold or *option* on a *future/forward* on gold	An amount equal to the troy ounces underlying the *option* with (in the case of a *future/forward* on gold) a maturity equal to the expiry date of the *forward* or *futures* contract underlying the *option*.
Currency	Currency *option*	The amount of the underlying currency that the *firm* will receive if the *option* is exercised converted at the spot rate into the currency that the *firm* will sell if the *option* is exercised.

Combinations of options which can be treated as one option

7.6.14 R A *firm* may treat (for the purpose of calculating an *option PRR* under BIPRU 7.6) an *option* strategy listed in the table in BIPRU 7.6.15R as the single *position* in a notional *option* specified against that strategy in the table in BIPRU 7.6.15R, if:

(1) each element of the strategy is transacted with the same *counterparty*;

(2) the strategy is documented as a single structure;

(3) the underlying for each part of the composite *position* (including any actual holding of the underlying) is the same under the *PRR identical product netting rules*;

(4) the netting achieved does not result overall in a greater degree of netting in the calculation of the *market risk capital requirement* than would be permitted under the other *standard market risk PRR rules*;

(5) each *option* in the structure has the same maturity and underlying; and

(6) the constituent parts of the structure form an indivisible single contract, so that neither party can unwind or default on one part of the structure without doing so for the contract as a whole;

except that (1) and (6) only apply to the extent possible with respect to any part of the composite *position* held by the *firm* that consists of an actual holding of the underlying.

7.6.15 R Table: Option strategies

This table belongs to BIPRU 7.6.14R

Option strategy (and an example)	Notional option (and rule it must be treated under)
Bull Spread	One purchased *option*
(e.g. buy 100 call and sell 101 call)	(treat under BIPRU 7.6.20R)
Bear Spread	One written *option*
(e.g. sell 100 put and buy 101 put)	(treat under BIPRU 7.6.21R)
Synthetic Long Call	One purchased *option*
(e.g. long underlying and buy 100 put)	(treat under BIPRU 7.6.20R or BIPRU 7.6.24R)
Synthetic Short Call	One written *option*
(e.g. short underlying and sell 100 put)	(treat under BIPRU 7.6.21R or BIPRU 7.6.24R)
Synthetic Long Put	One purchased *option*
(e.g. short underlying and buy 100 call)	(treat under BIPRU 7.6.20R or BIPRU 7.6.24R)
Synthetic Short Put	One written *option*
(e.g. buy underlying and sell 100 call)	(treat under BIPRU 7.6.21R or BIPRU 7.6.24R)
Long Straddle	One purchased *option*
(e.g. buy 100 call and buy 100 put)	(treat under BIPRU 7.6.20R)
Short Straddle	One written *option*
(e.g. sell 100 call and sell 100 put)	(treat under BIPRU 7.6.21R but with no reduction for the amount the *option* is *out of the money*)
Long Strangle	One purchased *option*
(e.g. buy 101 call and buy 99 put)	(treat under BIPRU 7.6.20R)
Short Strangle	One written *option*
(e.g. sell 99 call and sell 101 put)	(treat under BIPRU 7.6.21R but with no reduction for the amount the *option* is *out of the money*)
Long Butterfly	One purchased *option*
(e.g. buy one 100 call, sell two 101 calls, and buy one 102 call)	(treat under BIPRU 7.6.20R)
Short Butterfly	One written *option*
(e.g. sell one 100 put, buy two 101 puts, and sell one 102 put)	(treat under BIPRU 7.6.21R but with no reduction for the amount the *option* is *out of the money*)

The option PRR for an individual positions

7.6.16 R A *firm* must calculate the *option PRR* for each individual derived *option position* using the method specified in the table in ■ BIPRU 7.6.18R, or, if more than one method is permitted, using one of those methods.

7.6.17 R A *firm* must convert its *positions* into its *base currency* in accordance with the procedures that apply for whichever of the other *PRR charges* is appropriate (see ■ BIPRU 7.2.1R(3), ■ BIPRU 7.3.1R(2), ■ BIPRU 7.4.1R(3), ■ BIPRU 7.5.19R(2), ■ BIPRU 7.5.20R(3) and ■ BIPRU 7.7.1R(3)).

7.6.18 R Table: Option PRR: methods for different types of option

This table belongs to ■ BIPRU 7.6.16R

Option	Description	Method
American *option*	An *option* that may be exercised at any time over an extended period up to its expiry date.	*Option standard method* or *option hedging method* if appropriate
European *option*	An *option* that can only be exercised at expiry.	
Bermudan *option*	A cross between an American *option* and European *option*. The Bermudan *option* can only be exercised at specific dates during its life.	
Asian *option*	The buyer has the right to exercise at the average rate or price of the underlying over the period (or part of the period) of the *option*. One variant is where the payout is based on the average of the underlying against a fixed strike price; another variant is where the payout gives at expiry the price of the underlying against the average price over the *option* period.	*Option standard method* or *option hedging method* if appropriate
Barrier *option*	An *option* which is either cancelled or activated if the price of the underlying reaches a pre-set level regardless of the price at which the underlying may be trading at the expiry of the *option*. The knock-out type is cancelled if the underlying price or rate trades through the	

Option	Description	Method
	trigger; while the knock-in becomes activated if the price moves through the trigger.	
Corridor *option*	Provides the holder with a pay-out for each day that the underlying stays within a defined range chosen by the investor.	
Ladder *option*	Provides the holder with guaranteed pay-outs if the underlying trades through a pre-agreed price(s) or rate(s) at a certain point(s) in time, regardless of future performance.	
Lock-in *option*	An *option* where the pay-out to the holder is locked in at the maximum (or minimum) value of the underlying that occurred during the life of the *option*.	
Look-back *option*	A European style *option* where the strike price is fixed in retrospect, that is at the most favourable price (i.e. the lowest (highest) price of the underlying in the case of a call (put)) during the life of the *option*.	
Forward starting *option*	An *option* that starts at a future date.	
Compound *option*	An *option* where the underlying is itself an *option* (i.e. an *option* on an *option*).	*Option standard method* or *option hedging method* if appropriate
Interest rate cap	An interest rate *option* or series of *options* under which a counterparty contracts to pay any interest costs arising as a result of an increase in rates above an agreed rate: the effect being to provide protection to the holder against a rise above that agreed interest rate.	*Option standard method*, but no reduction for the amount the *option* is *out of the money* is permitted
Interest rate floor	An interest rate *option* or series of *options* under which a counter-	

Option	Description	Method
	party contracts to pay any lost income arising as a result of a fall in rates below an agreed rate: the effect being to provide protection to the holder against a fall below that agreed interest rate.	
Performance *option*	An *option* based on a reference basket comprising any number of assets, where the payout to the holder could be one of the following: the maximum of the worst performing asset, or 0; the maximum of the best performing asset, or 0; the maximum of the spreads between several pairs of the assets, or 0.	*Option standard method* or *option hedging method* - using the highest *position risk adjustment* of the individual assets in the basket
Quanto	Quanto stands for "Quantity Adjusted *Option*". A quanto is an instrument where two currencies are involved. The payoff is dependent on a variable that is measured in one of the currencies and the payoff is made in the other currency.	Subject to BIPRU 7.6.31R, the *option standard method*
Cliquet *option*	A cliquet *option* consists of a series of forward starting *options* where the strike price for the next exercise date is set equal to a positive constant times the underlying price as of the previous exercise date. It initially acts like a vanilla *option* with a fixed price but as time moves on, the strike is reset and the intrinsic value automatically locked in at pre-set dates. If the underlying price is below the previous level at the reset date no intrinsic value is locked in but the strike price will be reset to the current price attained by the underlying. If the underlying	*Option standard method* for a purchased cliquet, or the method specified in BIPRU 7.6.30R for a written cliquet

Option	Description	Method
	price exceeds the current level at the next reset the intrinsic value will again be locked in.	
Digital *option*	A type of *option* where the pay-out to the holder is fixed. The most common types are all-or-nothing and one-touch *options*. All-or-nothing will pay out the fixed amount if the underlying is above (call) or below (put) a set value at expiry. The one-touch will pay the fixed amount if the underlying reaches a fixed point any time before expiry.	The method specified in BIPRU 7.6.29 R
Any other *option* or *warrant*		The method specified for the type of instrument whose description it most closely resembles.

7.6.19 G

(1) The *option standard method* is described in ■ BIPRU 7.6.20R - ■ BIPRU 7.6.22R.

(2) The *option hedging method* is described in ■ BIPRU 7.6.23G - ■ BIPRU 7.6.28R.

The standard method: Purchased options and warrants

7.6.20 R

Under the *option standard method*, the *PRR* for a purchased *option* or *warrant* is the lesser of:

(1) the market value of the derived *position* (see ■ BIPRU 7.6.9R) multiplied by the *appropriate position risk adjustment* (see ■ BIPRU 7.6.8R); and

(2) the market value of the *option* or *warrant*.

The standard method: Written options and warrants

7.6.21 R

Under the *option standard method*, the *PRR* for a written *option* or *warrant* is the market value of the derived *position* (see ■ BIPRU 7.6.9R) multiplied by the *appropriate position risk adjustment* (see ■ BIPRU 7.6.8R). This result may be reduced by the amount the *option* or *warrant* is *out of the money* (subject to a maximum reduction to zero).

The standard method: Underwriting or sub-underwriting an issue of warrants

7.6.22 R Under the *option standard method*, the *PRR* for *underwriting* or sub-*underwriting* an issue of *warrants* is the *net underwriting position* (or *reduced net underwriting position*) multiplied by the current market price of the underlying *securities* multiplied by the *appropriate position risk adjustment*, but the result can be limited to the value of the *net underwriting position* (or *reduced net underwriting position*) calculated using the issue price of the *warrant*.

The hedging method

7.6.23 G The *option hedging method* involves the *option PRR* being calculated on a combination of the *option* and its hedge.

7.6.24 R Under the *option hedging method* a *firm* must calculate the *option PRR* for individual *positions* as follows:

(1) for an *option* or *warrant* on an *equity*, basket of *equities* or *equity* index and its *equity* hedge(s), the *firm* must, to the extent specified or permitted in the table in ■ BIPRU 7.6.26R, use the calculation in the table in ■ BIPRU 7.6.27R;

(2) for an *option* or *warrant* on a debt *security*, basket of debt *securities* or debt *security* index and its debt *security* hedge(s), the *firm* must, to the extent specified or permitted in the table in ■ BIPRU 7.6.26R, use the calculation in the table in ■ BIPRU 7.6.27R;

(3) for an *option* on gold and its gold hedge, the *firm* must, to the extent specified or permitted in the table in ■ BIPRU 7.6.26R, use the calculation in the table in ■ BIPRU 7.6.27R; and

(4) for an *option* on a currency and its currency hedge, the *firm* must, to the extent specified or permitted in the table in ■ BIPRU 7.6.26R, use the calculation in the table in ■ BIPRU 7.6.28R.

7.6.25 R (1) A *firm* may not use the *option hedging method* for:

(a) an interest rate *option* and its hedge; or

(b) a *commodity option* and its hedge; or

(c) a *CIU option* and its hedge.

(2) A *firm* may only use the *option hedging method* if the item underlying the *option* or *warrant* is the same as the hedge of the *option* or *warrant* under the *PRR identical product netting rules*.

7.6.26 R Table: Appropriate treatment for equities, debt securities or currencies hedging options

This table belongs to ■ BIPRU 7.6.24R

Hedge	PRR calculation for the hedge	Limits (if hedging method is used)	Naked *position*
An *equity* (hedging an *option* or *warrant*)	The *equity* must be treated in either BIPRU 7.3 (equity *PRR*) or the *option hedging method* (see the table in BIPRU 7.6.27R)	The *option hedging method* must only be used up to the amount of the hedge that matches the notional amount underlying the *option* or *warrant*	To the extent that the amount of the hedge (or *option* or *warrant*) exceeds the notional amount underlying the *option* or *warrant* (or hedge), a *firm* must apply an *equity PRR*, interest rate *PRR* or *foreign currency PRR* (or the *option standard method*)
A debt *security* (hedging an *option* or *warrant*)	The debt *security* must be treated in BIPRU 7.2 (interest rate PRR) or the *option hedging method* (see the table in BIPRU 7.6.27R)	As for the first row	As for the first row
Gold (hedging a gold *option*)	The gold must be treated in either BIPRU 7.5 (Foreign currency PRR) or the *option hedging method* (see the table in BIPRU 7.6.27R)	As for the first row	As for the first row
A currency or currencies (hedging a currency *option*)	The currency must be treated in either BIPRU 7.5 (Foreign currency PRR) or the *option hedging method* (see the table in BIPRU 7.6.28R)	As for the first row	As for the first row

7.6.27 R Table: The hedging method of calculating the PRR (equities, debt securities and gold)

This table belongs to ■ BIPRU 7.6.24R(1) - ■ (3)

	PRR			
	Option or *warrant position*	*In the money* by more than the *position risk adjustment*	*In the money* by less than the *position risk adjustment*	*Out of the money* or *at the money*
Long in *security* or gold	Long put	Zero	Wp	X
	Short call	Y	Y	Z

PRR				
Short in *security* or gold	Long call	Zero	Wc	X
	Short put	Y	Y	Z
Where:				
Wp means	{(*position risk adjustment*-100%) x The underlying *position* valued at strike price}	+		The market value of the underlying *position*
Wc means	{(100% +*position risk adjustment* x The underlying *position* valued at strike price}	-		The market value of the underlying *position*
X means	The market value of the underlying *position* multiplied by the *appropriate position risk adjustment*			
Y means	The market value of the underlying *position* multiplied by the *appropriate position risk adjustment*. This result may be reduced by the market value of the *option* or *warrant*, subject to a maximum reduction to zero.			
Z means	The *option hedging method* is not permitted; the *option standard method* must be used.			

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7.6.28 R Table: The hedging method of calculating the PRR (currencies)

This table belongs to ■ BIPRU 7.6.24R(4)

PRR			
Option position	*In the money* by more than 8%	*In the money* by less than 8%	*Out of the money* or *at the money*
Long calls & long puts	Zero	W_L	X
Short calls & short puts	Zero	Y	X
Where:			
W_L means	(1.08% x U)	-	The market value of the underlying *position*
U means	The amount of the underlying currency that the *firm* will receive if the *option* is exercised, converted at the strike price into the currency that the *firm* will sell if the *option* is exercised		
X means	The market value of the underlying *position* multiplied by 8%.		
Y means	The market value of the underlying *position* multiplied by 8%. This result may be reduced by the market value of the *option*, subject to a maximum reduction to zero.		

Specific methods and treatments: Digital options

7.6.29 R The *option PRR* for a digital *option* is the maximum loss of the *option*.

Specific methods and treatments: Written cliquet options

7.6.30 R The *option PRR* for a written cliquet *option* is the market value of the derived *position* (see ■ BIPRU 7.6.9R) multiplied by the *appropriate position risk adjustment* (see ■ BIPRU 7.6.8R) multiplied by F+1 (see the following provisions of this paragraph). This result may be reduced by the amount the *option* is *out of the money* (subject to a maximum reduction to zero). The *option PRR* for a written cliquet *option* is therefore defined by the following formula:

[*position risk adjustment* * underlying * (F + 1)] - OTM

where:

(1) $$F = \min\left[FR, \max\left(\frac{FR}{2}, Y\right)\right]$$

(2) FR= Number of forward re-sets

(3) Y= Years to maturity

(4) OTM= the amount by which the *option* is *out of the money*

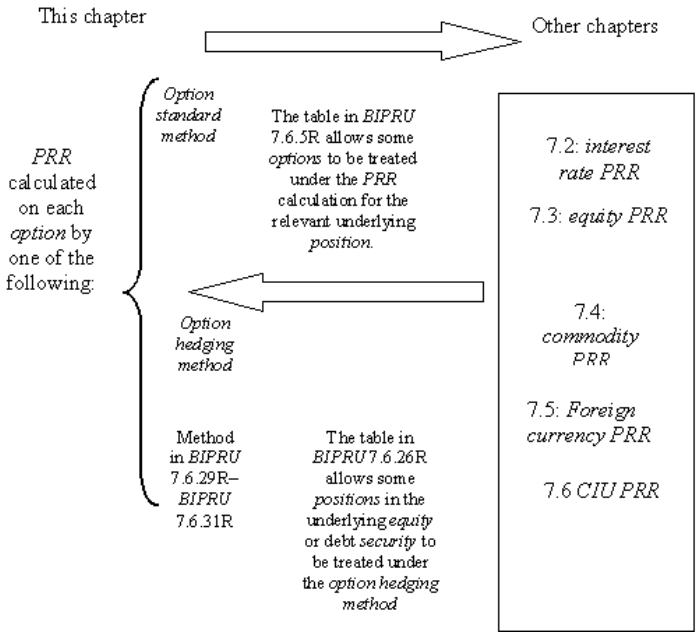
Specific methods and treatments: Quantos

7.6.31 R If the pay-out to the holder of a quanto *option* is fixed at the inception of the transaction a *firm* must add 8% to the *position risk adjustment* when applying the *option standard method*.

Interaction with other chapters

7.6.32 G The application of an *option PRR* to a *position* does not prevent any of the other *PRR charges* from applying if they would otherwise do so. In particular if a *firm* applies an *option PRR* to an *equity derivative* an *interest rate PRR* will also generally apply.

7.6.33 G The following diagram illustrates the relationship between ■ BIPRU 7.6 and the rest of ■ BIPRU 7.



Options on a commodity

7.6.34 R ■ BIPRU 7.4.38R to ■ BIPRU 7.4.41R (Liquidity and other risks) apply to *commodity options* treated under ■ BIPRU 7.6 as well as to those treated under ■ BIPRU 7.4 (Commodity PRR).

Options on a CIU

7.6.35 R For the purpose of identifying the appropriate treatment for the purpose of ■ BIPRU 7.6.5R, the underlying *position* for the purpose of ■ BIPRU 7.6.8R and the derived *position* under ■ BIPRU 7.6.13R a *firm* may choose between treating an *option* on a *CIU* as being:

(1) a *position* in the *CIU* itself; or

(2) (if the conditions in ■ BIPRU 7.7 (Position risk requirements for collective investment undertakings) for the use of the method in question are satisfied) *positions* in the underlying investments or assumed *positions* arising through the use of the *standard CIU look through method* or the *modified CIU look through method*.

7.6.36 G (1) This paragraph gives an example of how the *appropriate position risk adjustment* should be calculated for the purpose of deciding whether or not an *option* on a *CIU* is sufficiently *in the money* for the *firm* to have a choice whether or not to apply an *option PRR*. This example assumes that there is no leveraging (see ■ BIPRU 7.7.11R (CIU modified look through method)).

(2) Say that the *CIU* contains underlying *equity position* and the *firm* is using one of the *CIU look through methods*. The *appropriate position risk adjustment* for some is 8% and for the others is 12%. The *firm* should identify the highest *appropriate position risk adjustment* for the underlyings. In this case it is 12%. Therefore in this case the

option would need to be *in the money* by more than 12% in order for the *firm* to have a choice between applying the *option PRR* or one of the other *PRR charges*.

(3) However if the *firm* is not using one of the *CIU look through methods* the *option* would need to be *in the money* by more than 32% in order for the *firm* to have a choice between applying the *option PRR* or the *CIU PRR*.

7.6.37 G ■ BIPRU 7.6.10R - ■ BIPRU 7.6.12R are subject to ■ BIPRU 7.7.3R (netting). ■ BIPRU 7.7.4R (use of third party) applies for the purpose of ■ BIPRU 7.6.

7.7 Position risk requirements for collective investment undertakings

Collective investment undertaking PRR calculation

7.7.1 R A *firm* must calculate its *CIU PRR* by:

(1) identifying which *CIU positions* must be included within the scope of the *PRR* calculation (see ■ BIPRU 7.7.2R);

(2) identifying which *CIU positions* are to be subject to the *CIU PRR* and which *positions* are to be subject to one of the other *PRR charges*;

(3) converting on a daily basis net *positions* into the *firm's base currency* at the prevailing spot exchange rate before their aggregation;

(4) calculating an individual *PRR* for each *position* in a *CIU* (see ■ BIPRU 7.7.5R);

(5) summing the resulting individual *PRRs*.

Scope of the PRR calculation for collective investment undertakings

7.7.2 R

(1) A *firm's PRR* calculation must include all *trading book positions* in *CIUs*.

(2) A *firm's CIU PRR* calculation must include all *trading book positions* in *CIUs* unless they are treated under one of the *CIU look through methods* and included in the *PRR* calculations for the relevant underlying investments or subject to an *option PRR*.

(3) A *firm's PRR* calculation for *CIUs* must include notional *positions* arising from *trading book positions* in *options* or *warrants* on *collective investment undertakings*.

General rules

7.7.3 R Unless noted otherwise, no netting is permitted between the underlying investments of a *CIU* and other *positions* held by a *firm* for the purposes of calculating the *PRR charge* for a *position* in a *CIU*.

7.7.4 R A *firm* may rely on a third party to calculate and report *PRR* capital requirements for *position* risk (*general market risk* and *specific risk*) for *positions* in *CIUs* falling within ■ BIPRU 7.7.9R and ■ BIPRU 7.7.11R, in

accordance with the methods set out in ■ BIPRU 7.7, provided that the correctness of the calculation and the report is adequately ensured.

Calculation of the collective investment undertaking PRR

7.7.5 R Without prejudice to other provisions in ■ BIPRU 7.7, a *position* in a *CIU* is subject to a *collective investment undertaking PRR* (*general market risk* and *specific risk*) of 32%. Without prejudice to provisions in ■ BIPRU 7.5.18R (*Foreign currency PRR* for *CIUs*) or, if the *firm* has a *VaR model permission*, ■ BIPRU 7.10.44R (*Commodity* risks and *VaR models*) taken together with ■ BIPRU 7.5.18R, where the modified gold treatment set out in those *rules* is used, a *position* in a *CIU* is subject to a *securities PRR* requirement for *position* risk (*general market risk* and *specific risk*) and a *foreign currency PRR* of no more than 40%.

Look through methods: General criteria

7.7.6 R A *firm* may determine the *securities PRR* requirement for *positions* in *CIUs* which meet the criteria set out in ■ BIPRU 7.7.7R, by one of the following methods:

(1) the *standard CIU look through method* (■ BIPRU 7.7.4R and ■ BIPRU 7.7.7R - ■ BIPRU 7.7.10R); or

(2) the *modified CIU look through method* (■ BIPRU 7.7.4R, ■ BIPRU 7.7.7R - ■ BIPRU 7.7.8R and ■ BIPRU 7.7.11R - ■ BIPRU 7.7.12R).

7.7.7 R The general eligibility criteria for using the methods in ■ BIPRU 7.7.4R and ■ BIPRU 7.7.9R - ■ BIPRU 7.7.11R, for *CIUs* issued by *companies* supervised or incorporated within the *UK* are that:

(1) the *CIU's* prospectus or equivalent document must include:

(a) the categories of assets the *CIU* is authorised to invest in;

(b) if investment limits apply, the relative limits and the methodologies to calculate them;

(c) if leverage is allowed, the maximum level of leverage; and

(d) if investment in OTC financial derivatives or repo-style transactions are allowed, a policy to limit counterparty risk arising from these transactions;

(2) the business of the *CIU* must be reported in half-yearly and annual reports to enable an assessment to be made of the assets and liabilities, income and operations over the reporting period;

(3) the units/shares of the *CIU* are redeemable in cash, out of the *undertaking's* assets, on a daily basis at the request of the Unitholder;

(4) investments in the *CIU* must be segregated from the assets of the *CIU* manager; and

(5) there must be adequate risk assessment, by the investing *firm*, of the *CIU*.

7.7.8 R Third country *CIUs* are eligible if the requirements in ■ BIPRU 7.7.7R (1) - ■ BIPRU 7.7.7R (5) are met.

Standard CIU look through method: General

7.7.9 R

(1) Where a *firm* is aware of the underlying investments of the *CIU* on a daily basis the *firm* may look through to those underlying investments in order to calculate the *securities PRR* for *position* risk (*general market risk* and *specific risk*) for those *positions* in accordance with the methods set out in the *securities PRR* requirements or, if the *firm* has a *VaR model permission*, in accordance with the methods set out in ■ BIPRU 7.10 (Use of a Value at Risk Model).

(2) Under this approach, *positions* in *CIUs* must be treated as *positions* in the underlying investments of the *CIU*. Netting is permitted between *positions* in the underlying investments of the *CIU* and other *positions* held by the *firm*, as long as the *firm* holds a sufficient quantity of units to allow for redemption/creation in exchange for the underlying investments.

Standard CIU look through method: Index or basket funds

7.7.10 R

(1) A *firm* may calculate the *securities PRR* for *position* risk (*general market risk* and *specific risk*) for *positions* in *CIUs* in accordance with the methods set out in the *securities PRR* requirements or, if the *firm* has a *VaR model permission*, in accordance with the methods set out in ■ BIPRU 7.10 (Use of a Value at Risk Model), to assumed *positions* representing those necessary to replicate the composition and performance of the externally generated index or fixed basket of *equities* or *debt securities* referred to in (a), subject to the following conditions:

(a) the purpose of the *CIU's* mandate is to replicate the composition and performance of an externally generated index or fixed basket of *equities* or *debt securities*; and

(b) a minimum correlation of 0.9 between daily price movements of the *CIU* and the index or basket of *equities* or *debt securities* it tracks can be clearly established over a minimum period of six months.

(2) Correlation as referred to in (1)(b) means the correlation coefficient between daily returns on the *CIU* and the index or basket of *equities* or *debt securities* it tracks.

CIU modified look through method

7.7.11 R Where a *firm* is not aware of the underlying investments of the *CIU* on a daily basis, the *firm* may calculate the *securities PRR* for *position* risk (*general market risk* and *specific risk*) in accordance with the methods set out in the *securities PRR* requirements, subject to the following conditions:

(1) it must be assumed that the *CIU* first invests to the maximum extent allowed under its mandate in the asset classes attracting the highest *securities PRR* for *position* risk (*general market risk* and *specific risk*), and then continues making investments in descending order until the maximum total investment limit is reached;

(2) the *firm* must take account of the maximum indirect exposure that it could achieve by taking leveraged *positions* through the *CIU* when calculating its *securities PRR* for *position* risk, by proportionally increasing the *position* in the *CIU* up to the maximum exposure to the underlying investment items resulting from the investment mandate; and

(3) should the *securities PRR* for *position* risk (*general market risk* and *specific risk*) under this approach exceed that set out in ■ BIPRU 7.7.5R, the *PRR charge* must be capped at that level.

7.7.12 R For the purpose of ■ BIPRU 7.7.11R (1) the *position* in the *CIU* must be treated as a direct holding in the assumed *position*.

CAD 1 models and VaR models

7.7.13 G Where ■ BIPRU 7.7 permits a *firm* to calculate the *PRR charge* for a *position* in a *CIU* using the *rules* in ■ BIPRU 7 relating to the underlying investment, a *firm* that has:

(1) a *CAD 1 model waiver* that covers *positions* in *CIUs* may use the *rules* as modified by that *waiver*; and

(2) a *VaR model permission* that covers *positions* in *CIUs* may use its *VaR model*.

Options on a CIU

7.7.14 G An *option* on a *CIU* should be treated in accordance with ■ BIPRU 7.6.35R to ■ BIPRU 7.6.37G (Options on a CIU).

7.8 Securities underwriting

General rules

7.8.1 G ■ BIPRU 7.8 sets out the method for calculating a *net underwriting position* or *reduced net underwriting position*, which is then included in the *PRR* calculation in other parts of ■ BIPRU 7. It also deals with concentration risk. ■ BIPRU 7.8 only relates to new *securities*, which is defined in ■ BIPRU 7.8.12R.

7.8.2 R A *firm* which *underwrites* or sub-*underwrites* an issue of *securities* must, for the purposes of calculating its market risk capital component:

(1) identify commitments to *underwrite* or sub-*underwrite* which give rise to an *underwriting position* (see ■ BIPRU 7.8.8R);

(2) identify the time of *initial commitment* (see ■ BIPRU 7.8.13R); and

(3) calculate the *net underwriting position* (set out in ■ BIPRU 7.8.17R), *reduced net underwriting position* or the *net underwriting exposure*.

7.8.3 R A *firm* must include the *net underwriting position* or *reduced net underwriting position* in whichever one or more of the following is or are relevant:

(1) ■ BIPRU 7.2.3R (1) where debt *securities* are being underwritten;

(2) ■ BIPRU 7.3.2R (1) where *equities* are being underwritten;

(3) ■ BIPRU 7.6.22R where *warrants* are being underwritten; and

(4) ■ BIPRU 7.5.3R where the *equities*, debt *securities* or *warrants* being underwritten are denominated in a *foreign currency*.

7.8.4 R A *firm* must comply with ■ BIPRU 7.8.3R from *initial commitment* (as determined under ■ BIPRU 7.8.8R) until the end of the fifth *business day* after *working day 0* (as determined under ■ BIPRU 7.8.23R).

7.8.5 G Sub-*underwriting* is a commitment given by one *firm* to someone other than the issuer or seller of the *securities* to sub-underwrite all or part of an issue of *securities*.

7.8.6 G The *net underwriting position* calculated in ■ BIPRU 7.8.17R will also be used in calculating the *net underwriting exposure* under ■ BIPRU 7.8.34R.

7.8.7 G The *net underwriting position* or *reduced net underwriting position* arising from *underwriting* or sub-*underwriting* a rights or *warrants* issue should be calculated using the current market price of the underlying *security* for the purposes of the *equity PRR* or *option PRR*. However, the *PRR* will be limited to the value of the *net underwriting position* calculated using the initial issue price of the rights or *warrants*. Where there is no market price because the rights or *warrants* are in relation to a new class of *securities* and the initial price has not been set the *net underwriting position* or *reduced net underwriting* is the amount of the commitment.

Commitment to underwriting securities

7.8.8 R

(1) For the purpose of ■ BIPRU 7.8.2R (1), a *firm* has a commitment to *underwrite* or sub-*underwrite* an issue of *securities* where:

(a) it gives a commitment to an issuer of *securities* to *underwrite* an issue of *securities*; or

(b) (where ■ BIPRU 7.8.12R (2) applies) it gives a commitment to a seller of *securities* to *underwrite* a sale of those *securities*;

(c) it gives a commitment to a *person*, other than the issuer of *securities* or, if ■ BIPRU 7.8.12R (2) applies, the seller of the *securities*, to sub-*underwrite* an issue of *securities*; or

(d) it is a member of a syndicate or group that gives a commitment of the type described in (1)(a)-(c).

(2) Unless a *rule* deals with them separately or the context otherwise requires, a provision of ■ BIPRU 7.8 that deals with *underwriting* also applies to sub-*underwriting*.

Exclusions from BIPRU 7.8

7.8.9 G

(1) Block trades, including bought deals, and private placements are not within the scope of ■ BIPRU 7.8 because they involve an outright purchase by the *firm* of the relevant *securities*.

(2) For the purpose of ■ BIPRU 7.8 *securities* include debt and *equity* instruments and *convertibles* but excludes loans.

Grey market transactions

7.8.10 R

(1) A *firm* that buys and sells *securities* before issue is dealing in the grey market for the purposes of ■ BIPRU 7.8.

(2) ■ BIPRU 7.8 does not apply to a *firm* with respect to its dealings in the grey market unless the *firm*:

(a) has an *underwriting* commitment to the issuer in respect of those *securities*; or

(b) has a sub-*underwriting* commitment in respect of those *securities* and is using the grey market solely for the purpose of reducing that sub-*underwriting* commitment.

(3) ■ BIPRU 7.8 does not apply to a *firm* with respect to its dealings in the grey market if the transaction is undertaken by the proprietary trading part of the *firm* or is undertaken for proprietary trading purposes.

(4) ■ BIPRU 7.8 does not apply to a *firm* with respect to its dealings in the grey market except as described in ■ BIPRU 7.8.17R.

7.8.11 G In ■ BIPRU 7.8 the grey market is the market in which dealers "buy" and "sell" *securities* ahead of issue. In reality the dealers are buying and selling promises to deliver the *securities* when issued.

New securities

7.8.12 R For the purposes of ■ BIPRU 7.8, a *firm* must treat *securities* as being new for the purposes of the definition of *underwriting* if they are:

(1) *securities* that, prior to the allotment following the *underwriting*, were not in issue; or

(2) *securities* that do not fall within (1) but that have not previously been offered for sale or subscription to the public and have not been admitted to trading on a market operated by a *recognised investment exchange* or an *overseas investment exchange*.

Time of initial commitment

7.8.13 R Subject to ■ BIPRU 7.8.14R, the time of *initial commitment* is the earlier of:

(1) (in the case of *underwriting*) the time the *firm* agrees with the issuer of *securities* to *underwrite* those *securities*; or

(2) (in the case of *underwriting* falling under ■ BIPRU 7.8.12R (2)) the time the *firm* agrees with the seller of *securities* to *underwrite* those *securities*; or

(3) (in the case of sub-*underwriting*) the time the *firm* agrees with the *person* referred to ■ BIPRU 7.8.8R (1)(c) to sub-*underwrite* those *securities*; or

(4) (in the case of ■ BIPRU 7.8.8R (1)(d)) the time the group or syndicate in question (or a member of that group or syndicate on behalf of the others) agrees with the issuer or other *person* to whom the commitment is given as referred to in ■ BIPRU 7.8.8R (1)(d) to *underwrite* or sub-*underwrite* the *securities* in question; or

(5) (if the *firm* at that time has a commitment, whether legally or binding or not) the time the price and allocation of the issue or offer are set.

7.8.14 R If a *firm* has an irrevocable and unfettered right to withdraw from an *underwriting* commitment, exercisable within a certain period, the commitment commences (and thus the time of *initial commitment* occurs) when that right expires.

7.8.15 G Subject to the existence of a right described in ■ BIPRU 7.8.14R an *underwriting* commitment commences even if it is subject to formal, legal or other conditions that would normally be expected to be satisfied.

7.8.16 G A force majeure or material adverse change clause would not be a right of the sort referred to in ■ BIPRU 7.8.14R.

Calculating the net underwriting position

7.8.17 R A *firm* must calculate a *net underwriting position* by adjusting the gross amount it has committed to *underwrite* for:

(1) any sales or sub-*underwriting* commitments received that have been confirmed in writing at the time of *initial commitment* (but excluding any sales in the grey market as defined in ■ BIPRU 7.8.10R (1));

(2) any *underwriting* or sub-*underwriting* commitments obtained from others since the time of *initial commitment*;

(3) any purchases or sales of the *securities* since the time of *initial commitment* (other than purchases or sales in the grey market as defined in ■ BIPRU 7.8.10R (1));

(4) (in the case of sales in the grey market as defined in ■ BIPRU 7.8.10R (1)) any sales of the *securities* as at the time of *initial commitment* or since the time of *initial commitment* subject, in both cases, to the following conditions:

(a) any sales of the *securities* as at the time of *initial commitment* must be confirmed in writing at the time of *initial commitment*; and

(b) sales must be net of any purchases in the grey market as defined in ■ BIPRU 7.8.10R (1); and

(5) any allocation of *securities* granted or received, arising from the commitment to *underwrite* the *securities*, since the time of *initial commitment*.

7.8.18 R If the allocation of *securities* has not been fixed a *firm* must calculate the gross amount of its commitment, for the purposes of ■ BIPRU 7.8.17R, by reference to the maximum amount it has committed to *underwrite* until the time the allocation is set.

7.8.19 R An *underwriting* commitment may only be reduced under ■ BIPRU 7.8.17R on the basis of a formal agreement.

7.8.20 G Allocations may arise, after date of *initial commitment*, from the agreement to *underwrite*. For example obligations or rights may be allocated to or from the issuer, the *underwriting* group or syndicate.

Over-allotment options

7.8.21 R

(1) This *rule* deals with the treatment of short *positions* that arise when a *firm* commits to distribute *securities* that it is *underwriting* in an amount that exceeds the allocation to the *firm* made by the issuer of the *securities* being *underwritten*.

(2) When calculating its *net underwriting position*, a *firm* may use an over-allotment option granted to it by the issuer of the *securities* being *underwritten* to reduce the short *positions* in (1).

(3) A *firm* may also use an over-allotment option granted to another member of the *underwriting* syndicate for the purpose in (2).

(4) (2) and (3) only apply from *working day 0*.

(5) (2) and (3) only apply to the extent that the treatment is consistent with the terms of the over-allotment option.

7.8.22 R

Except as provided in ■ BIPRU 7.8.21R, a *firm* must not take into account an over-allotment option granted to it or another member of the *underwriting* syndicate in calculating its *net underwriting position*.

Working day 0

7.8.23 R

For the purposes of ■ BIPRU 7.8 *working day 0* is the *business day* on which a *firm* that is *underwriting* or sub-*underwriting* becomes unconditionally committed to accepting a known quantity of *securities* at a specified price.

7.8.24 G

For debt issues and *securities* which are issued in a similar manner, *working day 0* is the later of the date on which the *securities* are allotted and the date on which payment for them is due.

7.8.25 G

For *equity* issues and *securities* which are issued in a similar manner, *working day 0* is the later of the date on which the offer becomes closed for subscriptions and the date on which the allocations are made public.

7.8.26 G

For rights issues, *working day 0* is the first day after the date on which the offer becomes closed to acceptances for subscription.

Calculating the reduced net underwriting position

7.8.27 R

To calculate the *reduced net underwriting position* a *firm* must apply the reduction factors in the table in ■ BIPRU 7.8.28R to the *net underwriting position* (calculated under ■ BIPRU 7.8.17R) as follows:

(1) in respect of debt *securities*, a *firm* must calculate two *reduced net underwriting positions*; one for inclusion in the *firm's interest rate PRR specific risk* calculation (■ BIPRU 7.2.43R), the other for inclusion in its *interest rate PRR general market risk* calculation (■ BIPRU 7.2.52R); and

(2) in respect of *equities*, a *firm* must calculate only one *reduced net underwriting position*, and then include it in the *simplified equity method* (see ■ BIPRU 7.3.29R).

7.8.28 R Table: Net underwriting position reduction factors

This table belongs to ■ BIPRU 7.8.27R

Underwriting timeline	Debt: *General market risk*	Debt: *Specific risk*	Equity
Time of *initial commitment* until *working day 0*	0%	100%	90%
Working day 1	0%	90%	90%
Working day 2	0%	75%	75%
Working day 3	0%	75%	75%
Working day 4	0%	50%	50%
Working day 5	0%	25%	25%
Working day 6 and onwards	0%	0%	0%

7.8.29 G The table in ■ BIPRU 7.8.30G gives an example of the *reduced net underwriting position* calculation. The example is based on the *firm* starting with a commitment to underwrite £100 million of a new *equity* issue. *Firms* are reminded that in the case of an *equity*, the *reduced net underwriting position* should be treated under the *simplified equity method* (see ■ BIPRU 7.8.27R (Simplified and standard equity methods) and ■ BIPRU 7.8.27R).

7.8.30 G Table: Example of the reduced net underwriting position calculation

This table belongs to ■ BIPRU 7.8.29G

Time	*Net underwriting position* (see BIPRU 7.8.17R)			Percentage reduction (see BIPRU 7.8.28R)	*Reduced net under-writing position*
At *initial commit-ment* 9.00am Monday	£100m gross amount is reduced by £20m due to sales/ sub-*under-writing* commit-ments confirmed in writing at the time of initial commit-ment (see BIPRU	=	£80m	90%	£8m

Time	*Net underwriting position* (see BIPRU 7.8.17R)			Percentage reduction (see BIPRU 7.8.28R)	*Reduced net underwriting position*
	7.8.17R (1)) and (4)).				
Post initial commitment 9.02am Monday	Remaining £80m is reduced by £40m due to further sales, sub-*underwriting* commitments obtained and allocations granted (see BIPRU 7.8.17R (2) - (5)).	=	£40m	90%	£4m
At the end of *working day* 1	Remaining £40m is reduced to £20m due to further sales.	=	£20m	90%	£2m
End of *working day* 3	Remaining £20m is reduced to £5m due to further sales.	=	£5m	75%	£1.25 m
End of *working day* 4	Remaining £5m is reduced to £2m due to further sales.	=	£2m	50%	£1m
End of *working day* 5	Remaining £2m is reduced to £1m due to further sales.	=	£1m	25%	£0.75 m
Start of *working day* 6	£1m remaining	=	£1m	0%	£1m

Large exposure risk from underwriting securities: Calculating the net underwriting exposure

7.8.31 R For the purposes of calculating the total amount of its *trading book exposures* to a *person* for concentration risk purposes, a *firm* must include *net underwriting exposure* to that *person*.

7.8.32 R A *firm* must include any other *exposures* arising out of *underwriting* (including any counterparty *exposures* to any sub-*underwriters*) for the purposes of calculating the total amount of its *trading book exposures* to a *person* for concentration risk purposes.

7.8.33 R [deleted]

7.8.34 R Except where otherwise specified by a *requirement* on its *Part 4A permission*, a *firm* must calculate the *net underwriting exposure* to an issuer by applying the relevant reduction factors in the table in ■ BIPRU 7.8.35R to its *net underwriting position* calculated under ■ BIPRU 7.8.17R.

7.8.35 R Table: Calculation of net underwriting exposure

This table belongs to ■ BIPRU 7.8.34R

Time	Reduction factor to be applied to net underwriting position
Initial commitment to *working day 0*	100%
Working day 0	100%
Working day 1	90%
Working day 2	75%
Working day 3	75%
Working day 4	50%
Working day 5	25%
Working day 6 onwards	0%

7.8.36 G The effect of ■ BIPRU 7.8.34R is that there is no concentration limit for *net underwriting exposures* between *initial commitment* and the end of *working day 0*, except where specified by a *requirement* on a *firm's Part 4A permission*.

Large exposure risk from underwriting securities: Monitoring and reporting concentration risk

7.8.37 R For the purposes of concentration risk monitoring only, a *firm* must report its *net underwriting exposure* both before and after the application of the reduction factors in the table in ■ BIPRU 7.8.35R.

Risk management

7.8.38 R A *firm* must take reasonable steps to establish and maintain such systems and controls to monitor and manage its *underwriting* and sub-*underwriting* business as are appropriate to the nature, scale and complexity of its *underwriting* and sub-*underwriting* business. In particular, a *firm* must have systems to monitor and control its *underwriting exposures* between the time of the *initial commitment* and *working day* one in the light of the nature of the risks incurred in the markets in question.

7.8.39 G A *firm* should take reasonable steps to:

(1) allocate responsibility for the management of its *underwriting* and sub-*underwriting* business;

(2) allocate adequate resources to monitor and control its *underwriting* and sub-*underwriting* business;

(3) satisfy itself that its systems to monitor *exposure* to counterparties will calculate, revise and update its *exposure* to each counterparty arising from its *underwriting* or sub-*underwriting* business;

(4) satisfy itself of the suitability of each *person* who performs functions for it in connection with the *firm's underwriting* and sub-*underwriting* business having regard to the *person's* skill and experience; and

(5) satisfy itself that its procedures and controls to monitor and manage its *underwriting* business address, on an on-going basis, the capacity of sub-*underwriters* to meet sub-*underwriting* commitments.

7.9 Use of a CAD 1 model

Introduction

7.9.1 G A *firm* is required under ■ GENPRU 2.1.52 R (Calculation of the *market risk* capital requirement) to calculate its *market risk capital requirement* using the rules in ■ BIPRU 7. However, the *appropriate regulator* may at the *firm's* request modify ■ GENPRU 2.1.52 R to allow the *firm* to calculate all or part of the *PRR* for the *positions* covered by that model by using a *CAD 1 model* (for *options* risk aggregation and/or interest rate pre-processing) or a *VaR model* (value at risk model) instead. ■ BIPRU 7.10 (Use of a Value at Risk Model) deals with *VaR model permissions*.

7.9.2 G The purpose of ■ BIPRU 7.9 is to provide *guidance* on the *appropriate regulator's* policy for granting *CAD 1 model waivers* under section 138A of the *Act* (Modification or waiver of rules). The policy recognises that *CAD 1 models* may vary across *firms* but, as a minimum, the *appropriate regulator* will need to be satisfied:

(1) about the quality of the internal controls and risk management relating to the model (see ■ BIPRU 7.9.19G - ■ BIPRU 7.9.23G for further details);

(2) about the quality of the model standards; and

(3) that the *CAD 1 model* captures and produces an accurate measure of the risks inherent in the portfolio covered by the *CAD 1 model* (see ■ BIPRU 7.9.25G - ■ BIPRU 7.9.53G for further details).

7.9.3 G ■ BIPRU 7.9 also explains how the output from the *CAD 1 model* is fed into the *market risk capital requirement* calculation.

7.9.4 G If a *CAD 1 model waiver* is granted by the *appropriate regulator*, the *waiver* will contain certain requirements. In order adequately to address individual circumstances, these may differ from what is set out in ■ BIPRU 7.9. The *waiver* will also identify the *rules* to which the *waiver* applies and the scope of model recognition granted to the *firm*.

7.9.5 G *Waivers* permitting the use of models in the calculation of *PRR* will not be granted if that would be contrary to *BIPRU*. When granting any '*waivers*' the *FCA* will have regard to the *CAD*. Accordingly, the only *waivers* permitting the use of models in calculating *PRR* that the *appropriate regulator* is likely to grant are CAD 1 model waivers and VaR model permissions.

Scope of CAD 1 models

7.9.6 G The *appropriate regulator* recognises two types of *CAD 1 model*. The table in ■ BIPRU 7.9.7G describes them.

7.9.7 G Table: Types of CAD 1 model

This table belongs to ■ BIPRU 7.9.6G

	Options risk aggregation models	Interest rate pre-processing models
Brief description and eligible instruments	Analyse and aggregate *options* risks for: • interest rate *options*; • *equity options*; • *foreign currency options*; • *commodity options*; and • *CIU options*.	May be used to calculate duration weighted *positions* for: • interest rate *futures*; • *forward rate agreements* (*FRAs*); • forward commitments to buy or sell debt *securities*; • *options*, *swaps* or *warrants* on interest rates or debt *securities* and *options* on such *swaps*; • amortising bonds; • *equity futures*, *forwards*, *warrants* and *options* (but only in relation to the interest rate risk inherent in these products); and • *foreign currency futures*, *forwards*, *swaps* and *options*, but only in relation to the interest rate risk inherent in these products.
The output and how it is used in the *PRR* calculation	Depending on the type of model and the requirements in the *CAD 1 model waiver* granted, the outputs from an *options* risk aggregation model are used as an input to the *market risk capital requirement* calculation.	Depending on the type of model and the requirements in the *CAD 1 model waiver* granted, the individual sensitivity figures produced by this type of *CAD 1 model* are either input into the calculation of *interest rate PRR* under the *interest rate duration method* (see BIPRU 7.2.63R) or are converted into notional *position* and input into the calculation of *interest rate PRR* under the *interest rate maturity method* (see BIPRU 7.2.59R).

7.9.8 G Currently the *appropriate regulator* only envisages allowing recognition for *options* on *CIUs* if the *CIU* satisfies one of the following conditions:

(1) it is a *regulated collective investment scheme*; or

(2) the *firm* can demonstrate that it has characteristics that are similar to or better than an *undertaking* in (1) from the point of view of transparency and liquidity.

The CAD 1 model waiver application and review process

7.9.9 G Details of the general *waiver* process are set out in ■ SUP 8 (Waiver and modification of rules). Further details of the *waiver* process applicable to certain *waivers* relating to BIPRU (including *CAD 1 model waivers*) can be found in ■ BIPRU 1.3 (Applications for advanced approaches). Because of the complexity of a *CAD 1 model waiver*, it is recommended that, as set out in ■ SUP 8.3.4 G and ■ BIPRU 1.3.21 G, a *firm* contact its usual contact at the *appropriate regulator* to discuss its proposed application. It should also be noted that the *waiver* recognition process in the case of a *CAD 1 model* may take longer than the timescales indicated in ■ SUP 8.3.5 G.

7.9.10 G In order to consider a *CAD 1 model waiver* request, the *appropriate regulator* may undertake a review to ensure that it is adequate and appropriate for the *PRR* calculation.

7.9.11 G The model review process may be conducted through a series of visits covering various aspects of the *firm's* control and IT environment. Before these visits the *appropriate regulator* may ask the *firm* to provide some information relating to its *waiver* request accompanied by some specified background material. The model review visits are organised on a timetable that allows a *firm* being visited sufficient time to arrange the visit and provide the appropriate pre-visit information.

7.9.12 G As part of the model review process, the following may be reviewed: organisational structure and personnel; details of the *firm's* market position in the relevant products; profit and risk information; valuation and reserving policies; operational controls; IT systems; model release and control procedures; risk management and control framework; risk appetite and limit structure and future developments relevant to model recognition.

7.9.13 G The *appropriate regulator* will normally require meetings with senior management and staff from the front office, financial control, risk management, operations, systems development, information technology and audit areas.

7.9.14 G A review by a *skilled person* may be used before a *CAD 1 model waiver* is granted to supplement the *waiver* process or after the *waiver* has been granted to review the *CAD 1 model*.

7.9.15 G If the *appropriate regulator* grants a *CAD 1 model waiver*, the *waiver* direction will specify the particular *rule* which has been modified, and set

out the requirements subject to which the *waiver* has been granted. These requirements may include:

(1) the details of the calculation of *PRR*;

(2) the *CAD 1 model waiver* methodology to be employed;

(3) the products covered by the model (e.g. *option* type, maturity, currency); and

(4) any notification requirements relating to the *CAD 1 model waiver*.

7.9.16 G Where a *firm* operates any part of its *CAD 1 model* outside the *United Kingdom*, the *appropriate regulator* may take into account the results of any review of that model carried out by any overseas regulator concerned. The *appropriate regulator* may wish to receive information directly from that regulator.

Maintenance of model recognition

7.9.17 G No changes should be made to a *CAD 1 model* unless the change is not material. Material changes to a *CAD 1 model* will require a renewed *waiver* to be issued. Materiality is measured from the time that the *waiver* is granted or, if the *waiver* has been varied in accordance with section 138A of the *Act*, any later time that may be specified in the *waiver* for these purposes. If a *firm* is considering making material changes to its *CAD 1 model*, then it should notify the *appropriate regulator* at once. If a *firm* wishes to change the products covered by the model it should apply for a variation of its *CAD 1 model waiver*.

7.9.18 G If the *CAD 1 model* ceases to meet the requirements of the *waiver*, the *firm* should notify the *appropriate regulator* at once. The *appropriate regulator* may then revoke the *waiver* unless it is varied in accordance with section 138A of the *Act*. If the *CAD 1 model waiver* contains conditions it is a condition of using the *CAD 1 model approach* that the *firm* should continue to comply with those conditions.

Risk management standards

7.9.19 G A *firm* with a complex portfolio is expected to demonstrate more sophistication in its modelling and risk management than a *firm* with a simple portfolio.

7.9.20 G A *firm* should be able to demonstrate that the risk management standards set out in ■ BIPRU 7.9 are satisfied by each legal entity with respect to which the *CAD 1 model approach* is being used (even though they are expressed to refer only to a *firm*). This is particularly important for *subsidiary undertakings* in *groups* subject to matrix management where the business lines cut across legal entity boundaries.

7.9.21 G (1) A *firm* should have a conceptually sound risk management system which is implemented with integrity and should meet the minimum standards set out in this paragraph.

(2) A *firm* should have a risk control unit that is independent of business trading units and reports directly to senior management. The unit should be responsible for designing and implementing the *firm's* risk management system. It should produce and analyse daily reports on the risks run by the business and on the appropriate measures to be taken in terms of the trading limits.

(3) A *firm's* senior management should be actively involved in the risk control process and the daily reports produced by the risk control unit should be reviewed by a level of management with sufficient authority to enforce reductions of *positions* taken by individual traders as well as in the *firm's* overall risk exposure.

(4) The risk control group should have a sufficient number of staff with appropriate skills in the use of models.

(5) A *firm* should have established procedures for monitoring and ensuring compliance with a documented set of appropriate internal policies and controls concerning the overall operation of the risk measurement and control framework. This should take into account the front, middle and back office functions.

(6) A *firm* should conduct, as part of its regular internal audit process, a review of the systems and controls relating to its *CAD 1 model*. This review should include the valuation process, compliance with the *CAD 1 model waiver's* scope and the activities of the business trading units and the risk control units. This review should be undertaken by staff independent of the areas being reviewed.

7.9.22 G In assessing whether the risk management and control framework is implemented with integrity, the *appropriate regulator* will consider the IT systems used to run the *CAD 1 model* and associated calculations. The assessment will include, where appropriate:

(1) feeder systems; risk aggregation systems; the integrity of the data (i.e. whether it is complete, coherent and correct); reconciliations and checks on completeness of capture; and

(2) system development, change control and documentation; security and audit trails; system availability and contingency procedures; network adequacy.

7.9.23 G A *firm* should take appropriate steps to ensure that it has adequate controls relating to:

(1) the derivation of the *PRR* from the *CAD 1 model* output;

(2) *CAD 1 model* development, including independent validation;

(3) reserving;

(4) valuation (see ■ GENPRU 1.3 (Valuation)), including independent validation; and

(5) the adequacy of the IT infrastructure.

Model standards

7.9.24 G A *firm* should take appropriate steps to ensure that its *CAD 1 model* captures and produces an accurate measure of the risks inherent in the portfolio covered by the *CAD 1 model*. These risks may include, but are not limited to, gamma, vega and rho.

Options risk aggregation models

7.9.25 G For a *firm* to obtain a *CAD 1 model waiver* for its *options* risk aggregation model, it should have in place an appropriate *options* valuation model.

7.9.26 G The *appropriate regulator* does not specify the methodology that a *firm* should employ in order to produce the appropriate outputs from its *options* risk aggregation *CAD 1 model*. However, ■ BIPRU 7.9.27G - ■ BIPRU 7.9.43G provide details of how a *firm* could meet the requirement to capture gamma, vega and rho risks using a scenario matrix approach. Where a *firm* adopts the scenario matrix approach then the standards set out in ■ BIPRU 7.9.27G - ■ BIPRU 7.9.43G should be followed. The *firm* should also take into account other risks not captured by the scenario matrix approach. If a *firm* does not use the scenario matrix approach it should use an equivalent methodology. If a *firm* uses an equivalent methodology it should be able to demonstrate that the approach used meets the requirements of ■ BIPRU 7.9.

7.9.27 G A scenario matrix is an approach by which an *options* portfolio is revalued given a number of simultaneous shifts in both the spot level of the underlying and the implied volatility.

7.9.28 G The scenario matrix approach may be employed for all types of *options* on all types of underlying asset.

7.9.29 G

(1) This paragraph provides an outline of the initial steps to be taken when using the scenario matrix approach.

(2) A value for an *option* should be obtained using the *firm's options* valuation model.

(3) The inputs into the *options* valuation model for implied volatility of the underlying asset and the price of the underlying asset should then be altered so that a new value for the *option* is obtained (details of the amount by which the implied volatility and the price of the underlying should be amended are set out in ■ BIPRU 7.9.30G - ■ BIPRU 7.9.36G).

(4) The difference between the original value of the *option* and the new value obtained following the alterations should be input into the appropriate cell in the matrix. The value in the central cell where there is no change in implied volatility or price of the underlying should therefore be zero.

(5) The process of obtaining a new price for the *option* should be repeated until the matrix is completed.

7.9.30 G The alteration to the implied volatility (known as the implied volatility shift) referred to in ■ BIPRU 7.9.29G (3) may be a proportional shift. The size of the shift depends on the remaining life of the *option* and the asset class of the underlying. The table in ■ BIPRU 7.9.32G sets out the shifts that should be applied where a proportional shift is used. Alternatively, a *firm* may use a single shift across all maturities or use an absolute rather than a proportional implied volatility shift. Where a single shift or an absolute shift is used it should be at least as conservative as the proportional shifts. Any use of a single shift or an absolute shift should be reviewed and, if necessary updated, on a regular basis.

7.9.31 G A *firm* may choose to use a less detailed term structure than that in the table in ■ BIPRU 7.9.32G, but the shifts used should be no less conservative than those set out in that table. For example, a *firm* that uses one <3 month band, rather than the two bands (≤ 1 month and 1-3 months) set out in the table, should use the most conservative shift set out in the table for the bands covered. In this example that shift is 30%.

7.9.32 G Table: proportional implied volatility shifts

This table belongs to ■ BIPRU 7.9.30G

Remaining life of option	Proportional shift	
	Equities, foreign currency and *commodities*	Interest rates and *CIUs*
≤ 1 month	30%	30%
> 1 ≤ 3 months	20%	20%
> 3 ≤ 6 months	15%	15%
> 6 ≤ 9 months	12%	12%
> 9 ≤ 12 months	9%	9%
> 1 ≤ 2 years	6%	9%
> 2 ≤ 4 years	4.5%	9%
> 4 years	3%	9%

7.9.33 G The size of the underlying price/rate shift depends on the asset class of the underlying as referred to in ■ BIPRU 7.9.29G (3) and is set out in the table in ■ BIPRU 7.9.34 G.

7.9.34 G Table: underlying price/rate shifts

This table belongs to ■ BIPRU 7.9.33G

Underlying asset class	Shift
Equities	±8%
Foreign currency	±8%
Commodities	±15%, (but a *firm* may use the percentages applicable under the *commodity extended maturity ladder approach* if it would qualify under BIPRU 7.4 (Commodity PRR) to use that approach).

Underlying asset class	Shift
Interest rates	±100bp (but a *firm* may use the sliding scale of shifts by maturity as applicable to the *interest rate duration method*).
CIU	±32%, (but a *firm* may use the percentages applicable to the underlyings if the *firm* applies one of the *CIU look through methods* under BIPRU 7.7 (Position risk requirements for collective investment undertakings)).

7.9.35 G The shifts outlined in the table in ■ BIPRU 7.9.34G are the maximum shifts required; in addition there will be a number of intermediate shifts as a result of the minimum matrix size criteria set out in ■ BIPRU 7.9.36G.

7.9.36 G The minimum size of the scenario matrix should be 3x7, that is, three observations for implied volatility (including the actual implied volatility) and seven observations for the price of the underlying (including the actual price of the underlying). A *firm* should be able to justify its choice of granularity. Greater granularity may be required where the portfolio contains, for example, a large proportion of barrier *options*.

7.9.37 G

(1) A different scenario matrix should be set up for each underlying asset type in accordance with this paragraph.

(2) For *equities* (including single *equities*, baskets and indices) there should be a separate matrix for each national market or non-decomposed basket or non-decomposed multi-national index.

(3) For *foreign currency* products there should be a separate matrix for each currency pair where appropriate.

(4) For *commodity* products there should be a separate matrix for each *commodity*. The question whether two items are the same *commodity* should be decided in accordance with ■ BIPRU 7.4 (Commodity PRR).

(5) For interest rate products there should be a separate matrix for each currency. In addition, a *firm* should not offset the gamma and vega exposures (except in the circumstances set out in ■ BIPRU 7.9.38G) arising from any one of the following types of product with the gamma and vega exposures arising from any of the other products in the list:

(a) swaptions (*options* on interest rates);

(b) interest rate *options* (including *options* on exchange-traded deposit or bill *futures*);

(c) bond *options* (including *options* on exchange-traded bond *futures*); and

(d) other types of *options* required by the *CAD 1* model *waiver* to form their own separate class of underlying asset.

(6) The other types of *options* referred to in (5)(d) will generally be exotic *options* that do not fall easily into (5)(a) - (c)).

(7) For *CIUs* there should be a separate matrix for each *CIU* fund. If the *firm* applies one of the *CIU look through methods* under ■ BIPRU 7.7 (Position risk requirements for collective investment undertakings), then (1) - (6) apply based on what the underlyings are.

7.9.38 G A *firm* may offset gamma and vega exposures arising from the products listed in ■ BIPRU 7.9.37G (5) where it can demonstrate that it trades different types of interest rate-related *options* as a portfolio and takes steps to control the basis risk between different types of implied volatility. To the extent that this is the case an individual matrix is not required for each of the products listed in ■ BIPRU 7.9.37G (5) and a combined scenario matrix may be used.

7.9.39 G Where it is imprudent fully to offset long-dated and short-dated vega exposure owing to the risk of non-parallel shifts in the yield curve, a *firm* should use an appropriate number of scenario matrices to take account of non-parallel shifts in the yield curve according to the maturity of the *option* or underlying.

7.9.40 G Following the steps outlined in ■ BIPRU 7.9.29G, a *firm* then removes the portion of the values in the matrix that can be attributed to the effect that delta has had on the change in the value of the *option* (a process known as delta-stripping).

7.9.41 G Once the effect of delta has been removed from the matrix, the values left in the matrix relate to gamma and vega risk. A *firm's PRR* in relation to gamma and vega risk on the individual *option* is the absolute of the most negative cell in the scenario matrix produced. Where all cells are positive the *PRR* is zero. The total *PRR* for the gamma and vega risk on the portfolio of *options* is a simple sum of the individual requirements. This amount should then be fed into a *firm's PRR* calculation.

7.9.42 G The values that have been obtained for the delta-equivalent *positions* of instruments included in the scenario matrix should then be treated in the same way as *positions* in the underlying. Where the delta obtained relates to interest rate *position* risk, the delta equivalent *positions* may be fed into the *firm's* interest rate pre-processing model to the extent that the *positions* fall within the scope of interest rate pre-processing models as set out in ■ BIPRU 7.9.7G and provided that the *firm's CAD 1 model waiver* allows the *firm's CAD 1 model* to be used in this way. Alternatively, the delta obtained should be fed into the standard *PRR* calculations in ■ BIPRU 7.2 (Interest rate PRR), ■ BIPRU 7.3 (Equity PRR and basic interest rate PRR for equity derivatives), ■ BIPRU 7.4 (Commodity PRR) or ■ BIPRU 7.5 (Foreign currency PRR) as appropriate.

7.9.43 G In using the scenario matrix approach, none of the steps followed will take specific account of a *firm's* exposure to rho risk. Where a *firm* can demonstrate that for interest rate-related *options* the rho sensitivity is effectively included in the delta sensitivities produced, there is no separate capital requirement relating to rho. For all other *options* except *commodity*

options, a *firm* should calculate a rho sensitivity ladder by currency using its *CAD 1 model* and either feed this into the *interest rate maturity method* or *interest rate duration method* calculation or, where the *firm's CAD 1 model waiver* allows the *firm's CAD 1 model* to be used in this way, feed that ladder into an interest rate pre-processing model. Generally a *CAD 1 model* does not need to deal specifically with rho risk for *commodity options*.

Interest rate pre-processing models

7.9.44 G To the extent that a *firm's CAD 1 model waiver* is for the use of an interest rate pre-processing model the *firm* should use it for the pre-processing of the instruments set out in ■ BIPRU 7.9.7G, from which the residual *positions* are fed into the *interest rate maturity method* or *interest rate duration method* calculation.

7.9.45 G There are a number of different methods of constructing pre-processing models but all should comply with ■ BIPRU 7.9.45G - ■ BIPRU 7.9.53G. All pre-processing models should generate *positions* that have the same sensitivity to defined interest rate changes as the underlying cash flows.

7.9.46 G In an interest rate pre-processing model each transaction is converted into its constituent cash flows. The cash flows are discounted using zero coupon rates derived from the *firm's* own yield curves.

7.9.47 G The cash flows are then calculated again using the *firm's* own yield curve shifted by the amount set out in ■ BIPRU 7.9.49G.

7.9.48 G The difference between the present values calculated using the *firm's* own yield curve and those calculated using the *firm's* curve shifted under ■ BIPRU 7.9.47G are known as the sensitivity figures. Alternatively, a *firm* may shift the yield curve by one basis point and multiply up the sensitivity figures by the appropriate amount in order to achieve the shifts set out in ■ BIPRU 7.9.47G. These sensitivity figures are then allocated to each of the 15 maturity bands set out in ■ BIPRU 7.9.49G.

7.9.49 G Table: yield curve shifts

This table belongs to ■ BIPRU 7.9.47G

Zone	Modified duration	Assumed interest rate change (percentage points)
1	0 ≤ 1 months	1.00
	> 1 ≤ 3 months	1.00
	> 3 ≤ 6 months	1.00
	> 6 ≤ 12 months	1.00
2	> 1.0 ≤ 1.9 years	0.90
	> 1.9 ≤ 2.8 years	0.85
	> 2.8 ≤ 3.6 years	0.85
3	> 3.6 ≤ 4.3 years	0.75

Zone	Modified duration	Assumed interest rate change (percentage points)
3	> 4.3 ≤ 5.7 years	0.70
	> 5.7 ≤ 7.3 years	0.70
	> 7.3 ≤ 9.3 years	0.70
	> 9.3 ≤ 10.6 years	0.70
	> 10.6 ≤ 12 years	0.70
	> 12.0 ≤ 20 years	0.70
	> 20 years	0.70

7.9.50 G Sensitivity figures calculated by a *firm* using an interest rate pre-processing model are usually produced in the format of a net sensitivity by maturity bucket or by discrete gridpoint. These maturity buckets or gridpoints should then be allocated to the 15 bands set out in ■ BIPRU 7.9.49G. The number of maturity buckets or gridpoints used to represent a yield curve can be referred to as granularity. The granularity should always be adequate to capture the material curve risk in the portfolio. Curve risk can be defined as the risk associated with holding long and short *positions* at different points along the yield curve.

7.9.51 G Positive and negative amounts placed in each of the different maturity bands in ■ BIPRU 7.9.49G under the sensitivity calculation in ■ BIPRU 7.9.50G should then be netted off to produce one figure for each of the bands. There is no capital requirement for this netting process.

7.9.52 G The individual sensitivity figures produced should then be input into the *interest rate duration method* calculation. The individual sensitivity figures for each band should be included with the other *positions* in the appropriate column in the table in ■ BIPRU 7.2.65R (Table: Assumed interest rate change in the interest rate duration method).

7.9.53 G Instead of using the approach in ■ BIPRU 7.9.52G a *firm* may use an approach based on the *interest rate maturity method*, making appropriate adjustments to the sensitivity figures.

7.10 Use of a Value at Risk Model

Application

7.10.1 R ■ BIPRU 7.10 applies to a *firm* with a *VaR model permission*.

Introduction and purpose

7

7.10.2 G ■ BIPRU 7.10 provides details of when the *appropriate regulator* expects to allow a *firm* to use a *VaR model* (value at risk model) for the purpose of calculating part or all of its *PRR*. It introduces the concept of a *VaR model*, the methodology behind it and the link to the *standard market risk PRR rules*. It then goes on to detail the application and review process. The bulk of ■ BIPRU 7.10 specifies the model standards and risk management standards that *firms* will be required to meet in order to use a *VaR model*. It further stipulates requirements for stress testing, backtesting, capital calculations and finally the reporting standards expected by the *appropriate regulator*.

7.10.3 G The models described in ■ BIPRU 7.10 are described as VaR models in order to distinguish them from *CAD 1 models*, which are dealt with in ■ BIPRU 7.9 (Use of a CAD 1 model). A *VaR model* is a risk management model which uses a statistical measure to predict profit and loss movement ranges with a confidence interval. From these results *PRR charges* can be calculated. The standards described in ■ BIPRU 7.10, and which will be applied by the *appropriate regulator*, are based on Annex V of the *Capital Adequacy Directive*.

7.10.4 G The aim of the *VaR model approach* is to enable a *firm* with adequate risk management systems to be subject to a *PRR* requirement that is more closely aligned with the risks to which it is subject than the *PRR* requirements generated by the *standard market risk PRR rules*. This provides a *firm* with an incentive to measure market risks as accurately and comprehensively as possible. It is crucial that those responsible for managing *market risk* at a *firm* should be aware of the assumptions and limitations of the *firm's VaR model*.

7.10.5 G There are a number of general methodologies for calculating *PRR* using a *VaR model*. The *appropriate regulator* does not prescribe any one method of computing VaR measures. Moreover, it does not wish to discourage any *firm* from developing alternative risk measurement techniques. A *firm* should discuss the use of any alternative techniques used to calculate *PRR* with the *appropriate regulator*.

7.10.6 G A *firm* should not use the *VaR model approach* to calculate *PRR* unless it has a *VaR model permission*. If a *firm* does not have such a permission it should use the *standard market risk PRR rules*. Therefore, a *firm* needs to apply for a *VaR model permission* in order to calculate its *PRR* using a *VaR model* instead of (or in combination with) the *standard market risk PRR rules*.

Conditions for granting a VaR model permission

7.10.7 G A *waiver* or other permission allowing the use of models in the calculation of *PRR* will be considered with regards to *CAD* and any *VaR model permission* which is granted will be considered with regards to *CAD*. Accordingly, the *appropriate regulator* is likely only to grant a *waiver* or other permission allowing the use of models in the calculation of *PRR* if it is a *VaR model permission* or a *CAD 1 model waiver*.

7.10.8 G ■ BIPRU 7.10 sets out the minimum standards that the *appropriate regulator* expects *firms* to meet before granting a *VaR model permission*. The *appropriate regulator* will not grant a *VaR model permission* unless it is satisfied that the requirements of ■ BIPRU 7.10 are met and it is satisfied about the procedures in place at a *firm* to calculate the model PRR. In particular the *appropriate regulator* will not normally grant a *VaR model permission* unless it is satisfied about the quality of:

(1) the internal controls and risk management relating to the *VaR model* (see ■ BIPRU 7.10.56G - ■ BIPRU 7.10.82R);

(2) the *VaR model* standards (see ■ BIPRU 7.10.24R-■ BIPRU 7.10.55G); and

(3) stress testing and backtesting procedures relating to a *VaR model* (see, in addition to (2), ■ BIPRU 7.10.83R - ■ BIPRU 7.10.112G).

7.10.9 G The *appropriate regulator* recognises that the nature of *VaR models* will vary between *firms*. The scope of and the requirements and conditions set out in a *VaR model permission* may therefore differ in substance or detail from ■ BIPRU 7.10 in order to address individual circumstances adequately. The *FCA* will consider any differences by having regard to the *CAD*. A *VaR model permission* will implement any such variation by modifying ■ BIPRU 7.10. A *VaR model permission* may also include additional conditions to meet the particular circumstances of the *firm* or the model.

The VaR model permission application and review process

7.10.10 G Details of the general process for applying for a *VaR model permission* are set out in ■ BIPRU 1.3 (Applications for advanced approaches). Because of the complexity of a *VaR model permission*, it is recommended that a *firm* discuss its proposed application with its usual contact at the *appropriate regulator* before it makes the application.

7.10.11 G In order for a *VaR model permission* to be granted, the *appropriate regulator* is likely to undertake a review to ensure that it is adequate and appropriate for the *PRR* calculation.

7.10.12 G The *VaR model* review process may be conducted through a series of visits covering various aspects of a *firm's* control and IT environment. Before these visits the *appropriate regulator* may ask the *firm* to provide some information relating to the *firm's VaR model permission* request accompanied by some specified background material. The *VaR model* review visits are organised on a timetable that allows the *firm* being visited sufficient time to arrange the visit and provide the appropriate pre-visit information.

7.10.13 G As part of the process for dealing with an application for a *VaR model permission* the following may be reviewed: organisational structure and personnel; details of the *firm's* market position in the relevant products; revenue and risk information; valuation and reserving policies; operational controls; information technology systems; model release and control procedures; risk management and control framework; risk appetite and limit structure; future developments relevant to model recognition.

7.10.14 G A visit will usually involve the *appropriate regulator* wishing to meet senior management and staff from the front office, financial control, risk management, operations, systems development, information technology and internal audit areas.

7.10.15 G The *appropriate regulator* may complement its own review of a VaR model permission request with one or more reviews by a skilled person under section 166 of the *Act* (Reports by skilled persons). Such a review may also be used where a VaR model permission has been granted to ensure that the requirements ■ BIPRU 7.10 and of the VaR model permission continue to be met.

Conditions for a VaR model outside the United Kingdom

7.10.16 G Where a *VaR model* used outside the *United Kingdom* differs from that used in the *United Kingdom* the *appropriate regulator* may request details of the reasons for using different models.

7.10.17 G Where a *firm* operates any part of its *VaR model* outside the *United Kingdom*, the *appropriate regulator* may take into account the results of the home supervisor's review of that model. The *appropriate regulator* may wish to receive information directly from the home supervisor.

Scope of VaR models

7.10.18 R A *firm* must use the *VaR model approach* to calculate the *PRR* for a *position*:

(1) to the extent that the risks in relation to that *position* are within the scope of the *VaR model permission* (see ■ BIPRU 7.10.136R (Link to standard *PRR* rules: Incorporation of the model output into the capital calculation)); and

(2) if the *position* is of a type that comes within the scope of the *VaR model permission*.

7.10.19 G In accordance with ■ BIPRU 7.10.18R (1) a *VaR model permission* will set out the risk categories that it covers, which are expected to be one or more of the following types:

(1) interest rate *general market risk*;

(2) interest rate *specific risk* (in conjunction with interest rate *general market risk*);

(3) equity general market risk;

(4) equity specific risk (in conjunction with *equity general market risk*);

(5) CIU risk;

(6) foreign currency risk; and

(7) commodity risk.

7.10.20 G A *VaR model permission* will generally set out the broad classes of *position* within its scope. It may also specify how individual products within one of those broad classes may be brought into or taken out of the scope of the *VaR model permission*.

7.10.21 G The broad classes of *position* referred to in ■ BIPRU 7.10.20G are as follows:

(1) linear products, which comprise *securities* with linear pay-offs (e.g. bonds and *equities*) and *derivative* products which have linear pay-offs in the underlying risk factor (e.g. interest rate *swaps*, *FRAs*, total return *swaps*);

(2) European, American and Bermudan put and call *options* (including caps, floors and swaptions) and *investments* with these features (see ■ BIPRU 7.6.18R (Table: Option PRR: methods for different types of option) for an explanation of some of these terms);

(3) Asian *options*, digital *options*, single barrier *options*, double barrier *options*, look back *options*, forward starting *options*, compound *options* and *investments* with these features (see ■ BIPRU 7.6.18R for an explanation of some of these terms); and

(4) all other *option* based products (e.g. basket *options*, quantos, outperformance *options*, timing *options*) and *investments* with these features (see ■ BIPRU 7.6.18R for an explanation of some of these terms).

7.10.22 G The categorisation described in ■ BIPRU 7.10.21G may be amended or replaced in the case of a particular *firm's VaR model permission*.

7.10.23 G It is the *appropriate regulator's* view that, where a *firm* uses a *VaR model* for one risk category as described in ■ BIPRU 7.10.19G, it is good practice to extend its model over time to calculate all of its *PRR* risk categories. A *firm* will typically be expected to have a realistic plan in place to do this.

Model standards: General

7.10.24 R A *firm* must comply with the minimum standards set out in ■ BIPRU 7.10.26R - ■ BIPRU 7.10.53R in calculating the *model PRR*.

7.10.25 G The *appropriate regulator* accepts that the scope and nature of *VaR models* varies across *firms*. This means that different *firms* are likely to calculate different estimates of *market risk* for the same portfolio. Systematic differences are due to length of data series, choice of methodology (historical or Monte Carlo simulation or variance-covariance method or a hybrid of these), differences in aggregating risks within and across broad risk factors, the treatment of *options* and other non-linear products and the specification of risk factors.

Model standards: Frequency of calculations and confidence level

7

7.10.26 R The *model PRR* must be computed at least once every *business day*, using a 99% one-tailed confidence limit.

7.10.27 G A *firm* may meet the requirement in ■ BIPRU 7.10.26R by using different model parameters and employing a suitable adjustment mechanism to produce a figure which is equivalent to the figure produced using the parameters set out in ■ BIPRU 7.10.26R. For example, a *firm's* model may use a 95% one-tailed confidence limit if the *firm* has a mechanism to convert the output of the model to reflect a 99% one-tailed confidence limit.

7.10.27A R *Stressed VaR* must be calculated at least weekly, using a 99% one-tailed confidence limit.

Model standards: Holding period

7.10.28 R In calculating the *VaR number*, a *firm* must either use a ten *business day* holding period, or use a holding period converted to a ten *business day* holding period. However if the *firm's VaR model permission* specifies that the *firm* must use a specific method, the *firm* must do so.

7.10.29 G If a *firm* uses a holding period other than 10 *business days* and converts the resulting *VaR measure* to a ten *business day* equivalent measure, it should be able to justify the choice of conversion technique. For example, the square root of time method will usually be justifiable. The *appropriate regulator* considers it good practice ultimately to move towards the application of an actual ten *business day* holding period, rather than using different holding periods.

Model standards: Observation period

7.10.30 R Subject to ■ BIPRU 7.10.31R, the calculation of *VaR numbers* must be based on an effective historical observation period that is the longest possible consistent with a prudent *VaR number*. That period must be at least one year or such longer period as may be set out in the *firm's VaR model permission*. However if using that prescribed observation period does not result in a sufficiently prudent way of calculating a *VaR measure* or a component of a

VaR measure the *firm* must shorten this observation period until the observation period is consistent with a prudent *VaR number*.

7.10.30A R The *stressed VaR* measure must be based on inputs calibrated to historical data from a continuous twelve-month period of significant financial stress relevant to the *firm's* portfolio. The choice of that historical period will be subject to the *appropriate regulator's* approval and will form part of a *firm's VaR model permission*.

7.10.30B R A *firm* must review the selection of the *stressed VaR* historical observation period at least annually.

Model standards: Data series

7.10.31 R A *firm* must ensure that the data series used by its *VaR model* is reliable. Where a reliable data series is not available, proxies or any other reasonable value-at-risk measurement technique must be used. A *firm* must be able to demonstrate that the technique is appropriate and does not materially understate the modelled risks.

7.10.32 G A data series is unreliable if it has, for example, missing data points, or data points which contain stale data. Reliable data series may be difficult to obtain for new products (for example an instrument of longer dated tenor that did not previously trade) and for less liquid risk factors or *positions*. With regard to less liquid risk factors or *positions*, a *firm* may use a combination of prudent valuation techniques and alternative *VaR* estimation techniques to ensure there is a sufficient cushion against risk over the close out period which takes account of the illiquidity of the risk factor or *position*.

7.10.33 R

(1) If a weighting scheme or other similar method is used to calculate *VaR numbers*, then the effective observation period must be at least one year. Where a weighting scheme is used, the weighted average time lag of the individual observations must not be less than six *Months*.

(2) If a specific observation period or weighted average time lag is specified in a *firm's VaR model permission*, the *firm* must comply with that if it is longer than the period specified in (1).

(3) However, if a weighting scheme in (1) or (2) would result in imprudent *VaR numbers* then the weighting scheme must be adjusted so that it is consistent with a prudent *VaR number*.

7.10.34 R A *firm* must update data sets in accordance with the frequency set out in its *VaR model permission*. If volatility in market prices or rates necessitates more frequent updating in order to ensure a prudent calculation of the *VaR measure* the *firm* must do so.

7.10.35 G The minimum updating frequency for the current *VaR measure* that can be specified in a *VaR model permission* is monthly.

Model standards: Aggregation across risk categories

7.10.36 R The process for determining and implementing correlations within and across risk categories must be sound, implemented with integrity and consistent with the terms of the *firm's VaR model permission*.

7.10.37 R In aggregating *VaR measures* across risk or product categories, a *firm* must not use the square root of the sum of the squares approach unless the assumption of zero correlation between these categories is empirically justified. If correlations between risk categories are not empirically justified, the *VaR measures* for each category must simply be added in order to determine its aggregate *VaR measure*. But to the extent that a *firm's VaR model permission* provides for a different way of aggregating *VaR measures*:

(1) that method applies instead of this *rule*; and

(2) if the correlations between risk categories used for that purpose cease to be empirically justified then the *firm* must notify the *appropriate regulator* at once.

Model standards: Risk factors: Introduction

7.10.38 G Subject to ■ BIPRU 7.10.53R (Model standards: Materiality), a *VaR model* should capture and accurately reflect all material risks arising on the underlying portfolio on a continuing basis insofar as those risks are within the scope of the *VaR model permission*. This should encompass *general market risk* and, to the extent that this comes within the scope of the *VaR model permission*, *specific risk*. A *firm* should ensure that the *VaR model* has sufficient risk factor granularity to be able to capture all such material risks and that these are properly documented and specified.

Model standards: Risk factors: General

7.10.39 R In the case of *general market risk* and risks with respect to which the *standard market risk PRR rules* do not distinguish between *general market risk* and *specific risk*, a *firm's VaR model* must capture a sufficient number of risk factors in relation to the level of activity of the *firm* and in particular the risks set out in ■ BIPRU 7.10.40R - ■ BIPRU 7.10.44R.

7.10.39A R A *firm* must incorporate risk factors that are included in its pricing model in its *VaR model*. A *firm's VaR model* must capture nonlinearities for *options* and other products, as well as correlation risk and *basis risk*. Where proxies for risk factors are used they must show a good track record for the actual *position* held. In addition, ■ BIPRU 7.10.40 R to ■ BIPRU 7.10.44 R apply for individual risk types.

7.10.39B R A *firm* with a *VaR model permission* must justify to the *appropriate regulator* any omissions of risk factors from its *VaR model*, if they are included in its pricing model.

7.10.40 R For interest rate risk, a *VaR model* must incorporate a set of risk factors corresponding to the interest rate curves in each currency in which the *firm* has interest rate sensitive *positions*. A *firm* must ensure that it captures the

variations of volatility of rates along the yield curve. In order to achieve this, a *firm* must divide the yield curves of, at a minimum, the major currencies and markets in which it has material interest rate exposures into a minimum of six maturity segments. The *VaR model* must also capture the risk of less than perfectly correlated movements between different yield curves.

7.10.41 R For *equity* risk, a *VaR model* must use a separate risk factor at least for each of the *equity* markets in which the *firm* has material *positions*.

7.10.42 R For *foreign currency* risk, a *VaR model* must incorporate risk factors corresponding to the individual *foreign currencies*, including gold, in which the *firm's positions* are denominated.

7.10.43 R For *commodity* risk, the *VaR model* must use a separate risk factor at least for each *commodity* in which the *firm* has material *positions*. The *VaR model* must also capture the risk of less than perfectly correlated movements between similar, but not identical, *commodities* and the exposure to changes in forward prices arising from maturity mismatches. It must also take account of market characteristics, notably delivery dates and the scope provided to traders to close out positions.

7.10.44 R

(1) For *CIUs* the actual *foreign currency positions* of the *CIU* must be taken into account.

(2) A *firm* may rely on third party reporting of the *foreign currency position* of the *CIU*, where the correctness of this report is adequately ensured.

(3) If a *firm* is not aware of the *foreign currency positions* in a *CIU*, this *position* must be carved out and treated in ■ BIPRU 7.5.18R (Derivation of notional *positions* in *CIUs* for the *foreign currency PRR*).

7.10.45 G

(1) This paragraph contains *guidance* on the inclusion of *CIUs* in a *VaR model*.

(2) The *appropriate regulator* may allow all types of *CIU* to be included within the scope of a *firm's VaR model permission*.

(3) ■ BIPRU 7.10 does not distinguish between *specific risk* and *general market risk* for *positions* in *CIUs*. Therefore even if *specific risk* is not otherwise included within the scope of a *firm's VaR model permission*, a *firm* should be able to demonstrate that its *VaR model* captures *specific risk*.

(4) A *firm* should also be able to demonstrate that its *VaR model* adequately captures correlations, concentration risk and risks associated with the illiquidity of the *CIU* itself should this be deemed necessary (see ■ BIPRU 7.10.32G).

(5) A *firm* may use a look-through approach, under which the *VaR model* estimates are based on the underlying *positions*. If a *firm* uses a look through approach it should also ensure that all the relevant risk factors relating to the underlying *positions* are captured. ■ BIPRU 7.7

(Position risk requirements for collective investment undertakings) sets out *rules* relating to the look through approach when a *firm* is using the *VaR model approach*.

Model standards: Risk factors: Specific risk

7.10.46 R

(1) If a *firm's VaR model* covers the calculation of *PRR* with respect to *specific risk* the *firm* must meet the *VaR specific risk minimum requirements* in addition to the other requirements of ■ BIPRU 7.10.

(2) The *VaR model* must explain the historical price variation in the portfolios concerned.

(3) The *VaR model* must capture concentration in terms of magnitude and changes of composition of the portfolios concerned.

(4) The *VaR model* must be robust to an adverse environment.

(5) The *VaR model* must capture name-related basis risk. That is the *firm* must be able to demonstrate that the *VaR model* is sensitive to material idiosyncratic differences between similar but not identical *positions*.

(6) The *VaR model* must capture event risk.

(7) In addition to the other requirements in ■ BIPRU 7.10, a *firm* must have an approach in place to capture, in the calculation of its capital requirements, the *incremental risk charge* of its *trading book positions* that is incremental to the default and migration risk captured by the *VaR measures*, as specified in ■ BIPRU 7.10.55A R to ■ BIPRU 7.10.55S G and ■ BIPRU 7.10.107R (Backtesting: Specific risk backtesting).

(8) [deleted]

7.10.47 G

This paragraph provides *guidance* on ■ BIPRU 7.10.46 R (2). Take as an example a *VaR model* based on a factor model or on a historical simulation model. The ability of the model to explain price variation could be demonstrated by a statistical comparison over the same period of time between actual price changes on the portfolio and the profit and loss impact of risk factors included within the model. A *firm* may wish to include an estimate of residual variation not explained by the model.

7.10.48 R

(1) [deleted]

(2) A *firm's VaR model* must conservatively assess the risk arising from less liquid *positions* and *positions* with limited price transparency under realistic market scenarios. In addition, the *VaR model* must meet minimum data standards. Proxies must be appropriately conservative and may be used only where available data is insufficient or is not reflective of the true volatility of a *position* or portfolio.

7.10.49 R

As techniques and best practices evolve, a *firm* must avail itself of these advances.

7.10.50 R [deleted]

7.10.51 R [deleted]

7.10.52 R [deleted]

Model standards: Materiality

7.10.53 R A *firm's VaR model* must capture accurately all material price risks for *positions* within the scope of its *VaR permission*, including risks relating to *options* or *option*-like *positions*. The *firm* must ensure that, if its *VaR model* does not accurately capture any material risk, the *firm* has *capital resources* adequate to cover that risk. These capital resources must be additional to those required to meet its *capital resources requirement*.

7.10.54 G For example, ■ BIPRU 7.10.53R might involve creating and documenting a prudent incremental *PRR charge* for the risk not captured in the *VaR model* and holding sufficient *capital resources* against this risk. In that case the *firm* should hold *capital resources* at least equal to its *capital resources requirement* as increased by adding this incremental charge to the *model PRR*. Alternatively the *firm* may make valuation adjustments through its profit and loss reserves to cover this material risk. These reserves should be transparent to *senior management* and auditable. The reserves should also be consistent with ■ GENPRU 1.3 (Valuation) while not being excessive in relation to the principles of mark-to-market accounting. Therefore, a *firm* should be able to satisfy the *appropriate regulator* that all material risks are adequately addressed, whether this be through the *VaR model*, through taking an incremental *PRR charge* or through making an adjustment through profit and loss reserves.

7.10.55 G A *firm* is expected ultimately to move towards full revaluation of *option* positions. For portfolios containing path dependent *options*, an instantaneous price shock applied to a static portfolio will be acceptable provided that the risks not captured by such an approach are not material. Where a risk is immaterial and does not justify further *capital resources*, that immaterial risk should still be documented.

Incremental risk charge: Scope and parameters

7.10.55A R A *firm* must demonstrate that its *incremental risk charge* meets soundness standards comparable to those under the *IRB approach*, assuming a constant level of risk and adjusted, where appropriate, to reflect the impact of liquidity, concentrations, hedging and optionality.

7.10.55B R The *incremental risk charge* must cover all *positions* which are subject to a capital charge for interest-rate *specific risk* in accordance with the *firm's VaR model permission*, except *securitisation positions* and nth-to-default credit derivatives. Where permitted by its *VaR model permission*, a *firm* may choose consistently to include all listed *equity positions* and *derivatives positions* based on listed *equities* for which that inclusion is consistent with how the *firm* internally measures and manages risk, but the approach must reflect the impact of correlations between default and migration events, and it must

not reflect the impact of diversification between default and migration events and other market risk factors.

7.10.55C R The *firm's* approach to capture the *incremental risk charge* must measure losses due to default and internal or external ratings migration at the 99.9% confidence interval over a capital horizon of one year.

7.10.55D R The *firm's* correlation assumptions must be supported by the analysis of objective data in a conceptually sound framework. The approach to capture the *incremental risk charge* must appropriately reflect *issuer* concentrations. Concentrations that can arise within and across product classes under stressed conditions must also be reflected.

7.10.55E R The *firm's* approach must be based on the assumption of a constant level of risk over the one-year capital horizon, implying that given individual *trading book positions* or sets of *positions* that have experienced default or migration over their liquidity horizon are re-balanced at the end of their liquidity horizon to attain the initial level of risk. Alternatively, a *firm* may choose consistently to use a one-year constant *position* assumption.

Incremental risk charge: Liquidity horizons

7.10.55F R

(1) The *firm's* liquidity horizons for calculating *incremental risk charge* must be set according to the time required to sell the *position* or to hedge all material and relevant price risks in a stressed market, having particular regard to the size of the *position*.

(2) Liquidity horizons must reflect actual practice and experience during periods of both systematic and idiosyncratic stresses. The liquidity horizon must be measured under conservative assumptions and must be sufficiently long that the act of selling or hedging, in itself, would not materially affect the price at which the selling or hedging would be executed.

7.10.55G R The determination of the appropriate liquidity horizon for a *position* or set of *positions* is subject to a floor of three months. The determination of the appropriate liquidity horizon for a *position* or set of *positions* must take into account a *firm's* internal policies relating to valuation adjustments and the management of stale *positions*.

7.10.55H R When a *firm* determines liquidity horizons for sets of *positions* rather than for individual *positions*, the criteria for defining sets of *positions* must be defined in a way that meaningfully reflects differences in liquidity. The liquidity horizons must be greater for *positions* that are concentrated, reflecting the longer period needed to liquidate those *positions*.

7.10.55I R The liquidity horizon for a *securitisation* warehouse must reflect the time to build, sell and securitise the assets, or to hedge the material risk factors, under stressed market conditions.

Incremental risk charge: Hedges

7.10.55J R

(1) Hedges may be incorporated into the calculation of a *firm's incremental risk charge*. *Positions* may be netted only when long and short *positions* refer to the same financial instrument.

(2) Hedging or diversification effects associated with long and short *positions* involving different instruments or different securities of the same obligor, as well as long and short *positions* in different *issuers*, may only be recognised by explicitly modelling gross long and short *positions* in the different instruments.

(3) A *firm* must reflect the impact of material risks that could occur during the interval between the hedge's maturity and the liquidity horizon, as well as the potential for significant basis risks in hedging strategies by product, seniority in the capital structure, internal or external rating, maturity, vintage and other differences in the instruments. A *firm* must reflect a hedge only to the extent that it can be maintained even as the obligor approaches a credit or other event.

7.10.55K R

For *trading book positions* that are hedged via dynamic hedging strategies, a rebalancing of the hedge within the liquidity horizon of the hedged position may be recognised only if the *firm*:

(1) chooses to model rebalancing of the hedge consistently over the relevant set of *trading book positions*;

(2) demonstrates that the inclusion of rebalancing results in a better risk measurement;

(3) demonstrates that the markets for the instruments serving as hedges are liquid enough to allow for this rebalancing even during periods of stress; and

(4) reflects in the capital charge any residual risks resulting from dynamic hedging strategies.

Incremental risk charge: Nonlinear positions and model risk

7.10.55L R

(1) The *incremental risk charge* must reflect the nonlinear impact of *options*, structured credit derivatives and other *positions* with material nonlinear behaviour with respect to price changes.

(2) The *firm* must also consider the amount of model risk inherent in the valuation and estimation of price risks associated with those products.

7.10.55M R

The *incremental risk charge* must be based on objective and up-to-date data.

Incremental risk charge: Validation

7.10.55N R

A *firm* must validate its approach to *incremental risk charge*. In particular, a *firm* must:

(1) validate that its modelling approach for correlations and price changes is appropriate for its portfolio, including the choice and weights of its systematic risk factors;

(2) perform a variety of stress tests (not limited to the range of events experienced historically), including sensitivity analysis and scenario analysis, to assess the qualitative and quantitative reasonableness of the approach, with particular regard to the treatment of concentrations; and

(3) apply appropriate quantitative validation including relevant internal modelling benchmarks.

7.10.55O R A *firm's* approach for *incremental risk charge* must be consistent with the *firm's* internal risk management methodologies for identifying, measuring, and managing trading risks.

Incremental risk charge: Documentation and frequency of calculation

7.10.55P R A *firm* must document its approach for the *incremental risk charge* clearly, setting out its correlation and other modelling assumptions.

7.10.55Q R A *firm* must calculate its *incremental risk charge* at least weekly.

Incremental risk charge: Internal approaches based on different parameters

7.10.55R R A *firm* may use an approach for *incremental risk charge* that does not comply with all the requirements in ■ BIPRU 7.10.55A R to ■ BIPRU 7.10.55P R, only if:

(1) such an approach is consistent with the *firm's* internal methodologies for identifying, measuring, and managing risks; and

(2) the *firm* can demonstrate that its approach results in a capital requirement that is at least as high as it would be if based on an approach in full compliance with the requirements in ■ BIPRU 7.10.55A R to ■ BIPRU 7.10.55P R.

7.10.55S G The *appropriate regulator* will review at least annually any approach taken by the *firm* under ■ BIPRU 7.10.55R R.

All price risk measure: General requirements

7.10.55T R As part of its *VaR model permission*, the *appropriate regulator* may authorise a *firm* to use the *all price risk measure* to calculate an additional capital charge in relation to *positions* in its *correlation trading portfolio* if it meets the following minimum standards:

(1) it adequately captures all price risks at a 99.9% confidence interval over a capital horizon of one year under the assumption of a

constant level of risk, and adjusted, where appropriate, to reflect the impact of liquidity, concentrations, hedging and optionality;

(2) it adequately captures the following risks:

(a) the cumulative risk arising from multiple defaults, including the ordering of defaults, in *tranched* products;

(b) credit *spread risk*, including the gamma and cross-gamma effects;

(c) volatility of implied correlations, including the cross effect between spreads and correlations;

(d) *basis risk*, including both:

(i) the basis between the spread of an index and those of its constituent single names; and

(ii) the basis between the implied correlation of an index and that of bespoke portfolios;

(e) recovery-rate volatility, as it relates to the propensity for recovery rates to affect *tranche* prices; and

(f) to the extent that the *all price risk measure* incorporates benefits from dynamic hedging, the risk of hedge slippage and the potential costs of rebalancing those hedges.

7.10.55U R The amount of the capital charge for the *correlation trading portfolio* calculated in accordance with the *all price risk measure* must not be less than 8% of the capital charge that would result from applying ■ BIPRU 7.2.48L R to all *positions* in the *correlation trading portfolio* subject to the *all price risk measure*.

7.10.55V R A *firm* may include in its *all price risk measure positions* that are jointly managed with *positions* in the *correlation trading portfolio* and would otherwise be included in the *incremental risk charge*. In that case, the *firm* must exclude these *positions* from the calculation of its *incremental risk charge*.

7.10.55W R A *firm* must have sufficient market data to ensure that it fully captures the salient risks of the *positions* in its *all price risk measure* in accordance with the standards set out in ■ BIPRU 7.10.55T R.

7.10.55X R A *firm* must demonstrate through backtesting or other appropriate means that its *all price risk measure* can appropriately explain the historical price variation of these *positions*. A *firm* must be able to demonstrate to the *appropriate regulator* that it can identify the *positions* within its *correlation trading portfolio*, in relation to which it is authorised to use the *all price risk measure*, separately from those other *positions* in relation to which it is not authorised to do so.

7.10.55Y R A *firm* must calculate the capital charge under the *all price risk measure* at least weekly.

All price risk measure: Stress testing

7.10.55Z R

(1) For *positions* within its *correlation trading portfolio* in relation to which a *firm* may use the *all price risk measure*, a *firm* must regularly apply a set of specific, predetermined stress scenarios. These stress scenarios must examine the effects of stress to default rates, recovery rates, credit spreads, and correlations on the profit and loss of the *correlation trading portfolio*.

(2) A *firm* must apply the stress scenarios in (1) at least weekly and report the results to the *appropriate regulator* in accordance with ■ BIPRU 7.10.129 R.

7.10.55ZA R

If the results of the stress tests carried out in accordance with ■ BIPRU 7.10.55Z R indicate a material shortfall in the amount of capital required under the *all price risk measure*, a *firm* must notify the *appropriate regulator* of this circumstance by no later than two *business days* after the *business day* on which the material shortfall occurred.

7.10.55ZB G

The *appropriate regulator* may use its powers under section 55J (Variation etc. on the Authority's own initiative) of the *Act* to impose on the *firm* a capital add-on to cover the material shortfall reported under ■ BIPRU 7.10.55ZA R.

7.10.55ZC G

The *all price risk measure* is based on the *incremental risk charge*. Therefore, when applying the *all price risk measure*, a *firm* should have regard to the requirements in ■ BIPRU 7.10.55A R to ■ BIPRU 7.10.55R R.

Risk management standards: Introduction

7.10.56 G

A *firm* with a complex portfolio is expected to demonstrate greater sophistication in its modelling and risk management than a *firm* with a simple portfolio. For example, a *firm* will be expected to consider, where necessary, varying degrees of liquidity for different risk factors, the complexity of risk modelling across time zones, product categories and risk factors. Some trade-off is permissible between the sophistication and accuracy of the model and the conservatism of underlying assumptions or simplifications.

7.10.57 G

A *firm* should be able to demonstrate that it meets the risk management standards set out in the *VaR model permission* on a legal entity basis. This is particularly important for a *subsidiary undertaking* in a *group* subject to matrix management where the business lines cut across legal entity boundaries.

Risk management standards: General requirement

7.10.58 R

A *firm* must have a conceptually sound risk management system surrounding the use of its *VaR model* that is implemented with integrity and that in particular meet the qualitative standards set out in ■ BIPRU 7.10.59R - ■ BIPRU 7.10.82R.

Risk management standards: Use requirement

7.10.59 R A *firm* must base its *model PRR* calculation on the output of the *VaR model* which is used for its internal risk management rather than one developed specifically to calculate its *PRR*.

7.10.60 R The *VaR model* must be fully integrated into the daily risk management process of the *firm*, and serve as the basis for reporting risk exposures to *senior management* of the *firm*.

7.10.61 G A *firm's VaR model* output should be an integral part of the process of planning, monitoring and controlling a *firm's market risk* profile. The *VaR model* should be used in conjunction with internal trading and exposure limits. The links between these limits and the *VaR model* should be consistent over time and understood by *senior management*. The *firm* should regard risk control as an essential aspect of the business to which significant resources need to be devoted.

Risk management standards: Risk control unit

7.10.62 R A *firm* must have a risk control unit which is independent from business trading units and which reports directly to *senior management*. It:

(1) must be responsible for designing and implementing the *firm's* risk management system;

(2) must produce and analyse daily reports on the output of the *VaR model* and on the appropriate measures to be taken in terms of the trading limits; and

(3) conduct the initial and on-going validation of the *VaR model*.

Risk management standards: Senior management

7.10.63 R A *firm's governing body* and *senior management* must be actively involved in the risk control process, and the daily reports produced by the risk control unit must be reviewed by a level of management with sufficient authority to enforce both reductions of *positions* taken by individual traders as well as in the *firm's* overall risk exposure.

7.10.64 G It is the responsibility of a *firm's* own management to ensure the accuracy and integrity of its *VaR model*. This responsibility includes obtaining appropriate independent validation of the *VaR model*.

Risk management standards: Skilled staff

7.10.65 R A *firm* must have sufficient numbers of staff skilled in the use of sophisticated models in the trading, risk control, audit and back office areas.

Risk management standards: Controls and compliance

7.10.66 R A *firm* must establish, document and maintain policies, controls and procedures to an auditable standard:

(1) concerning the operation of its *VaR model approach*; and

(2) for monitoring and ensuring compliance with the policies, controls and procedures in (1).

Risk management standards: Documentation

7.10.67 R A *VaR model* must be adequately documented.

7.10.68 G

(1) An example of documents required by ■ BIPRU 7.10.67R may be a manual that describes the basic principles of the risk management framework, clearly setting out empirical techniques, principles and assumptions used within it.

(2) This documentation should be of sufficient detail for the *appropriate regulator* to be able to develop a clear understanding of how the *VaR model* works from that documentation on its own.

Risk management standards: Track record

7.10.69 R A *firm's VaR model* must have a proven track record of acceptable accuracy in measuring risk.

Risk management standards: Development validation

7.10.70 R Adequate procedures must be in place to ensure that model changes are validated before being introduced.

7.10.71 G The procedures in ■ BIPRU 7.10.70R need not necessarily rely on backtesting using a back-run of recreated data.

Risk management standards: Stress testing

7.10.72 R

(1) A *firm* must frequently conduct a rigorous programme of stress testing. The results of these tests must be reviewed by *senior management* and reflected in the policies and limits the *firm* sets.

(2) The programme must particularly address:

(a) concentration risk;

(b) illiquidity of markets in stressed market conditions;

(c) one way markets;

(d) event and jump to default risks;

(e) non linearity of products;

(f) deep out of the money *positions*;

(g) *positions* subject to the gapping of prices;

(h) full revaluation, or a reliable approximation, of *positions*;

(i) instant shocks as well as effects of longer term periods of stress;

(j) calibration changes under stressed conditions;

(k) secondary risk factors (such as volatility);

(l) basis risk;

(m) systemic and localised stresses; and

(n) other risks that may not be captured appropriately in the *VaR model* (for example, recovery rate uncertainty, implied correlations and skew risk).

(3) The shocks applied must reflect the nature of the portfolios and the time it could take to hedge out or manage risks under severe market conditions.

7.10.73 G The stress testing under ■ BIPRU 7.10.72R should be taken into account under the *overall Pillar 2 rule*.

7.10.73A G The *firm's* stress testing programme should be comprehensive in terms of both risk and *firm* coverage, and appropriate to the size and complexity of *trading book positions* held.

Risk management standards: Valuation

7.10.74 R A *firm* must have procedures to ensure that the valuation of assets and liabilities is appropriate, that valuation uncertainty is identified and appropriate reserving is undertaken where necessary.

Risk management standards: Risk review

7.10.75 R At least once a year, a *firm* must conduct, as part of its regular internal audit process, a review of its risk management process. This review must include both the activities of the business trading units and of the independent risk control unit, and must be undertaken by suitably qualified staff independent of the areas being reviewed. This review must consider, at a minimum:

(1) the adequacy of the documentation of the risk management system and process;

(2) the organisation of the risk control unit;

(3) the integration of *market risk* measures into daily risk management;

(4) the integrity of the management information system;

(5) the process for approving risk pricing models and valuation systems used in front and back offices;

(6) the validation of any significant changes in the risk management process;

(7) the scope of risks and products captured by the *VaR model*;

(8) the accuracy and completeness of *position* data;

(9) the process used to ensure the consistency, timeliness, independence and reliability of data sources (including the independence of such data sources);

(10) the accuracy and appropriateness of volatility and correlation assumptions;

(11) reserving policies and the accuracy of the valuation procedures and risk sensitivity calculations;

(12) the process employed to evaluate the *VaR model's* accuracy, including the programme of backtesting;

(13) the controls surrounding the development of the *VaR model*; and

(14) the process employed to produce the calculation of the *model PRR*.

Risk management standards: Validation and backtesting

7.10.76 G The *appropriate regulator* will require a period of initial monitoring or live testing before a *VaR model* can be recognised. This will be agreed on a *firm* by *firm* basis.

7.10.77 G In assessing the *firm's VaR model* and risk management, the *appropriate regulator* has regard to the results of internal model validation procedures used by the *firm* to assess the *VaR model*.

7.10.78 R A *firm* must have processes in place to ensure that its *VaR model* has been adequately validated by suitably qualified parties independent of the development process to ensure that it is conceptually sound and adequately captures all material risks. This validation must be conducted when the *VaR model* is initially developed and when any significant changes are made to the *VaR model*. The validation must also be conducted on a periodic basis but especially where there have been any significant structural changes in the market or changes to the composition of the portfolio which might lead to the *VaR model* no longer being adequate. As techniques and best practices evolve, a *firm* must avail itself of these advances. Model validation must not be limited to backtesting, but must, at a minimum, also include the following:

(1) tests to demonstrate that any assumptions made within the *VaR model* are appropriate and do not underestimate or overestimate the risk (including testing of the validity of the assumptions and approximations underlying the *VaR model*);

(2) in addition to the regulatory backtesting programmes, a *firm* must carry out its own model validation tests in relation to the risks and structures of its portfolios, such as statistical validation techniques and other methods of measuring performance and validity;

(3) the use of hypothetical portfolios to ensure that the *VaR model* is able to account for particular structural features that may arise, for example material basis risks and concentration risk; and

(4) investigation of the limitations of the *VaR model* including testing of the accuracy of parts of the *VaR model* as well as of the whole.

7.10.79 G

(1) In addition to regulatory backtesting programs, testing for model validation should be carried out using additional tests which may include for example:

(a) testing carried out using hypothetical changes in portfolio value that would occur were end of day positions to remain unchanged;

(b) testing carried out for longer periods than required for the regular backtesting programme (for example, 3 years);

(c) testing carried out using confidence intervals other than the 99 percent interval required under the quantitative requirements in ■ BIPRU 7.10; and

(d) testing of parts of portfolios.

(2) A longer time period generally improves the power of backtesting. However a longer time period may not be desirable if the *VaR model* or market conditions have changed to the extent that historical data is no longer relevant.

7.10.80 G

Further material on backtesting can be found in ■ BIPRU 7.10.91G - ■ BIPRU 7.10.112G.

Risk management standards: Information technology

7.10.81 G

In assessing whether the *VaR model* is implemented with integrity as described in ■ BIPRU 7.10.58R (Stress testing), the *appropriate regulator* will consider in particular the information technology systems used to run the model and associated calculations. The assessment may include:

(1) feeder systems; risk aggregation systems; time series databases; the *VaR model* system; stress testing system; the backtesting system including profit and loss cleaning systems where appropriate; data quality; reconciliations and checks on completeness of capture;

(2) system development, change control and documentation; security and audit trails; system availability and contingency procedures; network adequacy; and

(3) operational statistics relating to the *VaR model* production process, including, for example, statistics relating to timeliness, number of re-runs required and the reliability of data feeds.

Risk management standards: Controls

7.10.82 R

A *firm* must ensure that it has adequate controls relating to:

(1) the derivation of the *model PRR*;

(2) the integrity of the backtesting programme, including the calculation of the profit and loss account;

(3) the integrity and appropriateness of the *VaR model*, including the *VaR model's* geographic coverage and the completeness of data sources;

(4) the *VaR model's* initial and ongoing development, including independent validation;

(5) the valuation models, including independent validation; and

(6) the adequacy, security and integrity of the information technology infrastructure.

Stress testing

7.10.83 R ■ BIPRU 7.10.84G-■ BIPRU 7.10.90G relate to stress testing of a *VaR model* (see ■ BIPRU 7.10.72R (Risk management standards: Stress testing)).

7.10.84 G Stress testing is a way of identifying the risk to a *firm* posed by a breakdown of model assumptions or by low-probability events. Where stress tests reveal unacceptable vulnerability to a given set of circumstances, a *firm* should take prompt steps to manage those risks appropriately, for example by hedging against the outcome or reducing the size of the *firm's exposure*.

7.10.85 R A *firm* must have the capacity to run daily stress tests.

7.10.86 R Stress testing must involve identifying market scenarios or other low probability events in all types of risks that generate the greatest losses on a *firm's* portfolio.

7.10.87 R A *firm* must periodically and actively identify all the worst case scenarios that are relevant to its portfolio. Scenarios used must be appropriate to test the effect of adverse movements in market volatilities and correlations and the effect of any change in the assumptions underlying the *VaR model*. Scenarios involving low probability market events must nevertheless be plausible.

7.10.88 R Stress testing must capture non-linear effects.

7.10.89 R A *firm* must have procedures to assess and respond to the results produced from stress testing. In particular, stress testing results must be:

(1) used to evaluate its capacity to absorb such losses or identify steps to be taken to reduce risk; and

(2) communicated routinely to *senior management* and periodically to the *governing body*.

7.10.90 G A *firm* may want to conduct the more complex stress tests at longer intervals or on an ad hoc basis.

7.10.90A R A *firm* must also carry out reverse stress tests.

Backtesting: Introduction

7.10.91 G Backtesting is the process of comparing value-at-risk risk measures to portfolio performance. It is intended to act as one of the mechanisms for the ongoing validation of a *firm's VaR model* and to provide incentives for *firms* to improve their *VaR measures*.

7.10.92 G It is a condition for granting a *VaR model permission* that a *firm* should have a backtesting programme in place and should provide three months of backtesting history.

7.10.93 G Backtesting conducted only at a whole portfolio level using a single measure of profit and loss has limited power to distinguish an accurate *VaR model* from an inaccurate one. Backtesting should therefore be regarded as an additional safeguard rather than a primary validation tool. Such testing does however form the basis of the *appropriate regulator's plus factor* system. The test has been chosen as the basis of the backtesting regime because of its simplicity. A *firm* will therefore be expected to complement this backtesting with more granular backtesting analysis and involving more than one measure of profit and loss (i.e. both a *profit and loss figure* and a *hypothetical profit and loss figure*).

7.10.94 R A *firm* must have the capacity to analyse and compare its *profit and loss figures* and *hypothetical profit and loss figures* to the *VaR measure*, both at the level of the whole portfolio covered by the *VaR model permission* and at the level of individual books that contain material amounts of risk.

7.10.94A R At a minimum, backtesting of *hypothetical profit and loss figures* must be used for regulatory backtesting and also to calculate *plus factors*.

7.10.95 G Backtesting of *hypothetical profit and loss figures* is also used for model validation and for reporting to the *appropriate regulator*.

Backtesting: Basic testing requirements

7.10.96 R At a minimum, a *firm* must, on each *business day*, compare each of its 250 most recent *business days*' *hypothetical profit and loss figures* (ending with the *business day* preceding the *business day* in question) with the corresponding *one-day VaR measures*.

7.10.97 G Generally the *positions* underlying the profit and loss account and *VaR measures* should not be materially different.

Backtesting: One day VaR measure

7.10.98 R The *one-day VaR measure* for a particular *business day* is the *VaR number* for that *business day* calibrated to a one *business day* holding period and a 99% one-tailed confidence level.

Backtesting: Calculating the profit and loss

7.10.99 G The ultimate purpose of backtesting is to assess whether capital is sufficient to absorb actual losses. Actual daily profit and loss means the day's profit and loss arising from trading activities within the scope of the *VaR model permission*. This measure should, however, be 'cleaned' using ■ BIPRU 7.10.100R inclusion in profit and loss of non-modelled factors.

7.10.100 R The *profit and loss figure* for a particular *business day* is the *firm's* actual profit or loss for that day in respect of the trading activities within the scope of the *firm's VaR model permission*, adjusted by stripping out:

(1) fees and commissions;

(2) brokerage;

(3) additions to and releases from reserves which are not directly related to *market risk* (e.g. administration reserves); and

(4) any inception profit exceeding an amount specified for this purpose in the *firm's VaR model permission* (where inception profit is defined as any profit arising immediately on entering into a new transaction).

7.10.101 G The definition of *profit and loss figure* may be amended or replaced in an individual *VaR model permission* if the *firm* can demonstrate to the *appropriate regulator* that the alternative method meets the spirit and purpose of the provisions in ■ BIPRU 7.10 about the *profit and loss figure*.

7.10.102 G The *appropriate regulator* will review as part of a *firm's VaR model permission* application the processes and documentation relating to the derivation of profit and loss used for backtesting. A *firm's* documentation should clearly set out the basis for cleaning profit and loss. To the extent that certain profit and loss elements are not updated every day (for example certain reserve calculations) the documentation should clearly set out how such elements are included in the profit and loss series.

Backtesting: Definition of backtesting exception

7.10.103 R A *backtesting exception* is deemed to have occurred for any *business day* if the *hypothetical profit and loss figure* for that *business day* shows a loss, which in absolute magnitude, exceeds the *one-day VaR measure* for that *business day*. The only exception is if that *business day* is identified in the *firm's VaR model permission* as giving rise to an excluded *backtesting exception*.

Backtesting: Obligation to notify the appropriate regulator

7.10.104 R If a *backtesting exception* occurs, the *firm* must notify its usual supervisory contact at the *appropriate regulator* orally by close of business two *business days* after the *business day* for which the *backtesting exception* occurred. Within five *business days* following the end of each *Month*, the *firm* must submit to the *appropriate regulator* a written account of the previous *Month's backtesting exceptions* (if any). This explanation must include the causes of the *backtesting exceptions*, an analysis of whether the *backtesting*

exception indicate a deficiency in the *firm's VaR model* and the *firm's* planned response (if any).

Backtesting: Summary of the backtesting cycle

7.10.105 G

(1) This paragraph gives *guidance* on the backtesting calculation and reporting process in ■ BIPRU 7.10.96R - ■ BIPRU 7.10.104R.

(2) Let the day on which the loss referred to in ■ BIPRU 7.10.100R is made be day n. The value-at-risk measure for that day will be calculated on day n-1, or overnight between day n-1 and day n. Profit and loss figures are produced on day n+1, and backtesting also takes place on day n+1. The *firm's* supervisor should be notified of any *backtesting exceptions* by close of business on day n+2.

(3) Any *backtesting exception* initially counts for the purpose of the calculation of the *plus factor* even if subsequently the *appropriate regulator* agrees to exclude it under the process described in ■ BIPRU 7.10.106G. Thus, where the *firm* experiences a *backtesting exception* and already has four or more *backtesting exceptions* for the previous 250 *business days*, changes to the *multiplication factor* arising from changes to the *plus factor* become effective at n+3 (using the time-line terminology in (2)).

Backtesting: Process for disregarding backtesting exceptions

7.10.106 G

(1) This paragraph gives *guidance* on the process for excluding *backtesting exceptions* as referred to in ■ BIPRU 7.10.103R.

(2) The *appropriate regulator* will respond flexibly to *backtesting exceptions*. However, the *appropriate regulator's* starting assumption will be that a *backtesting exception* should be taken into account for the purpose of the calculation of *plus factors*. If the *firm* believes that a *backtesting exception* should not count for that purpose, then it should seek a variation of its *VaR model permission* in order to exclude that particular *backtesting exception*. The *appropriate regulator* will then decide whether to agree to such a variation.

(3) One example of when a *firm's backtesting exception* might properly be disregarded is when it has arisen as a result of a risk that is not captured in its *VaR model* but against which *capital resources* are already held.

Backtesting: Specific risk backtesting

7.10.107 R

If a *firm's VaR model permission* covers *specific risk*, the *firm* must validate its *VaR model* through backtesting aimed at assessing whether *specific risk* is being accurately captured. This backtesting must be carried out in accordance with the provisions of its *VaR model permission*. If the *VaR model permission* provides for this backtesting to be performed on the basis of relevant sub-portfolios, these must be chosen in a consistent manner.

7.10.108 G

Specific risk backtesting involves the backtesting of a standalone *specific risk VaR* measure against a profit and loss series determined by reference to exposure risk factors categorised as *specific risk*. Alternatively *specific risk*

backtesting may take the form of regular backtesting of trading books and portfolios that are predominantly exposed to risk factors categorised as *specific risk*. The precise requirements for *specific risk* backtesting will be specified in the *firm's VaR model permission* as will the definition of a *specific risk backtesting exception*.

Backtesting: Multiple exceptions

7.10.109 R If ten or more *backtesting exceptions* or ten or more *specific risk backtesting exceptions* are recorded in a 250 *business day* period, a *firm* must take immediate corrective action.

7.10.110 G Where backtesting reveals severe problems with the basic integrity of the *VaR model*, the *appropriate regulator* may withdraw model recognition. In particular, if ten or more *backtesting exceptions* are recorded in a 250 *business day* period, the *appropriate regulator* may apply a *plus factor* greater than one or the *appropriate regulator* may consider revoking a *firm's VaR model permission*. The *appropriate regulator* may also consider revoking a *firm's VaR model permission* if ten or more *specific risk backtesting exceptions* occur in such a period.

7

Backtesting: Hypothetical profit and loss

7.10.111 R A *firm* must perform backtesting against a *hypothetical profit and loss figure* with respect to each *business day*. A *hypothetical profit and loss figure* for a *business day* means the *hypothetical profit and loss figure* that would have occurred for that *business day* if the portfolio on which the *VaR number* for that *business day* is based remained unchanged.

7.10.112 G

(1) A *hypothetical profit and loss figure* is based on the day's change in the value of the same portfolio that was used to generate the value-at-risk forecast.

(2) [deleted]

(3) The *firm* may also need to calculate a *hypothetical profit and loss figure* in order to produce profit attribution reports and to analyse the cause of *backtesting exceptions*.

7.10.112A G The definition of *hypothetical profit and loss figure* may be amended or replaced in an individual *VaR model permission* if the *firm* can demonstrate to the *appropriate regulator* that the alternative method meets the spirit and purpose of the provisions in ■ BIPRU 7.10 about the *hypothetical profit and loss figure*.

Capital calculations: General

7.10.113 R The *model PRR* is, for any *business day* (the "relevant" *business day*), calculated in accordance with the following formula:

(1) the higher of:

(a) the *VaR number* for the relevant *business day*; and

(b) the average of its daily *VaR numbers* for each of the 60 *business days* ending with the relevant *business day*, multiplied by the *multiplication factor* for the relevant *business day*; and

(2) (in the case of a *VaR model permission* that covers *specific risk*) the higher of:

(a) the *incremental risk charge* for the relevant *business day*; and

(b) the average of the twelve-week *incremental risk charge*; and

(3) the higher of:

(a) the latest *stressed VaR number*; and

(b) the average of the *firm's* daily *stressed VaR number* for the 60 *business days* ending with the relevant *business day*, multiplied by the *multiplication factor* applied to the *stressed VaR measure* for the relevant *business day*; and

(4) (in the case of a *VaR model permission* that covers *all price risk measure*) the higher of:

(a) the *all price risk measure* for the relevant *business day*; and

(b) the average of the twelve-week *all price risk measure*.

7.10.114 R For any day that is not a *business day*, the *model PRR* is the amount for the prior *business day*.

7.10.115 R The *VaR number* for any *business day* means the *VaR measure*, in respect of the previous *business day's* close-of-business *positions* in products coming within the scope of the *VaR model permission*, calculated by the *VaR model* and in accordance with ■ BIPRU 7.10 and any methodology set out in the *VaR model permission*. The *VaR number* must not be calculated taking into account matters on the *business day* for which it is the *VaR number*.

7.10.116 R The *incremental risk charge* for any *business day* means the *incremental risk charge* required under the provisions in ■ BIPRU 7.10 about *specific risk*, in respect of the previous *business day's* close-of-business *positions* with respect to which those provisions apply.

7.10.116A R The *all price risk measure* for any *business day* means the *all price risk measure* required under the provisions in ■ BIPRU 7.10 about *specific risk* for the *correlation trading portfolio*.

7.10.117 G The following equation expresses ■ BIPRU 7.10.113R mathematically:

$$PRR_{VaR} = \text{Max}\left\{\text{VaR}_t, \text{fx}\,\frac{1}{60}\sum_{i=0}^{59}\text{VaR}_{t-i}\right\} + \text{Max}\left\{\text{SVaR}_t, \text{sx}\,\frac{1}{y}\sum_{i=0}^{y-1}\text{SVaR}_{t-i}\right\} + \text{Max}\left\{\text{IRC}_t, \frac{1}{z}\sum_{i=0}^{z-1}\text{IRC}_{t-i}\right\} + \text{Max}\left\{\text{APR}_t, \frac{1}{w}\sum_{i=0}^{w-1}\text{APR}_{t-i}\right\}$$

where:

(1) PRR_{Var} is a *firm's model PRR*;

(2) VaR_t represents the previous day's value-at-risk figure;

(3) *VaR* $_{t-i}$ represents the value-at-risk calculated for *i business days* earlier;

(4) *f* is the *multiplication factor* for *VaR*;

(5) SVAR $_t$ represents the latest *stressed VaR* figure;

(6) SVAR $_{t-i}$ represents the *stressed VaR* calculated for *i business days* earlier;

(7) *s* is the *multiplication factor* for *stressed VaR*;

(8) *y* is the number of times the *stressed VaR* was calculated in the last 60 *business days*;

(9) *IRC* $_t$ represents the latest *incremental risk charge*;

(10) *IRC* $_{t-i}$ represents the *incremental risk charge* calculated for *i business days* earlier;

(11) *z* is the number of times the *incremental risk charge* was calculated in the last 12 weeks;

(12) *APR* $_t$ represents the latest *all price risk measure*;

(13) *APR* $_{t-i}$ represents the *all price risk measure* calculated for *i business days* earlier; and

(14) *w* is the number of times the *all price risk measure* was calculated in the last 12 weeks.

Capital calculations: Multiplication factors

7.10.118 R The *multiplication factor*, for *VaR* and *stressed VaR*, for any *business day* is the sum of the *minimum multiplication factor* and the *plus factor* for that day.

7.10.119 R The *minimum multiplication factor*, for *VaR* and *stressed VaR*, is three or any higher amount the *VaR model permission* defines it as.

7.10.120 G The *minimum multiplication factor*, for *VaR* and *stressed VaR*, will never be less than three. If the *appropriate regulator* does set the *minimum multiplication factor*, for *VaR* and *stressed VaR*, above three the *VaR model permission* will have a table that sets out the reasons for that add on and specify how much of the add on is attributable to each reason (see ■ BIPRU 7.10.121R). If there are weaknesses in the *VaR model* that may otherwise be considered a breach of the minimum standards referred to in ■ BIPRU 7.10.24R the *appropriate regulator* may apply such an add on to act as a mitigant for those weaknesses.

7.10.121 R Something that would otherwise be a breach of the minimum standards in ■ BIPRU 7.10.26R - ■ BIPRU 7.10.53R is not a breach to the extent that that thing is identified in the *firm's VaR permission* as a reason for an increase in the *minimum multiplication factor*, for *VaR* and *stressed VaR*, above 3.

7.10.122 G Typically, any add on will be due to a specific weakness in systems and controls identified during the *appropriate regulator's* review that the *appropriate regulator* does not consider material enough to justify withholding overall model recognition. The *firm* will be expected to take action to address the reasons for any add on. The *appropriate regulator* will then review these periodically and, where satisfactory action has been taken, the add on will be removed through a variation of the *VaR model permission*.

7.10.123 G The *plus factor* system is designed so that the more often a *VaR model* has under-predicted losses in the past, the higher should be the capital requirement based on the *VaR model*. It is intended to provide a capital incentive for the *firm* to continue to improve the accuracy of its *VaR model*.

7.10.124 R The table in ■ BIPRU 7.10.125R sets out the *plus factors* to be added to the *minimum multiplication factor*, for *VaR* and *stressed VaR*, for any *business day*. It is based on the number of *backtesting exceptions* that occurred during the backtesting period as referred to in ■ BIPRU 7.10.96R (Backtesting: Basic testing requirements) ending three *business days* preceding the *business day* for which the *model PRR* is being calculated.

7.10.125 R Table: Backtesting plus factors

This table belongs to ■ BIPRU 7.10.124R

Zone	Number of recorded exceptions	Plus factor
Green	4 or less	0.00
Yellow	5	0.40
	6	0.50
	7	0.65
	8	0.75
	9	0.85
Red	10 or more	1.00

7.10.126 G A *VaR model* that correctly predicts a one-tailed 99% confidence level is expected to produce, on average, 2.5 *backtesting exceptions* every 250 days. Random events may cause the number of *backtesting exceptions* actually observed to vary. The *plus factor* system is designed to take this into account. Hence *plus factors* are only imposed on the *firm* if it has five or more recorded *backtesting exceptions*. Therefore, where a *backtesting exception* appears to be caused simply by chance, it will not be appropriate for a *VaR model permission* to be varied to exclude that *backtesting exception* as described in ■ BIPRU 7.10.106G (Backtesting: Process for disregarding backtesting exceptions).

Capital calculations: Specific risk surcharge: transitional requirements

7.10.127 G *Firms* who gained model recognition before 1 January 2007 will be permitted to calculate *PRR* for *specific risk* in accordance with the methodology they were permitted to use immediately before that date

instead of capturing event and default risk in their models (see ■ BIPRU TP 14 (Market risk: VaR models)). This treatment will not be available to a *firm* that gains model recognition after that date.

Reporting procedures and requirements

7.10.128 G A *VaR model permission* will contain requirements for what the *firm* should report to the *appropriate regulator* and the procedures for reporting. The precise requirements will vary from *VaR model permission* to *VaR model permission*. ■ BIPRU 7.10.129R-■ BIPRU 7.10.130R set out what the *appropriate regulator* regards as the standard requirements.

7.10.129 R A *firm* must, no later than the number of *business days* after the end of each quarter specified in the *VaR model permission* for this purpose, submit, in respect of that quarter, a report to the *appropriate regulator* about the operation of the *VaR model*, the systems and controls relating to it and any changes to the *VaR model* and those systems and controls. Each report must outline as a minimum the following information in respect of that quarter:

(1) methodological changes and developments to the *VaR model*;

(2) the introduction of all new pricing models used in connection with the *VaR model* and any changes to any pricing models used in connection with the *VaR model*, including details of any material associated valuation or risk management issues;

(3) a summary of backtesting performance against *profit and loss figures* (if calculated) and *hypothetical profit and loss figures*, which must be provided in electronic format as stipulated by the *VaR model permission*;

(4) (if the *VaR model permission* covers *specific risk*) the results of the *specific risk* backtesting including *specific risk backtesting exceptions*;

(5) any change to any feeder or pre-processing systems in connection with the *VaR model*, including changes to any of the systems set out in the list described in ■ BIPRU 7.10.131G (1) (as it exists at the date of the *VaR model permission*), and any introduction of a new such system;

(6) any changes to the products coming within the scope of the *VaR model*;

(7) any material changes or additions to any of the matters referred to in the *firm's* internal documentation in relation to the *VaR model* (as it exists at the date of the *VaR model permission*) or to any matters subsequently notified under (7);

(8) any changes in *senior management*;

(9) an up-to-date list of products covered by the *VaR model permission* showing all changes made since the *VaR model permission* was granted;

(10) where applicable (nil returns are not required), details of:

(a) any use of a changed historical observation period in accordance with ■ BIPRU 7.10.30R or any change in the use of any weighting scheme as described in ■ BIPRU 7.10.33R;

(b) any data series becoming unreliable as described in ■ BIPRU 7.10.31R and any subsequent use of alternative value-at-risk measurement techniques;

(c) the frequency of updating data sets being increased in accordance with ■ BIPRU 7.10.34R;

(d) any change in the method employed to derive 10-day *VaR measure* (see ■ BIPRU 7.10.28R);

(e) to the extent that the use of correlations is permitted by a *firm's VaR model permission*, a summary of any notifications that are required under ■ BIPRU 7.10.37R; and

(f) the *VaR model* not accurately capturing risks (as referred to in ■ BIPRU 7.10.53R) and any steps taken under ■ BIPRU 7.10.53R; and

(11) the results of the stress tests on the *firm's correlation trading portfolio* under ■ BIPRU 7.10.55Z R, including a comparison to the current capital charge.

7

7.10.130 R A *firm* must provide to, and discuss with, the *appropriate regulator* details of any significant planned changes to the *VaR model* before those changes are implemented. These details must include information about the nature of the change and an estimate of the impact on *VaR numbers* and the *incremental risk charge*.

Updating the VaR model permission

7.10.131 G The *VaR model permission* will generally contain a list of the following:

(1) feeder systems and pre-processing systems;

(2) products covered by the *VaR model permission*; and

(3) the *firm's* internal documentation in relation to the *VaR model*.

7.10.132 G The information in ■ BIPRU 7.10.131G will vary over time. It is therefore not included in a *VaR model permission* as a *rule* but for information only. The *appropriate regulator* will update that information regularly in accordance with information supplied under ■ BIPRU 7.10.129R. That updating will not amount to a variation of the *VaR model permission*.

Link to standard PRR rules: Incorporation of the model output into the capital calculation

7.10.133 G A *VaR model permission* will modify ■ GENPRU 2.1.52 R (Calculation of the *market risk* capital requirement) to provide that a *firm* should calculate its *market risk capital requirement* in accordance with ■ BIPRU 7.10 to the extent set out in the *VaR model permission*.

7.10.134 G By modifying ■ GENPRU 2.1.52 R (Calculation of the *market risk* capital requirement) to allow the *firm* to use the *VaR model* to calculate all or part of its *PRR* for certain positions, the *appropriate regulator* is treating it like an application *rule*. The modification means that the *PRR* calculation set out in ■ BIPRU 7.10 supersedes the *standard market risk PRR rules* for products and risks coming within the scope of the *VaR model permission*.

7.10.135 R To the extent that a *position* does not fall within the scope of a *firm's VaR model permission* the *firm* must calculate the *PRR* under the *standard market risk PRR rules* or, as applicable, those provisions as modified by the *firm's CAD 1 waiver*.

7.10.136 R

(1) This *rule* applies to a *position* of a type that comes within the scope of a *firm's VaR model permission*.

(2) Subject to ■ BIPRU 7.10.136A R, if, where the *standard market risk PRR rules* apply, a *position* is subject to a *PRR charge* and the *firm's VaR model permission* says that it covers the risks to which that *PRR charge* relates, the *firm* must, for those risks, calculate the *PRR* for that *position* under the *VaR model approach* rather than under the *standard market risk PRR rules*.

(3) If, where the *standard market risk PRR rules* apply, a *position* is subject to one or more *PRR charges* and the *firm's VaR model permission* does not cover all the risks to which those *PRR charges* relate, the *firm* must calculate the *PRR* for that *position* under the *VaR model approach* (for those risks that are covered) and under the *standard market risk PRR rules* (for those other risks).

(4) Where the *standard market risk PRR rules* distinguish between *specific risk* and *general market risk* a *firm's VaR model permission* covers *specific risk* to the extent that it says it does. If the *firm's VaR model permission* does not cover *specific risk*, ■ BIPRU 7.10.143R and ■ BIPRU 7.10.144R apply.

(5) If a *firm's VaR model permission* covers *positions* in *CIUs* it covers *specific risk* with respect to those *positions*.

7.10.136A R A *firm* must calculate the *market risk capital requirement* for *securitisation positions* and *positions* in the *correlation trading portfolio* in accordance with the *standard market risk PRR rules*, with the exception of those *positions* subject to the *all price risk measure*.

7.10.137 R A *firm* may exclude from the *VaR model approach* immaterial risks within the scope of its *VaR model approach*. If a *firm* does so it must instead apply the *standard market risk PRR rules* to those risks.

7.10.138 R

(1) If a *firm* calculates its *market risk capital requirement* using a combination of the *standard market risk PRR rules* and either the *VaR model approach* or the *VaR model approach* with the *CAD 1 model approach* the *PRR* from each method must be added together.

(2) A *firm* must take appropriate steps to ensure that all of the approaches are applied in a consistent manner.

7.10.139 G An example of the effect of ■ BIPRU 7.10.138R is that where a *firm* normally calculates the *PRR* for a particular portfolio using a *VaR model*, a *firm* should not switch to the *standard market risk PRR rules* purely to achieve a more attractive *PRR*.

7.10.140 R If:

(1) the *standard market risk PRR rules* provide for a choice of which of the *PRR charges* to use or specify that one type must be used in some circumstances and that another type must be used in other circumstances;

(2) one of those types is disapplied under ■ BIPRU 7.10.136R; and

(3) the other type is not disapplied;

the *firm*:

(4) must use the *VaR model approach* if under the *standard market risk PRR rules* the *firm* must use the *standard market risk PRR rules* in (2); and

(5) may use the *VaR model approach* if under the *standard market risk PRR rules* the *firm* may use the *standard market risk PRR rules* in (2).

7.10.141 G The treatment of a *convertible* is an example of a situation in which ■ BIPRU 7.10.140R applies. The table in ■ BIPRU 7.3.3R (Table: Instruments which result in notional positions) shows that there are circumstances in which under the *standard market risk PRR rules* a *firm* should calculate an *equity PRR* and that there are circumstances in which a *firm* may choose between calculating an *equity PRR* and an *interest rate PRR*. ■ BIPRU 7.10.140R would be relevant if a *firm's VaR model permission* only covers one of *equity* risk and interest rate risk.

7.10.142 R The *standard market risk PRR rules* for the *option PRR* are only disapplied to the extent that the derived positions arising under ■ BIPRU 7.6.13R (Table: Derived positions) come within the scope of the *VaR model permission*.

Link to standard PRR rules: General market risk only

7.10.143 R If a *firm's VaR model permission* covers interest rate *general market risk* but not interest rate *specific risk*, the *firm* must calculate the *interest rate PRR* so far as it relates to interest rate *specific risk* in accordance with the *standard market risk PRR rules* except that the *firm* must not use the basic *interest rate PRR* calculation in ■ BIPRU 7.3.45R (Basic interest rate calculation for equity instruments).

Link to standard PRR rules: General market risk only

7.10.144 R If a *firm's VaR model permission* covers *equity general market risk* but not *equity specific risk*, the *firm* must calculate the *equity PRR* so far as it relates to *equity specific risk* in accordance with the *standard market risk PRR rules* except that the *PRR* for *equity specific risk* must be calculated under the *standard equity method*.

Link to standard PRR rules: Miscellaneous

7.10.145 R

(1) To the extent that a *firm's VaR model permission* does not allow it to use an approach set out in ■ BIPRU 7.10 the relevant provisions in ■ BIPRU 7.10 do not apply to that *firm*.

(2) If a provision of the *Handbook* refers to ■ BIPRU 7.10, that reference must, in the case of a particular *firm* with a *VaR model permission*, be treated as excluding provisions of ■ BIPRU 7.10 that do not apply under the *VaR model permission* and as taking into account any modifications to ■ BIPRU 7.10 made by the *VaR model permission*. Such references also include requirements and conditions contained in the *VaR model permission* but not ■ BIPRU 7.10 and to the *rules* modified by the *VaR model permission*.

Requirement to use value at risk methodology

7.10.146 R A *VaR model* must be a value-at-risk model. It must provide an estimate of the worst expected loss on a portfolio resulting from market movements over a period of time with the specified confidence level.

Ceasing to meet the requirements of BIPRU 7.10

7.10.147 G If a *firm* ceases to meet any of the requirements set out in ■ BIPRU 7.10, the *appropriate regulator's* policy is that the *VaR model permission* should cease to have effect. In part this will be achieved by making it a condition of a *firm's VaR model permission* that it complies at all times with the minimum standards referred to in ■ BIPRU 7.10.26R - ■ BIPRU 7.10.53R. Even if they are not formally included as conditions, the *appropriate regulator* is likely to consider revoking the *VaR model permission* if the requirements are not met.

7.10.148 R If a *firm* ceases to meet the conditions or requirements in its *VaR model permission* or ■ BIPRU 7.10 it must notify the *appropriate regulator* at once.

Changes to a VaR model

7.10.149 R A *firm* may change its *VaR model* to such extent as it sees fit, except that it must not make a change that (either on its own or together with other changes since the date of *VaR model permission*) would:

(1) be inconsistent with *VaR model permission* or ■ BIPRU 7.10; or

(2) mean that backtesting in accordance with ■ BIPRU 7.10 and the *VaR model permission* would result in the use of data that is inappropriate for the purposes of measuring the performance of the *VaR model*.

7.11 Credit derivatives in the trading book

Scope

7.11.1 R This section applies to the treatment of credit derivatives in the *trading book*.

Establishment of positions created by credit derivatives: Treatment of the protection seller

7.11.2 R ■ BIPRU 7.11.3R - ■ BIPRU 7.11.11R relate to the treatment of the *protection seller* for the purpose of calculating the *securities PRR*. *Positions* are determined in accordance with ■ BIPRU 7.11.4R - ■ BIPRU 7.11.11R.

7.11.3 R

(1) When calculating the *PRR* of the *protection seller*, unless specified differently by other *rules* and subject to (2), the notional amount of the credit derivative contract must be used. For the purpose of calculating the *specific risk PRR charge*, other than for total return swaps, the maturity of the credit derivative contract is applicable instead of the maturity of the obligation.

(2) When calculating the *PRR* of the *protection seller*, a *firm* may choose to replace the notional value of the credit derivative by the notional value adjusted for changes in the *market value* of the credit derivative since trade inception.

7.11.4 R A total return swap creates a long *position* in the *general market risk* of the reference obligation and a short *position* in the *general market risk* of a *zero-specific-risk security* with a maturity equivalent to the period until the next interest fixing and which is assigned a 0% *risk weight* under the *standardised approach* to credit risk. It also creates a long *position* in the *specific risk* of the reference obligation.

7.11.5 R A credit default swap does not create a *position* for *general market risk*. For the purposes of *specific risk*, a *firm* must record a synthetic long *position* in an obligation of the reference entity, unless the derivative is rated externally and meets the conditions for a *qualifying debt security*, in which case a long *position* in the derivative is recorded. If premium or interest payments are due under the product, these cash flows must be represented as notional *positions* in *zero-specific-risk securities*.

7.11.6 R A single name credit linked note creates a long *position* in the *general market risk* of the note itself, as an interest rate product. For the purpose of *specific risk*, a synthetic long *position* is created in an obligation of the reference entity. An additional long *position* is created in the issuer of the note. Where the credit linked note has an external rating and meets the conditions for a *qualifying debt security*, a single long *position* with the *specific risk* of the note need only be recorded.

7.11.7 R In addition to a long *position* in the *specific risk* of the issuer of the note, a multiple name credit linked note providing proportional protection creates a *position* in each reference entity, with the total notional amount of the contract assigned across the *positions* according to the proportion of the total notional amount that each exposure to a reference entity represents. Where more than one obligation of a reference entity can be selected, the obligation with the highest *risk weighting* determines the *specific risk*.

7.11.8 R Where a multiple name credit linked note has an external rating and meets the conditions for a *qualifying debt security*, a single long *position* with the *specific risk* of the note need only be recorded.

7.11.9 R A first-asset-to-default credit derivative creates a *position* for the notional amount in an obligation of each reference entity. If the size of the maximum credit event payment is lower than the *PRR* requirement under the method in the first sentence of this *rule*, the maximum payment amount may be taken as the *PRR* requirement for *specific risk*.

7.11.10 R A second-asset-to-default credit derivative creates a *position* for the notional amount in an obligation of each reference entity less one (that with the lowest *specific risk PRR* requirement). If the size of the maximum credit event payment is lower than the *PRR* requirement under the method in the first sentence of this *rule*, this amount may be taken as the *PRR* requirement for *specific risk*.

7.11.11 R Ifan nth-to-default derivative is externally rated and meets the conditions for a *qualifying debt security*, then the *protection seller* need only calculate one *specific risk* charge reflecting the rating of the derivative. The *specific risk* charge must be based on the *securitisation PRAs* in ■ BIPRU 7.2 as applicable.

Establishment of positions created by credit derivatives: Treatment of the protection buyer

7.11.12 R For the *protection buyer*, the *positions* are determined as the mirror principle of the *protection seller*, with the exception of a credit linked note (which entails no short *position* in the issuer). If at a given moment there is a call option in combination with a *step-up*, such moment is treated as the maturity of the protection. In the case of first-to-default credit derivatives and n^{th} to default credit derivatives, the treatment in ■ BIPRU 7.11.12AR and ■ BIPRU 7.11.12B R applies instead of the mirror principle.

[**Note:** *CAD* Annex I point 8.B]

7.11.12A R Where a *firm* obtains credit protection for a number of reference entities underlying a credit derivative under the terms that the first default among the assets will trigger payment and that this credit event will terminate the contract, the *firm* may off-set specific risk for the reference entity to which the lowest specific risk percentage charge among the underlying reference entities applies according to the Table in ■ BIPRU 7.2.44R.

[**Note:** *CAD* Annex I point 8.B]

7.11.12B R Where the nth default among the exposures triggers payment under the credit protection, the *protection buyer* may only off-set specific risk if protection has also been obtained for defaults 1 to n-1 or when n-1 defaults have already occurred. In those cases, the methodology set out in ■ BIPRU 7.11.12AR for first-to-default credit derivatives must be followed, appropriately modified for n^{th}-to-default products.

[**Note:** *CAD* Annex I point 8.B]

Deriving the net position in each debt security: Credit derivatives

7.11.12C R A *firm* must calculate both the net long and the net short positions in credit derivatives by applying ■ BIPRU 7.2.36 R and ■ BIPRU 7.2.37 R and, where applicable, ■ BIPRU 7.2.42A R to ■ BIPRU 7.2.42C R or ■ BIPRU 7.11.13 R to ■ BIPRU 7.11.17 R.

Recognition of hedging provided by credit derivatives

7.11.13 R

(1) ■ BIPRU 7.11.14R - ■ BIPRU 7.11.17R relate to *specific risk PRR* for *trading book positions* hedged by credit derivatives for the purposes of the calculation of the *securities PRR*.

(2) A *firm* may take an allowance for protection provided by credit derivatives for the purposes in (1) in accordance with the principles set out in the *rules* referred to in (1).

(3) [deleted]

7.11.14 R

(1) A *firm* may take full allowance when the value of two legs always move in the opposite direction and broadly to the same extent.

(2) This will be the case in the following situations:

(a) the two legs consist of completely identical instruments; or

(b) a long cash *position* is hedged by a total rate of return swap (or vice versa) and there is an exact match between the reference obligation and the underlying exposure (i.e., the cash *position*).

(3) The maturity of the swap itself may be different from that of the underlying exposure for the purposes of (2)(b).

(4) In these situations, a *firm* must not apply a *specific risk PRR* to either side of the *position*.

7.11.15 R An 80% offset may be applied when the value of two legs always move in the opposite direction and where there is an exact match in terms of the reference obligation, the maturity of both the reference obligation and the credit derivative, and the currency of the underlying exposure. In addition, key features of the credit derivative contract must not cause the price movement of the credit derivative materially to deviate from the price movements of the cash *position*. To the extent that the transaction transfers risk, an 80% *specific risk* offset may be applied to the side of the transaction with the higher *PRR*, while the *specific risk* requirements on the other side are zero.

7.11.16 R

(1) A *firm* may take partial allowance when the value of two legs usually move in the opposite direction. This would be the case in the situations set out in (2) - (4).

(2) The first situation referred to in (1) is that the *position* falls under ■ BIPRU 7.11.16 R (2)(b) but there is an asset mismatch between the reference obligation and the underlying exposure. However, the *positions* meet the following requirements:

(a) the reference obligation ranks pari passu with or is junior to the underlying obligation; and

(b) the underlying obligation and reference obligation share the same obligor and have legally enforceable cross-default or cross-acceleration clauses.

(3) The second situation referred to in (1) is that the *position* falls under ■ BIPRU 7.11.14 R (2)(a) or ■ BIPRU 7.11.15 R but there is a currency or maturity mismatch between the credit protection and the underlying asset (currency mismatches must be included in the normal reporting with respect to the *foreign currency PRR*).

(4) The third situation referred to in (1) is that the *position* falls under ■ BIPRU 7.11.15 R but there is an asset mismatch between the cash *position* and the credit derivative. However, the underlying asset is included in the (deliverable) obligations in the credit derivative documentation.

(5) In each of those situations, rather than adding the *specific risk PRR* requirements for each side of the transaction, only the higher of the two *PRR* requirements applies.

7.11.17 R In all situations not falling under ■ BIPRU 7.11.14 R - ■ BIPRU 7.11.16 R, a *firm* must assess a *specific risk PRR charge* against both sides of the *positions*.

Specific risk calculation

7.11.18 R [deleted]

7.11.19 R [deleted]

7.11.20 R
FCA

The *specific risk* portion of the *interest rate PRR* for credit derivatives in the *trading book* must be calculated in accordance with ■ BIPRU 7.2.43 R to

■ BIPRU 7.2.46A G (Specific risk calculation), ■ BIPRU 7.2.48A R to ■ BIPRU 7.2.48K R (Specific risk: securitisations and re-securitisations), ■ BIPRU 7.2.48L R (Specific risk: Correlation trading portfolio), ■ BIPRU 7.2.49 R to ■ BIPRU 7.2.51 G (Definition of a qualifying debt security) and the other provisions of ■ BIPRU 7.11, as applicable.

7.11.21 R [deleted]

7.11.22 R [deleted]

7.11.23 R [deleted]

7.11.24 R [deleted]

7.11.25 R [deleted]

7.11.26 R [deleted]

7.11.27 R [deleted]

7.11.28 R [deleted]

7.11.29 R [deleted]

7.11.30 R [deleted]

7.11.31 R [deleted]

7.11.32 R [deleted]

7.11.33 R [deleted]

7.11.34 R [deleted]

7.11.35 R [deleted]

7.11.36 R [deleted]

7.11.37 R [deleted]

7.11.38	R	[deleted]
7.11.39	R	[deleted]
7.11.40	R	[deleted]
7.11.41	R	[deleted]
7.11.42	R	[deleted]
7.11.43	R	[deleted]
7.11.44	R	[deleted]
7.11.45	R	[deleted]
7.11.46	R	[deleted]
7.11.47	G	[deleted]
7.11.48	R	[deleted]
7.11.49	R	[deleted]
7.11.50	R	[deleted]
7.11.51	R	[deleted]
7.11.52	R	[deleted]

7.11.53 R [deleted]

7.11.54 R [deleted]

7.11.55 R [deleted]

7.11.56 R [deleted]

7.11.57 R [deleted]

7.11.58 R [deleted]

Valuation

7.11.59 G ■ GENPRU 1.3.29 R - ■ GENPRU 1.3.35 G (General requirements: Valuation adjustments or reserves) are particularly relevant for a *firm* trading credit derivatives, especially for credit default swaps that are also *securitisation positions*.

Other risks relating to credit derivatives

7.11.60 R A *firm* must be able to describe, demonstrate and explain to the *appropriate regulator* its trading strategies in relation to credit derivatives both in theory and in practice.

7.11.61 G ■ BIPRU 7.11.62 G - ■ BIPRU 7.11.63 G cover risks relating to credit derivatives that may not be captured in this section. This *guidance* is of particular relevance to the *overall financial adequacy rule*, the *overall Pillar 2 rule* and the *general stress and scenario testing rule*.

7.11.62 G ■ BIPRU 7.11.5 R requires a *firm* to recognise any premiums payable or receivable under the contract as notional *zero-specific-risk securities*. These *positions* are then entered into the *general market risk* framework. As premium payments paid under such contracts are contingent on no credit event occurring, a credit event could significantly change the *general market risk* capital requirement. A *firm* should consider, under the *overall Pillar 2 rule*, whether this risk means that the capital requirements under this section materially understate the *firm's general market risk* position.

7.11.63 G If a *firm* recognises profits on a non-accrual basis it should consider whether the capital requirements for its credit derivatives business adequately cover the risk that any recognised profit may not be achieved due to a credit event occurring. This includes *positions* for which the *firm* may have a perfect hedge in place.

7.11.64 G [deleted]

Chapter 8

Group risk consolidation

8.1 Application

8.1.1 R This chapter applies to:

(1) a *BIPRU firm* that is a member of a *UK consolidation group*;

(2) a *BIPRU firm* that is a member of a *non-UK sub-group*; and

(3) [deleted]

(4) a *firm* that is not a *BIPRU firm* and is a *parent financial holding company in the UK* in a *UK consolidation group*.

8.1.2 R This chapter does not apply to a *firm* in ■ BIPRU 8.1.1R (1) to ■ BIPRU 8.1.1R (3) which is a member of the *UK consolidation group* or *non-UK sub-group* if the interest of the relevant *UK consolidation group* or *non-UK sub-group* in that *firm* is no more than a *participation*.

8.1.2A R A *firm* is not subject to consolidated supervision under ■ BIPRU 8 where any of the following conditions are fulfilled:

(1) the *firm* is included in the supervision on a *consolidated basis* of the *group* of which it is a member by the *FCA* or *PRA* under the *UK CRR* ;

(2) [deleted]

8.1.2B R Where a *group* includes one or more *BIPRU firms* and one or more *IFPRU investment firms* which has permission under article 19 of the *UK CRR* (Exclusion from the scope of prudential consolidation) from the *FCA* not to be included in the supervision on a *consolidated basis* of the *group* of which it is a member, consolidated supervision under ■ BIPRU 8 applies to those *IFPRU investment firms* and the *BIPRU firms*.

Purpose

8.1.3 G Pursuant to the third paragraph of article 95(2) of the *UK CRR*, this chapter applies provisions corresponding to articles 71, 73(1) and (2), 125, 127(1), 133 and 134 of the *Banking Consolidation Directive* and articles 2 (in part), 22-27 and 37(1) (in part) of the *Capital Adequacy Directive*.

How this chapter is organised

8.1.4 G ■ BIPRU 8.2 sets out the definition of *UK consolidation group* and the basic requirement to apply financial resources and concentration risk requirements to that group on a consolidated basis.

8.1.5 G ■ BIPRU 8.3 sets out the definition of a *non-UK sub-group* and the basic requirement to apply financial resources and concentration risk requirements to that group on a consolidated basis.

8.1.6 G ■ BIPRU 8.4 sets out how a group of *CAD investment firms* can apply for a *waiver* from consolidated capital requirements although remaining subject to consolidated supervision (including reporting requirements).

8.1.7 G ■ BIPRU 8.5 sets out the basis for including and excluding *undertakings* within the group for the purposes of consolidation.

8.1.8 G ■ BIPRU 8.6 sets out the calculation of the *consolidated capital resources* of a group and the limits that apply.

8.1.9 G ■ BIPRU 8.7 sets out the calculation of the *consolidated capital resources requirement* of a group.

8.1.10 G ■ BIPRU 8.8 deals with the application of *advanced prudential calculation approach* on a consolidated basis.

8.1.11 G ■ BIPRU 8.9 sets out consolidated concentration risk requirements.

Consolidation requirements for BIPRU firms elsewhere in the Handbook

8.1.12 G ■ SYSC 12 (Group risk systems and controls requirement) deals with systems and controls requirements for groups.

8.1.13 G ■ GENPRU 1.2 (Adequacy of financial resources) deals with the detail about how ■ GENPRU 1.2 applies on a consolidated basis although the underlying requirement to apply it on a consolidated basis is in ■ BIPRU 8.2 and ■ BIPRU 8.3.

8.1.14 G ■ BIPRU 11 (Disclosure) itself deals with how that chapter is applied on a consolidated basis.

8.1.15 G ■ GENPRU 3.1 (Cross sector groups) deals with *financial conglomerates*.

8.1.16 G ■ GENPRU 3.2 (Prudential rules for third country groups) deals, amongst other things, with banking and investment services groups headed by a *parent undertaking* outside the *UK*.

8.2 Scope and basic consolidation requirements for UK consolidation groups

Main consolidation rule for UK consolidation groups

8.2.1 R A *firm* that is a member of a *UK consolidation group* must comply, to the extent and in the manner prescribed in ■ BIPRU 8.5, with the obligations laid down in ■ GENPRU 1.2 (Adequacy of financial resources) and the *main BIPRU firm Pillar 1 rules* (but not the *base capital resources requirement*) on the basis of the consolidated financial position of:

(1) where either Test 1A or Test 1B in ■ BIPRU 8 Annex 1 (Decision tree identifying a UK consolidation group) apply, the *parent institution in the UK* in the *UK consolidation group*; or

(2) where either Test 1C or Test 1D in ■ BIPRU 8 Annex 1 apply, the *parent financial holding company in the UK* or the *parent mixed financial holding company in the UK*.

8.2.2 R Further to ■ BIPRU 8.2.1 R, a *firm* that is a member of a *UK consolidation group* must at all times ensure that the *consolidated capital resources* of the *UK consolidation group* are equal to or exceed its *consolidated capital resources requirement*.

8.2.3 G The *base capital resources requirement* does not apply on a consolidated basis.

Definition of UK consolidation group

8.2.4 R A *firm's UK consolidation group* means a group that is identified as a *UK consolidation group* in accordance with the decision tree in ■ BIPRU 8 Annex 1 R (Decision tree identifying a UK consolidation group); the members of that group are:

(1) where either Test 1A or Test 1B in ■ BIPRU 8 Annex 1 R apply, the members of the *consolidation group* made up of the *sub-group* of the *parent institution in the UK* identified in ■ BIPRU 8 Annex 1 R together with any other *person* who is a member of that *consolidation group* because of a *consolidation Article 12(1) relationship* or an *Article 134 relationship*; or

(2) where either Test 1C or Test 1D in ■ BIPRU 8 Annex 1 R apply, the members of the *consolidation group* made up of the *sub-group* of

the *parent financial holding company in the UK* or the *parent mixed financial holding company in the UK* identified in ■ BIPRU 8 Annex 1 R together with any other *person* who is a member of that *consolidation group* because of a *consolidation Article 12(1) relationship* or an *Article 134 relationship*;

in each case only *persons* included under ■ BIPRU 8.5 (Basis of consolidation) are included in the *UK consolidation group*.

8.2.5 R For the purposes of this chapter, what would otherwise be a *UK consolidation group* is not a *UK consolidation group* if all the members of that *UK consolidation group* wholly form part of another *UK consolidation group*.

8.2.6 G

8.2.7 G [deleted]

8.3 Scope and basic consolidation requirements for non-UK sub-groups

Main consolidation rule for non-UK sub-groups

8.3.1 R

(1) A *BIPRU firm* that is a *subsidiary undertaking* of a *BIPRU firm* or of a *financial holding company* or of a *mixed financial holding company* must apply the requirements laid down in ■ GENPRU 1.2 (Adequacy of financial resources) and the *main BIPRU firm Pillar 1 rules* (but not the *base capital resources requirement*) on a sub-consolidated basis if the *BIPRU firm*, or the *parent undertaking* where it is a *financial holding company* or a *mixed financial holding company*, have a *third country investment services undertaking* as a *subsidiary undertaking* or hold a *participation* in such an *undertaking*.

(2) [deleted]

8.3.2 R

Further to ■ BIPRU 8.3.1 R, a *firm* that is a member of a *non-UK sub-group* must at all times ensure that the *consolidated capital resources* of that *non-UK sub-group* are equal to or exceed its *consolidated capital resources requirement*.

8.3.3 G

The *base capital resources requirement* does not apply on a consolidated basis.

8.3.4 G

The *sub-group* identified in ■ BIPRU 8.3.1 R is called a *non-UK sub-group*.

How to identify a non-UK sub-group

8.3.5 G

8.3.6 G

The remainder of this section sets out a process for identifying a *non-UK sub-group* in straightforward cases.

8.3.7 G

A *firm* will not be a member of a *non-UK sub-group* unless it is also a member of a *UK consolidation group*. So the first step is to identify each

undertaking in the *firm's UK consolidation group* that satisfies the following conditions:

(1) it isa *CAD investment firm*, *financial institution* or *asset management company* whose head office is outside the *UK* (a *third country investment services undertaking*);

(2) one of the following applies:

(a) it is a *subsidiary undertaking* of a *BIPRU firm* in that *UK consolidation group*; or

(b) a *BIPRU firm* in that *UK consolidation group* holds a *participation* in it; and

(3) that *BIPRU firm* is not a *parent institution in the UK*.

8.3.8 G The *sub-group* of the *BIPRU firm* identified in ■ BIPRU 8.3.7G (2)(a) or ■ BIPRU 8.3.7G (2)(b) is a potential *non-UK sub-group*.

8.3.9 G If more than one *BIPRU firm* is a direct or indirect *parent undertaking* in accordance with ■ BIPRU 8.3.7G (2)(a) then the *sub-groups* of each of them are all potential *non-UK sub-groups*.

8.3.10 G Similarly if there is more than one *BIPRU firm* that holds a *participation* in the *third country investment services undertaking* in accordance with ■ BIPRU 8.3.7G (2)(b) then the *sub-group* of each such *BIPRU firm* is a potential *non-UK sub-group*.

8.3.11 G The effect of ■ BIPRU 8.3.7G (3) is that a *non-UK sub-group* cannot be headed by a *parent institution in the UK*.

8.3.12 G The *firm* should then identify each *undertaking* in the *firm's UK consolidation group* that satisfies the following conditions:

(1) it is a *CAD investment firm*, *financial institution* or *asset management company* whose head office is outside the *UK* (a *third country investment services undertaking*);

(2) one of the following applies:

(a) it is a *subsidiary undertaking* of a *financial holding company* in that *UK consolidation group*; or

(b) a *financial holding company* in that *UK consolidation group* holds a *participation* in it;

(3) the head office of that *financial holding company* is in the *United Kingdom*; and

(4) that *financial holding company* has a *subsidiary undertaking* that is a *BIPRU firm*.

8.3.13 G The *sub-group* of the *financial holding company* identified in ■ BIPRU 8.3.12G (2)(a) or ■ BIPRU 8.3.12G (2)(b) is a potential *non-UK sub-group*.

8.3.14 G The *financial holding company* identified in ■ BIPRU 8.3.12 G may be a *parent financial holding company in the UK*.

8.3.15 G If more than one *financial holding company* is a direct or indirect *parent undertaking* in accordance with ■ BIPRU 8.3.12G (2)(a) then the *sub-groups* of each of them are all potential *non-UK sub-groups*.

8.3.16 G Similarly if there is more than one *financial holding company* that holds a *participation* in the *third country investment services undertaking* in accordance with ■ BIPRU 8.3.12G (2)(b) then the *sub-group* of each such *financial holding company* is a potential *non-UK sub-group*.

8.3.17 G The *firm* should apply the process in ■ BIPRU 8.3.12 G to a *third country investment services undertaking* even though it may be also be part of a potential *non-UK sub-group* under ■ BIPRU 8.3.7 G.

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8.3.18 G Having identified potential *non-UK sub-groups* for each *third country investment services undertaking* in its *UK consolidation group* the *firm* should then eliminate overlapping potential *non-UK sub-groups* in the following way. If:

(1) one potential *non-UK sub-group* is contained within a wider potential *non-EEA sub-group*; and

(2) the *third country investment services undertaking* in the two potential *non-UK sub-groups* are the same;

then the smaller potential *non-UK sub-group* is eliminated.

8.3.19 G If there is a chain of three or more potential *non-UK sub-groups*, each with the same *third country investment services undertaking*, the elimination process may remove all but the highest.

8.3.20 G Each remaining potential *non-UK sub-group* is a *non-UK sub-group*, even though it may be part of a wider *non-UK sub-group*.

8.3.21 G

8.3.22 G If a *UK consolidation group* is headed by a *parent financial holding company in the UK* the result of the elimination process may be that a *firm's UK consolidation group* contains only one *non-UK sub-group* and that the *non-UK sub-group* is the same as the *UK consolidation group*. In theory that means that there are two sets of consolidation requirements, one in relation to the *UK consolidation group* and one in relation to the *non-UK sub-group*. However as the *UK consolidation group* and the *non-UK sub-group*

are the same, in practice this means that the additional *non-UK sub-group* consolidation disappears.

8.3.23 G Even where the requirements for a *non-UK sub-group* are absorbed into those for the *UK consolidation group* a *firm* should still make clear in its regulatory reporting that the consolidation figures relate to a *UK consolidation group* and a *non-UK sub-group* and that they both contain the same members.

8.3.24 G [deleted]

8.4 CAD Article 22 groups and investment firm consolidation waiver

Application

8.4.1 R This section applies to a *BIPRU firm* with an *investment firm consolidation waiver*.

8.4.1A G An *investment firm consolidation waiver* may be applied for by a *BIPRU firm* only.

8

The effect of an investment firm consolidation waiver and the conditions for getting one

8.4.2 G A *BIPRU firm* may apply for a *waiver* of the requirement in this chapter to apply capital requirements on a consolidated basis. Such a *waiver* is called an *investment firm consolidation waiver*.

8.4.3 G An *investment firm consolidation waiver* will waive the application of ■ BIPRU 8.2.1 R and ■ BIPRU 8.2.2 R (if it applies with respect to a *UK consolidation group*) or ■ BIPRU 8.3.1 R and ■ BIPRU 8.3.2 R (if it applies with respect to a *non-UK sub-group*). The effect will be to switch off this chapter with respect to the group in question apart from this section.

8.4.4 G The *FCA* will not grant an *investment firm consolidation waiver* unless:

(1) the *UK consolidation group* or *non-UK sub-group* meets the conditions for being a *CAD Article 22 group*;

(2) the *FCA* is satisfied that each *BIPRU firm* in the *UK consolidation group* or *non-UK sub-group* will be able to meet its capital requirements using the calculation of *capital resources* in ■ GENPRU 2 Annex 6R (Capital resources table for a BIPRU firm with a waiver from consolidated supervision); and

(3) the *firm* demonstrates that the requirements in ■ BIPRU 8.4.11 R to ■ BIPRU 8.4.18 R will be met.

8.4.5 G The standards in ■ BIPRU 8.4.4 G are minimum standards. Satisfaction of these conditions does not automatically mean the *FCA* will give an *investment firm consolidation waiver*. The *FCA* will in addition also apply the tests in Section 138A of the *Act* (Modification or waiver of rules).

8.4.6 G ■ SUP 8 (Waiver and modification of rules) and ■ BIPRU 1.3 (Application for advanced approaches) are also relevant to applications for an *investment firm consolidation waiver*.

Meeting the terms of an investment firm consolidation waiver

8.4.7 R If a *firm* has an *investment firm consolidation waiver* with respect to its *UK consolidation group* or *non-UK sub-group* but that *UK consolidation group* or *non-UK sub-group* ceases to meet the definition of a *CAD Article 22 group* the *firm* must comply with the rest of this chapter rather than this section notwithstanding the *investment firm consolidation waiver*.

8.4.8 G Compliance with the capital requirements set out in ■ BIPRU 8.4.11 R is a condition under the *Capital Adequacy Directive* for the exemption from capital requirements as it applies in accordance with article 95(2) of the *UK CRR*. Thus if they are breached the *FCA* is likely to revoke the *investment firm consolidation waiver*.

Definition of a CAD Article 22 group

8.4.9 R

(1) A *CAD Article 22 group* means a *UK consolidation group* or *non-UK sub-group* that meets the conditions in this *rule*.

(2) There must be no *bank*, *building society* or *credit institution* in the *UK consolidation group* or *non-UK sub-group* and any *investment firm* in the *UK consolidation group* or *non-UK sub-group* must not be subject to consolidated supervision under the *UK CRR*.

(3) Each *CAD investment firm* in the *UK consolidation group* or *UK sub-group* must use the definition of own funds that would be at least equivalent to that which would apply under *GENPRU* and *BIPRU*.

(4) Each *CAD investment firm* in the *UK consolidation group* or *non-UK sub-group* must be a:

(a) limited activity firm; or

(b) limited licence firm.

(5) Each *CAD investment firm* in the *UK consolidation group* or *UK sub-group* must:

(a) meet the requirements that would be at least equivalent to those that would apply under *GENPRU* and *BIPRU* on an individual basis; and

(b) deduct from its own funds any contingent liability in favour of other members of the *UK consolidation group* or *UK sub-group*.

(6) Each *BIPRU firm* in the *UK consolidation group* or *non-UK sub-group* must comply with the *main BIPRU firm Pillar 1 rules* on an individual basis.

8.4.10 G [deleted]

Capital adequacy obligations relating to a CAD Article 22 group: General rule

8.4.11 R If a *firm* has an *investment firm consolidation waiver*, it must ensure that any *financial holding company* in the *UK consolidation group* or the *non-UK sub-group* that is the *parent financial holding company in the UK* of a *CAD investment firm* in the *UK consolidation group* or *non-UK sub-group* has capital resources, calculated under ■ BIPRU 8.4.12 R, in excess of the sum of the following (or any higher amount specified in the *investment firm consolidation waiver*):

(1) the sum of the solo notional capital resources requirements for each *CAD investment firm*, *financial institution*, *asset management company* and *ancillary services undertaking* in the *UK consolidation group* or the *non-UK sub-group*, as calculated in accordance with ■ BIPRU 8.4.13 R; and

(2) the total amount of any contingent liability in favour of *CAD investment firms*, *financial institutions*, *asset management companies* and *ancillary services undertakings* in the *UK consolidation group* or *non-UK sub-group*.

8

Capital adequacy obligations relating to a CAD Article 22 group: Capital resources

8.4.12 R A *firm* must calculate the capital resources of the *parent financial holding company in the UK* for the purpose of ■ BIPRU 8.4.11 R as follows:

(1) the capital resources are the sum of *capital resources* calculated at stages D (Total tier one capital before deductions) and I (Total tier two capital) of the version of the *capital resources table* in ■ GENPRU 2 Annex 4R(Capital resources table for a BIPRU firm deducting material holdings) as adjusted in accordance with this *rule*;

(2) *capital resources* at stage D must not include *innovative tier one capital resources*, but they may be included at stage I if (5) allows this;

(3) the amount of the items which may be included at stage I must not exceed the amount calculated at stage D of the *capital resources table*;

(4) the amount of the items which may be included in *lower tier two capital* in stage I must not exceed 50% of the amount calculated at stage D of the *capital resources table*; and

(5) ■ GENPRU 2.2.25 R (Limits on the use of different forms of capital: Use of higher tier capital in lower tiers) and ■ GENPRU 2.2.27 R (Use of *innovative tier one capital* in *lower stages of capital*) apply.

Capital adequacy obligations relating to a CAD Article 22 group: Capital resources requirement

8.4.13 R The solo notional capital resources requirement as referred to in ■ BIPRU 8.4.11R (1) is calculated in the same way as the *capital resources requirement* for a *BIPRU firm*.

8.4.14 R A *firm* must exclude *material holdings* in the notional calculation of the *credit risk capital requirement* for the purposes of ■ BIPRU 8.4.13 R. A *firm* must identify whether it has any *material holdings* and the amount of them in accordance with ■ GENPRU 2.2 (Capital resources) and ■ GENPRU 2 Annex 4 (Capital resources table for a BIPRU firm deducting material holdings).

8.4.15 G The notional capital resources requirement calculated under ■ BIPRU 8.4.13 R need not include a credit charge for *material holdings*. However it should include one for *illiquid assets*.

8.4.16 R Intra-group *exposures* must not be netted for the purpose of ■ BIPRU 8.4.11 R.

Capital adequacy obligations relating to a CAD Article 22 group: Advanced prudential calculation approaches

8.4.17 R A *firm* may not use an *advanced prudential calculation approach* for the purpose of ■ BIPRU 8.4.11 R.

Additional rules that apply to a firm with an investment firm consolidation waiver

8.4.18 R If a *firm* has an *investment firm consolidation waiver*, it must:

(1) ensure that each *CAD investment firm* in the *UK consolidation group* or *non-UK sub-group* which is a *firm* has in place systems to monitor and control the sources of capital and funding of all the members in the *UK consolidation group* or *non-UK sub-group*;

(2) notify the *FCA* of any serious risk that could undermine the financial stability of the *UK consolidation group* or *non-UK sub-group*, as soon as the *firm* becomes aware of that risk, including those associated with the composition and sources of the capital and funding of members of the *UK consolidation group* or *non-UK sub-group*;

(3) report the amount of the *consolidated capital resources* and *consolidated capital resources requirement* of the *UK consolidation group* or *non-UK sub-group* on a periodic basis as set out in the *investment firm consolidation waiver*;

(4) report any *large exposures* risks of members of the *UK consolidation group* or *non-UK sub-group* including any *undertakings* not located in the *UK* on a periodic basis set out in the *investment firm consolidation waiver*;

(5) notify the *FCA* immediately it becomes aware that the *UK consolidation group* or *non-UK sub-group* has ceased to meet the conditions for being a *CAD Article 22 group*; and

(6) notify the *FCA* immediately it becomes aware of any breach of ■ BIPRU 8.4.11 R.

8.4.19 G Although an *investment firm consolidation waiver* switches off most of this chapter, a *firm* should still carry out the capital adequacy calculations in ■ BIPRU 8.3 to ■ BIPRU 8.8 as if those parts of this chapter still applied to the *UK consolidation group* or *non-UK sub-group* and report these to the *FCA*. It should also still monitor *large exposure* risk on a consolidated basis.

8.5 Basis of consolidation

Undertakings to be included in consolidation

8.5.1 R A *firm* must include only the following types of *undertaking* in a *UK consolidation group* or *non-UK sub-group* for the purposes of this chapter:

(1) a *BIPRU firm*;

(2) [deleted]

(3) a *financial institution*;

(4) an *asset management company*;

(5) a *financial holding company*;

(6) a *mixed financial holding company*; and

(7) an *ancillary services undertaking*.

8.5.2 G Although an *undertaking* falling outside ■ BIPRU 8.5.1 R will not be included in a *UK consolidation group* or *non-UK sub-group* it may be relevant in deciding whether one *undertaking* in the *banking sector* or the *investment services sector* is a *subsidiary undertaking* of another with the result that they should be included in the same *UK consolidation group* or *non-UK sub-group*.

8.5.3 G An example of ■ BIPRU 8.5.2 G is as follows. Say that the *undertaking* at the head of a *BIPRU firm's UK group* is a *parent financial holding company in the UK*. One of its *subsidiary undertakings* is the *firm*. The *parent financial holding company in the UK* also has an *insurer* as a *subsidiary undertaking*. That *insurer* has several *BIPRU firms* as *subsidiary undertakings*. Say that the *UK group* is not a *financial conglomerate*. The *UK consolidation group* will include the *parent financial holding company in the UK* and the *firm*. It will also include the *BIPRU firms* that are *subsidiary undertakings* of the *insurer*. This is because the *BIPRU firms* are *subsidiary undertakings* of the *parent financial holding company in the UK* through the *parent financial holding company in the UK's* holding in the *insurer*. However it will not include the *insurer* itself.

Basis of inclusion of undertakings in consolidation

8.5.4 R A *firm* must include any *subsidiary undertaking* in the *UK consolidation group* or *non-UK sub-group* in full in the calculations in this chapter.

8.5.5 R In carrying out the calculations for the purposes of this chapter a *firm* must only include the relevant proportion of an *undertaking* that is a member of the *UK consolidation group* or *non-UK sub-group*:

(1) by virtue of a *consolidation Article 12(1) relationship*;

(2) by virtue of an *Article 134 relationship*; or

(3) because the group holds a *participation* in it.

8.5.6 R In ■ BIPRU 8.5.5 R, the relevant proportion is either:

(1) (in the case of a *participation*) the proportion of *shares* issued by the *undertaking* held by the *UK consolidation group* or the *non-UK sub-group*; or

(2) (in the case of a *consolidation Article 12(1) relationship* or an *Article 134 relationship*), such proportion (if any) as stated in the *Part 4A permission* of the *firm*.

8

Basis of inclusion of collective portfolio management investment firms in consolidation

8.5.7 R ■ GENPRU 2.1.46 R (Adjustment of the variable capital requirement calculation for collective portfolio management investment firms) does not apply for the purpose of this chapter.

8.5.8 G In general a *collective portfolio management investment firm* only calculates its capital and concentration risk requirements in relation to its *designated investment business* and does not calculate them with respect to*managing an AIF* or *managing a UK UCITS*. The effect of ■ BIPRU 8.5.7 R is that this does not apply on a consolidated basis. For the purpose of this chapter the calculations are carried out with respect to the whole of the activities of a *collective portfolio management investment firm*.

Exclusion of undertakings from consolidation: Balance sheet size

8.5.9 R A *firm* may, having first notified the *appropriate regulator* in writing in accordance with ■ SUP 15.7 (Form and method of notification), exclude a *BIPRU firm*, *asset management company*, *financial institution* or *ancillary services undertaking* that is a *subsidiary undertaking* in, or an *undertaking* in which a *participation* is held by, the *UK consolidation group* or *non-EEA sub-group* if the balance sheet total of that *undertaking* is less than the smaller of the following two amounts:

(1) 10 million Euros;

(2) 1% of the balance sheet total of the *parent undertaking* or the *undertaking* that holds the *participation*.

8.5.10 R A *firm* must include *undertakings*, to which ■ BIPRU 8.5.9 R would otherwise apply, if the balance sheet total of those *undertakings* taken together breaches the limit in ■ BIPRU 8.5.9 R.

Exclusion of undertakings from consolidation: Other reasons

8.5.11 G Article 95(2) preserves the discretion for the *appropriate regulator* to decide to exclude a *BIPRU firm*, *financial institution*, *asset management company* or *ancillary services undertaking* that is a *subsidiary undertaking* in, or an *undertaking* in which a *participation* is held by, the *UK consolidation group* or *non-UK sub-group* for the purposes of this chapter in the following circumstances:

(1) where the head office of the *undertaking* concerned is situated in a country outside the *UK* where there are legal impediments to the transfer of the necessary information; or

(2) where, in the opinion of the *appropriate regulator*, the *undertaking* concerned is of negligible interest only with respect to the objectives of monitoring*BIPRU firms*; or

(3) where, in the opinion of the *appropriate regulator*, the consolidation of the financial situation of the *undertaking* concerned would be inappropriate or misleading as far as the objectives of the supervision of *BIPRU firms* are concerned.

8.5.12 G If a *firm* wishes to exclude an *undertaking* on the basis of any of the grounds set out in ■ BIPRU 8.5.11 G it should apply to the *appropriate regulator* for a *waiver*. The *appropriate regulator* will consider such applications in the light of the criteria in Section 138A of the *Act*.

8.5.13 G If several *undertakings* meet the criteria in ■ BIPRU 8.5.11G (2), the *appropriate regulator* will not agree to a *waiver* to exclude them all from consolidation where collectively they are of non-negligible interest with respect to the objectives of the supervision of *institution*s.

Information about excluded undertakings

8.5.14 G The *appropriate regulator* may require a *firm* to provide information about the *undertakings* excluded from consolidation of the *UK consolidation group* or *non-UK sub-group* pursuant to this section.

8.6 Consolidated capital resources

General

8.6.1 R A *firm* must calculate the *consolidated capital resources* of its *UK consolidation group* or its *non-UK sub-group* by applying ■ GENPRU 2.2 (Capital resources) to its *UK consolidation group* or *non-UK sub-group* on an accounting consolidation basis, treating the *UK consolidation group* or *non-UK sub-group* as a single *undertaking*. The *firm* must adjust ■ GENPRU 2.2 in accordance with this section for this purpose.

8

Notification of issuance of capital instruments

8.6.1A R This section applies to a *firm* if another member of its *group* intends to issue a *capital instrument* on or after 1 March 2012 for inclusion in the *firm's capital resources* or *consolidated capital resources* of its *UK consolidation group* or *non-UK sub-group*.

8.6.1B R A *firm* must notify the *appropriate regulator* in writing of the intention of another member of its *group* which is not a *firm* to issue a *capital instrument* which the *firm* intends to include within its *capital resources* or the *consolidated capital resources* of its *UK consolidation group* or *non-UK sub-group* as soon as it becomes aware of the intention of the *group undertaking* to issue the *capital instrument*. When giving notice, a *firm* must:

(1) provide details of the amount of capital to be raised through the intended issue and whether the capital is intended to be issued to external investors or within its *group*;

(2) identify the stage of the *capital resources table* the *capital instrument* is intended to fall within;

(3) include confirmation from a *senior manager* of the *firm* responsible for authorising the inclusion of the issue within *capital resources* or *consolidated capital resources* that the *capital instrument* complies with the *rules* applicable to instruments included in the stage of the *capital resources table* identified in (2); and

(4) provide details of any features of the *capital instrument* which are novel, unusual or different from a *capital instrument* of a similar nature previously issued by the *firm* or widely available in the market or not specifically contemplated by ■ GENPRU 2.2.

This *rule* does not apply to a *firm* if a *group undertaking* intends to issue a *capital instrument* listed in ■ BIPRU 8.6.1E R.

8.6.1C R A *firm* must provide a further notification to the *appropriate regulator* in writing including all the information required in ■ BIPRU 8.6.1BR (1) to ■ (4) as soon as it becomes aware of any changes that are proposed to the intended date of issue, amount of issue, type of investors, stage of capital or any other feature of the *capital instrument* previously notified to the *appropriate regulator*.

8.6.1D R If a *group undertaking* proposes to establish a debt securities program for the issue of *capital instruments* which the *firm* intends to include within its *capital resources* or the *consolidated capital resources* of its *UK consolidation group* or *non-UK sub-group*, it must:

(1) notify the *appropriate regulator* of the establishment of the program; and

(2) provide the information required by ■ BIPRU 8.6.1BR (1) to ■ (4);

as soon as it becomes aware of the proposed establishment. The *appropriate regulator* must be notified of any changes, in accordance with ■ BIPRU 8.6.1C R.

8.6.1E R The *capital instruments* to which ■ BIPRU 8.6.1B R does not apply are:

(1) ordinary *shares* issued by a *group undertaking* which:

(a) are the most deeply subordinated *capital instrument* issued by that *group undertaking*;

(b) meet the criteria set out in ■ GENPRU 2.2.83R (2) and ■ GENPRU 2.2.83R (3) and ■ GENPRU 2.2.83A R; and

(c) are the same as ordinary *shares* previously issued by that *group undertaking*;

(2) debt instruments issued from a debt securities program established by a *group undertaking*, provided the program was notified to the *appropriate regulator* prior to its first drawdown, in accordance with ■ BIPRU 8.6.1D R; and

(3) *capital instruments* which are not materially different in terms of their characteristics and eligibility for inclusion in a particular tier of capital to *capital instruments* previously issued by a *group undertaking* for inclusion in the *firm's capital resources* or *consolidated capital resources* of its *UK consolidation group* or *non-UK sub-group*.

8.6.1F R A *firm* must notify the *appropriate regulator* in writing, no later than the date of issue, of the intention of a *group undertaking* to issue a *capital instrument* listed in ■ BIPRU 8.6.1E R which the *firm* intends to include within its *capital resources* or the *consolidated capital resources* of its *UK consolidation group* or *non-UK sub-group*. When giving notice a *firm* must:

(1) provide the information set out at ■ BIPRU 8.6.1BR (1) to ■ (3); and

(2) confirm that the terms of the *capital instrument* have not changed since the previous issue of that type of *capital instrument* by that *group undertaking*.

Limits on the use of different forms of capital

8.6.2 R The *capital resources gearing rules* apply for the purposes of calculating *consolidated capital resources*. They apply to the *UK consolidation group* or *non-UK sub-group* on an accounting consolidation basis, treating the *UK consolidation group* or *non-UK sub-group* as a single *undertaking*.

8.6.3 G As the various components of capital differ in the degree of protection that they offer, the *capital resources gearing rules* as applied on a consolidated basis place restrictions on the extent to which certain types of capital are eligible for inclusion in a *UK consolidation group* or *non-UK sub-group's consolidated capital resources*. ■ GENPRU 2.2.25 R (Limits on the use of different forms of capital: Use of higher tier capital in lower tiers) also applies.

8

8.6.4 G The prohibition in ■ GENPRU 2.2 (Capital resources) on including *innovative tier one capital* in *tier one capital* for the purposes of meeting capital resources requirements applies under this section. However ■ GENPRU 2.2.27 R (*innovative tier one capital* may be included in *lower stages of capital* when excluded from *tier one capital*) also applies. So, for example, a *firm* should not include *consolidated indirectly issued capital* in *tier one capital* but should generally include it as *upper tier two capital*.

8.6.5 G The *rules* in ■ GENPRU 2.2 (Capital resources) on what *tier two capital* and *tier three capital* can be used for also apply under this section.

8.6.6 R

8.6.7 R

Calculation of consolidated capital resources for a BIPRU firm group

8.6.8 R A *firm* must calculate the *consolidated capital resources* of its *UK consolidation group* or *non-UK sub-group* using the calculation of *capital resources* in ■ GENPRU 2 Annex 4 (Capital resources table for a BIPRU firm deducting material holdings) or ■ GENPRU 2 Annex 5 (Capital resources table for a BIPRU firm deducting illiquid assets).

8.6.9 R A *firm* must give one *Month's* prior notice to the *appropriate regulator* before starting to use or stopping using the method in ■ GENPRU 2 Annex 5 (Capital resources table for a BIPRU investment firm deducting illiquid assets).

Treatment of minority interests

8.6.10 R

(1) This *rule* sets out how to determine whether minority interests in an *undertaking* in a *UK consolidation group* or *non-UK sub-group* may be included in *tier one capital*, *tier two capital* or *tier three capital* for the purpose of calculating *consolidated capital resources* (each referred to as a "tier" of capital in this *rule*).

(2) A *firm* must identify the item of capital of the *undertaking* in question that gives rise to that minority interest.

(3) A *firm* must include the minority interest in the tier of capital in which that *undertaking* would have to include the capital referred to in (2) if it were a *firm* calculating its *capital resources* on a solo basis under whichever method applies to the group under ■ BIPRU 8.6.6 R to ■ BIPRU 8.6.8 R.

(4) This *rule* does not apply to a minority interest created by *consolidated indirectly issued capital*.

Indirectly issued capital and group capital resources

8.6.11 R

For the purposes of this chapter, ■ GENPRU 2.2.123 R to ■ GENPRU 2.2.137 R (Indirectly issued tier one capital (BIPRU firm only)) do not apply. A *firm* may only include *consolidated indirectly issued capital* in *consolidated capital resources* (whether as a minority interest or otherwise) in accordance with this section.

8.6.12 R

Consolidated indirectly issued capital means any *capital instrument* issued by a member of the *UK consolidation group* or *non-UK sub-group* where:

(1) some or all of the following conditions are satisfied:

(a) that capital is issued to an *SPV*; or

(b) that capital is issued by an *SPV*; or

(c) the subscription for the capital issued by the member of the group in question is funded directly or indirectly by an *SPV*; and

(2) any of the *SPV*s referred to in (1) is a member of the *UK consolidation group* or *non-UK sub-group* or a *subsidiary undertaking* of any member of the *UK consolidation group* or *non-UK sub-group*.

8.6.13 R

A *firm* may only include *consolidated indirectly issued capital* in the *consolidated capital resources* of its *UK consolidation group* or *non-UK sub-group* if:

(1) it is issued by an *SPV* that is a member of the *UK consolidation group* or *non-UK sub-group* to *persons* who are not members of the *UK consolidation group* or *non-UK sub-group*; and

(2) the conditions in ■ BIPRU 8.6.16 R to ■ BIPRU 8.6.18 R are satisfied.

8.6.14 R

Consolidated indirectly issued capital that is eligible for inclusion in the *consolidated capital resources* of a *UK consolidation group* or *non-UK sub-*

group may only be included as a minority interest created by the *capital instrument* issued by the *SPV* referred to in ■ BIPRU 8.6.13 R. If it is eligible, it is *innovative tier one capital*.

8.6.15 R For the purposes of this section, an *undertaking* is an *SPV* if the main activity of the *SPV* is to raise funds for *undertakings* in:

(1) (in the case of a *UK consolidation group*) that *UK consolidation group*; or

(2) (in the case of a *non-UK sub-group*) that *non-UK sub-group* or any *UK consolidation group* of which it forms part.

8.6.16 R The *SPV* referred to in ■ BIPRU 8.6.13 R must satisfy the conditions in ■ GENPRU 2.2.127 R (Conditions that an *SPV* has to satisfy if indirectly issued capital is to be included in *capital resources* on a solo basis) as modified by the following:

(1) references in ■ GENPRU 2.2.127R (1) to being controlled by the *firm* are to being controlled by a member of the *firm's UK consolidation group* or *non-UK sub-group* as the case may be; and

(2) references to the *firm's group* are to the *firm's UK consolidation group* or *non-UK sub-group* as the case may be.

8.6.17 R The capital issued by the *SPV* referred to in ■ BIPRU 8.6.13 R must satisfy the conditions in ■ GENPRU 2.2.129 R (Conditions that capital issued by an *SPV* has to satisfy if indirectly issued capital is to be included in *capital resources* on a solo basis) as modified by the following:

(1) references to the *firm's group* are to the *firm's UK consolidation group* or *non-UK sub-group* as the case may be;

(2) the substitution obligation in ■ GENPRU 2.2.129R (2) need not be the *firm's* but may apply to any member of the *UK consolidation group* or *non-UK sub-group* as the case may be; and

(3) that substitution obligation applies if the *consolidated capital resources* of the *UK consolidation group* or *non-UK sub-group*, as the case may be, fall, or are likely to fall, below its *consolidated capital resources requirement*.

8.6.18 R The *SPV* referred to in ■ BIPRU 8.6.13 R must invest the funds raised from the issue of capital by the *SPV* by subscribing for capital resources issued by an *undertaking* that is a member of the *UK consolidation group* or *non-UK sub-group*. Those capital resources must satisfy the following conditions:

(1) those capital resources must at least comply with the requirements for *lower tier two capital*; and

(2) the first call date or fixed maturity date (if any) of those capital resources must not arise before the first call date on the instrument issued by the *SPV*.

8.6.19 R In relation to the obligation to substitute described in ■ BIPRU 8.6.17R (2), a *firm* must take all reasonable steps to ensure that the *undertaking* in question has at all times sufficient authorised and unissued *tier one instruments* other than *innovative tier one instruments* (and authority to issue them) to enable it to discharge the obligation to substitute.

8.6.20 R A *firm* must comply with the requirements set out in ■ GENPRU 2.2.135R (Notifying the *appropriate regulator* of unusual transactions in relation to indirectly issued capital) and ■ GENPRU 2.2.137 R (Contents of marketing documents in relation to indirectly issued capital) in relation to *consolidated indirectly issued capital* included in *consolidated capital resources*.

8.6.21 R

8.7 Consolidated capital resources requirements

General approach

8.7.1 G The calculation of the *consolidated capital resources requirement* of a *firm's UK consolidation group* or *non-UK sub-group* involves taking the individual components that make up the *capital resources requirement* on a solo basis and applying them on a consolidated basis. Those components are the capital charge for credit risk (the *credit risk capital requirement*), the capital charge for *market risk* (the *market risk capital requirement*) and the *fixed overheads requirement*.

8.7.2 G Each of the capital charges in ■ BIPRU 8.7.1 G, as applied on a consolidated basis, is called a *consolidated requirement component*. The name of each *consolidated requirement component* reflects the solo capital charge on which it is based. Solo capital charges are called *risk capital requirements*. Thus for example the *consolidated requirement component* for *market risk* is called the *consolidated market risk requirement*. The calculation of the *consolidated market risk requirement* is based on the calculation of the capital charge for *market risk* that applies on a solo basis (the *market risk capital requirement*). So the *risk capital requirement* applicable to the *consolidated market risk requirement* is the *market risk capital requirement*.

8.7.3 G

8.7.4 G

8.7.5 G In general a *firm* should calculate each *consolidated requirement component* using the *appropriate regulator's rules*, even in the case of group members who are subject to the capital requirements of an overseas regulator. However this section sets out certain circumstances in which a *firm* may use the capital requirements of an overseas regulator.

8.7.6 G ■ BIPRU 8.8 (Advanced prudential calculation approaches) says that a *firm* should not apply an *advanced prudential calculation approach* on a consolidated basis unless the *advanced prudential calculation approach permission* allowing the *firm* to use the *advanced prudential calculation approach* specifically allows it to be used on consolidated basis.

8.7.7 G ■ BIPRU 8.8 (Advanced prudential calculation approaches) has further details about how capital requirements are calculated on a consolidated basis if a *firm* uses an *advanced prudential calculation approach*.

8.7.8 G A *firm* has a choice about how it should apply a *risk capital requirement* to the group. It may do this by treating the whole of the group as a single entity and applying the *risk capital requirement* to the group (a line by line approach), calculating a separate *risk capital requirement* for each group member (an aggregation approach) or a mixture of the two.

8.7.9 G A *firm* may make the choice between an aggregation and a line by line approach differently for each *consolidated requirement component*. So for example a *firm* may decide to calculate the *consolidated market risk requirement* on an aggregation basis and the *consolidated fixed overheads requirement* on a line by line basis.

Method of calculation to be used

8.7.10 R A *firm* must calculate the *consolidated capital resources requirement* of its *UK consolidation group* or *non-UK sub-group* as the higher of the following *consolidated requirements components*:

(1) the sum of the *consolidated credit risk requirement* and the *consolidated market risk requirement*; and

(2) the *consolidated fixed overheads requirement*.

Calculation of the consolidated requirement components

8.7.11 R A *firm* must calculate a *consolidated requirement component* by applying the *risk capital requirement* applicable to that *consolidated requirement component* to the *UK consolidation group* or *non-UK sub-group* in accordance with ■ BIPRU 8.7.13 R. The *risk capital requirement* must be calculated in accordance with the *appropriate regulator's rules*. The *risk capital requirement* applicable to a *consolidated requirement component* is the one specified in the second column of the table in ■ BIPRU 8.7.12 R.

8.7.12 R Table: Capital charges relating to consolidated requirement components

This table belongs to ■ BIPRU 8.7.11 R

Consolidated requirement component	*Rules* on which the *consolidated requirement component* are based (the applicable *risk capital requirement*)
Consolidated credit risk requirement	*Credit risk capital requirement*
Consolidated fixed overheads requirement	*Fixed overheads requirement*
Consolidated market risk requirement	*Market risk capital requirement*

Choice of consolidation method

8.7.13 R

(1) A *firm* must calculate a *consolidated requirement component* by using one of the methods in this *rule*.

(2) Under the first method a *firm* must:

(a) apply the *risk capital requirement* set out in ■ BIPRU 8.7.12 R to each *undertaking* in the *UK consolidation group* or *non-UK sub-group*; and

(b) add the *risk capital requirements* together.

(3) Under the second method a *firm* must:

(a) treat the whole *UK consolidation group* or *non-UK sub-group* as a single *undertaking*; and

(b) apply the *risk capital requirement* set out in ■ BIPRU 8.7.12 R to the group on an accounting consolidation basis.

(4) The third method is a mixture of methods one and two. Under the third method a *firm* must:

(a) treat one or more parts of the *UK consolidation group* or *non-UK sub-group* as separate single *undertakings*;

(b) apply the *risk capital requirement* set out in ■ BIPRU 8.7.12 R to each such part of the group on an accounting consolidation basis;

(c) apply the *risk capital requirement* set out in ■ BIPRU 8.7.12 R to each of the remaining *undertakings* in the *UK consolidation group* or *non-UK sub-group* (if any); and

(d) add the *risk capital requirements* together.

(5) A *firm* may use different methods for different *consolidated requirement components*.

8.7.14 G

An accounting consolidation basis means applying the *rules* in ■ BIPRU 8.7.12 R on a line by line consolidation basis rather than an aggregation basis.

8.7.15 G

The provisions of this section on credit risk and *market risk* restrict the choice given by ■ BIPRU 8.7.13 R in certain circumstances.

Notifying the appropriate regulator of the choice of consolidation technique

8.7.16 R

A *firm* must notify the *appropriate regulator* which method under ■ BIPRU 8.7.13 R it applies for which *consolidated requirement component* and to which parts of the *UK consolidation group* or *non-UK sub-group* it is applying an aggregation approach and to which parts it is applying an accounting consolidation approach.

Special rules for the consolidated credit risk requirement

8.7.17 R

■ BIPRU 8.7.18 G to ■ BIPRU 8.7.23 R relate to the calculation of the *consolidated credit risk requirement*.

8.7.18 G The *credit risk capital requirement* (on which the *consolidated credit risk requirement* is based) is split into twocapital charges. One relates to credit risk in the *non-trading book* (the *credit risk capital component*). One relates to credit risk in the *trading book* (the *counterparty risk capital component*).

8.7.19 G [deleted]

8.7.20 R A *firm* may use a combination of the *CCR standardised method*, the *CCR mark to market method* and the *CCR internal model method* on a permanent basis with respect to the *firm's UK consolidation group* or *non-UK sub-group* for the purposes of calculating the *consolidated credit risk requirement*. In particular, where the *firm* is permitted to apply the *CCR internal model method* on a consolidated basis with respect to its *UK consolidation group* or *non-UK sub-group*, it may combine the use of *CCR standardised method* and *CCR mark to market method* on a permanent basis for *financial derivative instruments* and *long settlement transaction* not covered by its *CCR internal model method permission*.

8.7.21 R ■ BIPRU 9.4.1 R (Minimum requirements for recognition of significant credit risk transfer) as applied on a consolidated basis requires the transfer to be to a *person* outside the *UK consolidation group* or *non-UK sub-group*.

8.7.22 R A *firm* must not use both the *financial collateral simple method* and the *financial collateral comprehensive method* with respect to its *UK consolidation group* or *non-UK sub-group*.

8.7.23 R

(1) A *firm* may only treat an *exposure* as exempt under ■ BIPRU 3.2.25 R (Zero risk-weighting for intra-group exposures) as applied on a consolidated basis if the member of the *UK consolidation group* or *non-UK sub-group* that has the *exposure*:

(a) is a *BIPRU firm* and that *exposure* is exempt under ■ BIPRU 3.2.25 R as it applies to that *BIPRU firm* on a solo basis; or

(b) meets the conditions in ■ BIPRU 3.2.25 R (1)(d) (Condition relating to establishment in the *UK*) and that *exposure* would be exempt under (a) if that member was a *BIPRU firm*.

(2) The notification obligation in ■ BIPRU 3.2.35 R applies.

Special rules for the consolidated market risk requirement

8.7.24 R For the purposes of calculating the *consolidated market risk requirement* of a *UK consolidation group* or *non-UK sub-group*, a *firm* must apply ■ BIPRU 1.2.3 R (Definition of the trading book) and ■ BIPRU 1.2.17 R (Size thresholds for the purposes of the definition of the trading book) to the whole *UK consolidation group* or *non-UK sub-group* as if the group were a single *undertaking*.

8.7.25 R A *firm* may not apply the second method in ■ BIPRU 8.7.13R (3) (accounting consolidation for the whole group) or apply accounting consolidation to parts of its *UK consolidation group* or *non-UK sub-group* under method

three as described in ■ BIPRU 8.7.13R (4)(a) for the purposes of the calculation of the *consolidated market risk requirement* unless the group or sub-group and the *undertakings* in that group or sub-group satisfy the conditions in this *rule*. Instead the *firm* must use the aggregation approach described in ■ BIPRU 8.7.13R (2) (method one) or ■ BIPRU 8.7.13R (4)(c). Those conditions are as follows:

(1) each of the *undertakings* in that group or sub-group is an *institution* that is:

(a) a *BIPRU firm*; or

(b) [deleted]

(c) [deleted]

(d) a *recognised third country investment firm*;

(2) each of the *undertakings* referred to in (1) that is a *BIPRU firm* has *capital resources* that are equal to or in excess of its *capital resources requirement* ;

(3) [deleted]

(4) each of the *undertakings* referred to in (1) that is a *recognised third country investment firm* complies with laws in the state or territory in which it has its head office that are equivalent to the requirements of *GENPRU* and *BIPRU* relating to capital adequacy;

(5) there is no material legal, regulatory or contractual impediment to the transfer of funds between those *undertakings* in that group or sub-group;

(6) there is no material legal, regulatory or contractual impediment to mutual financial support between those *undertakings* in that group or sub-group;

(7) the *market risk position* of the *undertakings* are monitored and managed on a co-ordinated basis; and

(8) there is satisfactory allocation of capital within the group or sub-group.

8.7.26 R [deleted]

8.7.27 R [deleted]

Special rules for calculating specific consolidated requirement components

8.7.28 G ■ BIPRU 8.7.21 R to ■ BIPRU 8.7.26 R are generally examples of the application of the general principles in ■ BIPRU 8.2.1 R (Main consolidation rule for UK consolidation groups) and ■ BIPRU 8.3.1 R (Main consolidation rule for non-UK sub-groups). ■ BIPRU 8.7.20 R and ■ BIPRU 8.7.25 R are exceptions to those principles.

Elimination of intra-group transactions

8.7.29 R In accordance with ■ BIPRU 8.2.1 R and ■ BIPRU 8.3.1 R (The basic consolidation *rules* for a *UK consolidation group* or *non-UK sub-groups*), a *firm* may exclude that part of the *risk capital requirement* that arises as a result of:

(1) (in respect of the *consolidated credit risk requirement*) intra-group balances; or

(2) (in respect of the *consolidated fixed overheads requirement*) intra-group transactions;

with other *undertakings* in the *UK consolidation group* or *non-UK sub-groups*.

Other provisions about calculating risk capital requirements

8.7.30 R

8.7.31 G If a *firm* is calculating a *risk capital requirement* for an *undertaking* that is not a *BIPRU firm* it should calculate it as if the *undertaking* were a *BIPRU firm*.

8.7.32 G

8.7.33 G A *firm* should not use an *advanced prudential calculation approach* for calculating a *risk capital requirement* unless this is permitted as explained in ■ BIPRU 8.8 (Advanced prudential calculation approaches).

8.7.34 R [deleted]

8.7.35 R (1) [deleted]

(2) [deleted]

8.7.36 G [deleted]

8.7.37 R [deleted]

8.7.38 R [deleted]

Prohibition on using the standardised rules of a regulator outside the UK

8.7.38A R

(1) This *rule* applies to a *firm* if:

(a) an *institution* in its *UK consolidation group* or *non-UK sub-group* is subject to any of the rules or requirements of, or administered by, a *third-country competent authority* applicable to its *financial sector* that correspond to the *sectoral rules* applicable to that *financial sector* ("corresponding sectoral rules"); or

(b) a part of its *UK consolidation group* or *non-UK sub-group* constitutes the whole of a group subject to the consolidated capital requirements of a *third-country competent authority* under the corresponding sectoral rules applicable to the *banking sector* or the *investment services sector* for a state or territory outside the *UK*.

(2) A *firm* may not use the requirements under any of the corresponding sectoral rules of a state or territory outside the *UK* in order to calculate the *consolidated capital resources requirement* of its *UK consolidation group* or *non-UK sub-group* for the purpose of this chapter.

Use of an advanced prudential calculation approach under the rules of an overseas regulator

8.7.39 G A *firm* should not use the requirements of an overseas regulator if that would involve the use of an *advanced prudential calculation approach* unless this is permitted under ■ BIPRU 8.8 (Advanced prudential calculation approaches).

8.8 Advanced prudential calculation approaches

General

8.8.1 R A *firm* must not apply any *advanced prudential calculation approach* for the purposes of this chapter unless it has an *advanced prudential calculation approach permission* and that *advanced prudential calculation approach permission* requires the *firm* to use that *advanced prudential calculation approach* for those purposes.

8

8.8.2 G ■ BIPRU 1.3 (Applications for advanced approaches) deals with how to apply for an *advanced prudential calculation approach permission*.

Prohibition on using the rules of an overseas regulator

8.8.3 R Even if a *firm* has an *advanced prudential calculation approach permission* that allows it to use an *advanced prudential calculation approach* for the purposes of this chapter, the *firm* may not use the requirements of another state or territory to the extent they provide for that *advanced prudential calculation approach*.

Special provisions relating to the internal ratings based approach

8.8.4 R The conditions in ■ BIPRU 4.2.26 R (Combined use of methodologies under the IRB approach) apply to a *firm's UK consolidation group* or *non-UK sub-group* as if that group were a single *undertaking*.

8.8.5 R

8.8.6 G

8.8.7 G

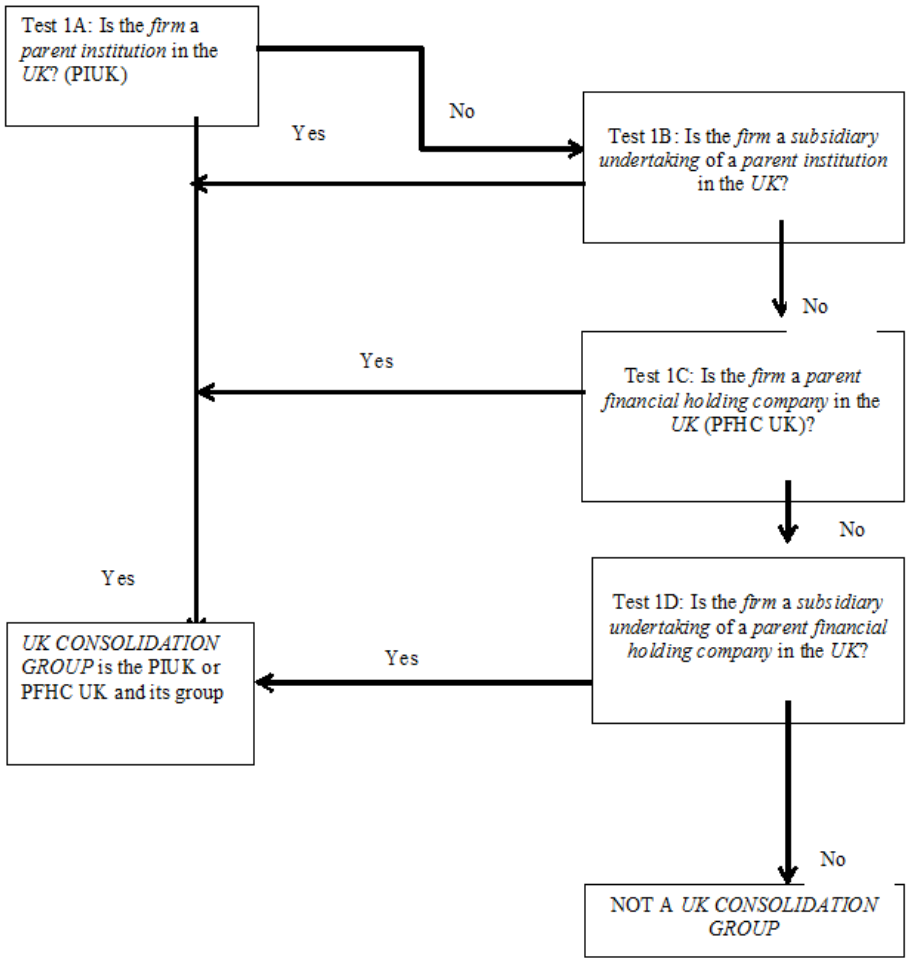
Special provisions relating to the CCR internal model method

8.8.8 G ■ BIPRU 8.7.17 R deals with the combination of the *CCR internal model method* with other approaches to calculating exposure values on a group level.

Corporate governance arrangement for the IRB approach and the AMA

8.8.9 G The governance arrangements that apply to the *governing body*, the senior management and any *designated committee* of a *firm* in relation to the *IRB approach* also apply to the body or *persons* with equivalent powers with respect to the *UK consolidation group* or *non-UK sub-group*. Where the *parent undertaking* and its *subsidiary undertakings* use rating systems on a unified basis, the approval and reporting process described in ■ BIPRU 4.3.12 G (Approval and reporting arrangements for the *IRB approach* where rating systems are used on a unified group basis) apply for the purpose of this paragraph too.

Decision tree identifying a UK consolidation group



Text of Articles 125 and 126 of the Banking Consolidation Directive [deleted]

Non-UK regulators' requirements deemed equivalent for individual risks

Part 1 (Non-UK banking regulators' requirements deemed equivalent for individual risks)

Regime regulators	Market risk	Credit risk	Operational Risk
USA	√	X*	X
Office of the Comptroller of the Currency	√	X*	X
Board of Governors of the Federal Reserve System			
* a US banking subsidiary will be deemed equivalent for credit risk if: • it is categorised as well capitalised: and • it scales up its US Basel 1 credit risk requirement by 25%			
Australia	√	√	X
Australian Prudential Regulation Authority [APRA]			
Canada	√	√	√
Office of the Superintendent of Financial Institutions [OSFI]			
Switzerland Swiss Financial Market Supervisory Authority [FINMA]	√	√ See note 2	√
Japan	√	X	X
Financial Services Agency, Japan [JFSA]			
South Africa	√	√	√
South African Reserve Bank [SARB]			
Hong Kong	√	√	√
Hong Kong Monetary Authority [HKMA]			
Singapore	√	√	√
Monetary Authority of Singapore [MAS]			

Regime regulators	Market risk	Credit risk	Operational Risk
India	√	√	√
Reserve Bank of India [RBI]			
Korea	√	X	X
Financial Supervisory Service [FSS]			
Jersey	√	√	√
Guernsey	X	√	√
Isle of Man	X	√	√

Note 1: A √ denotes that the requirements have been assessed as equivalent to *EEA* standards.

A X denotes that the requirements have been assessed as not being equivalent to *EEA* standards.

Note 2: √ International standardised approach only. The treatment of the Lombard loans is not equivalent and they must be treated under the *appropriate regulator's rules*.

Part 2 (Non-UK investment firm regulators' requirements deemed equivalent for individual risks)

Regime regulators	Market risk	Credit risk	Operational Risk
Australia	√	X	X
Sydney Futures Exchange	√	X	X
Australian Stock Exchange			
Canada	√	X	X
Ontario Securities Commission	√	X	X
	√	X	X
Quebec Securities Commission	√	X	X
British Columbia Securities Commission	√	X	X
Alberta Securities Commission			
Investment dealers Association of Canada			
Hong Kong	√	X	X
Hong Kong Monetary Authority [HKMA]	√	X	X
Hong Kong Securities and Futures Commission			
Japan	√	X	X
Financial Services Agency, Japan [JFSA]			
Singapore	√	X	X
Monetary Authority of Singapore [MAS]	√	X	X

Regime regulators	Market risk	Credit risk	Operational Risk
Stock Exchange of Singapore			
South Africa	√	X	X
South African Futures Exchange	√	X	X
Johannesburg Stock Exchange	√	X	X
Bond Exchange of South Africa			
Switzerland	√	√ Note 2	√
Swiss Federal Banking Commission [EBK]			
USA	√ Note 3	√	X
Securities & Exchange Commission (SEC): Net Capital rule only	√	X	X
Commodities and Futures Trading Commission			

Note 1: A √ denotes that the requirements have been assessed as equivalent to *EEA* standards.

A X denotes that the requirements have been assessed as not being equivalent to *EEA* standards.

Note 2: √ International standardised approach only. The treatment of Lombard loans is not equivalent and they must be treated under the *appropriate regulator's rules*.

Note 3: √ Where entities are subject to a local regulatory capital requirement.

Chapter 9

Securitisation

9.1 Application and purpose

Application

9.1.1 R ■ BIPRU 9.1 applies to a *BIPRU firm*.

Purpose

9.1.2 G Pursuant to the third paragraph of article 95(2) of the *UK CRR*, the purpose of ■ BIPRU 9 is to apply requirements that correspond to:

(1) Articles 94 to 96, paragraphs (1) and (5) of Article 97 , Article 99, Article 100(1) and Article 101;

(2) Points 8 and 9 of Annex V; and

(3) Parts 2, 3 (in part) and 4 of Annex IX;

of the *Banking Consolidation Directive*.

General obligations: Risk-weighted exposures

9.1.3 R A *firm* must calculate the *risk weighted exposure amount* for *securitisation positions* in accordance with ■ BIPRU 9.

9.1.4 G A *firm* should apply the *securitisation* framework set out in this chapter for determining regulatory capital requirements on *exposures* arising from *traditional securitisations* and from *synthetic securitisations* and from structures that contain features of both.

9.1.5 G Since transactions may be structured in many different ways, the capital treatment of a position should be determined on the basis of its economic substance rather than merely its legal form. A *firm* should look to the economic substance of a transaction to determine whether the *securitisation* framework is applicable for purposes of determining regulatory capital. A *firm* should consult the *appropriate regulator* when there is uncertainty about whether a given transaction should be considered a *securitisation*.

General obligations: Systems

9.1.6 R The risks arising from *securitisation* transactions in relation to which a *firm* is investor, *originator* or *sponsor*, including reputational risks, must be evaluated and addressed through appropriate policies and procedures, to

ensure in particular that the economic substance of the transaction is fully reflected in risk assessment and management decisions.

[**Note:** *BCD* Annex V point 8]

9.1.7 G A *firm* that is a party to a *securitisation* should fully understand the risks it has assumed or retained. In particular it should do so in order that it can correctly determine in accordance with ■ BIPRU 9 the capital effects of the *securitisation*.

9.1.8 G The *appropriate regulator* expects an *originator* to continue to monitor any risks that it may be subject to when it has excluded the *securitised exposures* from its calculation of *risk weighted exposure amounts*. The *originator* should consider capital planning implications where risks may return and the impact that *securitisation* has on the quality of the remaining *exposures* held by the *originator*.

9.1.8A G

(1) The *appropriate regulator* expects *firms* to conduct regular stress testing in relation to their *securitisation* activities and off-balance sheet *exposures*. The stress tests should consider the *firm*-wide impact of those activities and *exposures* in stressed market conditions and the implications for other sources of risk, for example, credit risk, concentration risk, counterparty risk, *market risk*, *liquidity risk* and reputational risk. Stress testing of *securitisation* activities should take into account both existing securitisations and pipeline transactions, as there is a risk that these would not be completed in a stressed market scenario.

(2) The frequency and extent of the stress testing should be determined by the materiality of the *firm's securitisation* activities and off-balance sheet *exposures*.

(3) A *firm* should have procedures in place to assess and respond to the results produced from the stress testing and these should be taken into account under the *overall Pillar 2 rule*.

Trading book and non-trading book

9.1.9 G ■ BIPRU 9 deals with:

(1) requirements for investors, *originators* and *sponsors* of *securitisations* of *non-trading book exposures*;

(2) the calculation of *risk weighted exposure amount* for *securitisation* positions for the purposes of calculating either the *credit risk capital component* or the *counterparty risk capital component*; and

(3) the requirements that investors, *originators* and *sponsors* of *securitisations* in the *trading book* will have to meet (■ BIPRU 9.3.1AR, ■ BIPRU 9.3.15R to ■ BIPRU 9.3.20R and ■ BIPRU 9.6.1A R).

9.1.10 G ■ BIPRU 7 sets out the calculation of the *market risk capital requirement* for *securitisation* positions held in the *trading book*.

9.2 Approach to be used

9.2.1 R

(1) Where a *firm* uses the *standardised approach* set out in ■ BIPRU 3 (Standardised approach to credit risk) for the calculation of *risk weighted exposure amount* for the *standardised credit risk exposure class* to which the *securitised exposures* would otherwise be assigned under ■ BIPRU 3, then it must calculate the *risk weighted exposure amount* for a *securitisation position* in accordance with the *standardised approach* to *securitisations* set out in ■ BIPRU 9.9, ■ BIPRU 9.10, ■ BIPRU 9.11 and ■ BIPRU 9.13.

(2) In all other cases it must calculate a *risk weighted exposure amount* in accordance with the *IRB approach* to *securitisations* set out in ■ BIPRU 9.9, ■ BIPRU 9.10, ■ BIPRU 9.12, ■ BIPRU 9.13 and ■ BIPRU 9.14.

[**Note:** *BCD* Article 94]

9.3 Requirements for originators and sponsors

9.3.1 R

(1) Where significant credit risk associated with *securitised exposures* has been transferred from the *originator* in accordance with the terms of ■ BIPRU 9.4 or ■ BIPRU 9.5, that *originator* may:

(a) in the case of a *traditional securitisation*, exclude from its calculation of *risk weighted exposure amounts* and, as relevant, *expected loss* amounts, the *exposures* which it has *securitised*; and

(b) in the case of a *synthetic securitisation*, calculate *risk weighted exposure amounts* and, as relevant, *expected loss* amounts in respect of such *exposures*, in accordance with the provisions of ■ BIPRU 9.5.

(2) Where (1) applies, the *originator* must calculate the *risk weighted exposure amounts* prescribed in this chapter for the positions it may hold in the *securitisation*.

(3) Where the *originator* fails to transfer significant credit risk in accordance with (1), it need not calculate *risk weighted exposure amounts* for any positions it may hold in the *securitisation* in question.

[**Note:** *BCD* Article 95]

9.3.1A R

9.3.2 G

9.3.3 G [deleted]

9.3.4 G [deleted]

9.3.5 G

(1) [deleted]

(2) [deleted]

[deleted]

9.3.6 G An *originator* should not adjust its assessment of the transfer of risk in order to reflect uncertainties related to the effectiveness of a *securitisation* under ■ BIPRU 9.4 or ■ BIPRU 9.5. Instead the *originator* should treat the terms of ■ BIPRU 9.4 or ■ BIPRU 9.5 as not having been satisfied.

9.3.7 R Significant credit risk will be considered to have been transferred for *originators* in the following cases:

(1) the *risk weighted exposure amounts* of the *mezzanine securitisation positions* held by the *originator* in the *securitisation* do not exceed 50% of the *risk weighted exposure amounts* of all *mezzanine securitisation positions* existing in this *securitisation*;

(2) where there are no *mezzanine securitisation positions* in a given *securitisation* and the *originator* can demonstrate that the exposure value of the *securitisation positions* that would be subject to deduction from *capital resources* or a 1250% *risk weight* exceeds a reasoned estimate of the expected loss on the *securitised exposures* by a substantial margin, the originator does not hold more than 20% of the exposure values of the *securitisation positions* that would be subject to deduction from *capital resources* or a 1250% risk weight.

[**Note:** *BCD*, Annex IX, Part 2, Point 1, paragraph 1a and Point 2 paragraph 2a]

9.3.8 R An *originator* must notify the *appropriate regulator* that it is relying on the deemed transfer of significant credit risk under ■ BIPRU 9.3.7R within a reasonable period before or after a relevant transfer, not being later than one month after the date of the transfer. The notification must include the following information:

(1) the *risk weighted exposure amount* of the *securitised exposures* and retained *securitisation positions*;

(2) the *exposure* value of the *securitised exposures* and the retained *securitisation positions*;

(3) details of the *securitisation positions*, including rating, *exposure* value broken down by *securitisation positions* sold and retained;

(4) a statement that sets out why the *firm* is satisfied that the reduction in *risk weighted exposure amounts* is justified by a commensurate transfer of credit risk to third parties;

(5) any relevant supporting documents, for example, a summary of the transaction.

9.3.9 G In the event that the *appropriate regulator* decides that the possible reduction in *risk weighted exposure amounts* which the *originator* would achieve by the *securitisation* referred to in ■ BIPRU 9.3.7R is not justified by a commensurate transfer of credit risk to third parties, it will use its powers under section 55J of the *Act* (Variation etc on the Authority's own initiative) to require the *firm* to increase its *risk weighted exposure amount* to an amount commensurate with the *appropriate regulator*'s assessment of the transfer of credit risk to third parties.

9.3.10 G An *originator* may be granted a *waiver* of the requirements in ■ BIPRU 9.3.7R and ■ BIPRU 9.3.8R.

9.3.11 D An *originator's* application for a *waiver* of the requirements in ■ BIPRU 9.3.7R and ■ BIPRU 9.3.8R must demonstrate that the following conditions are satisfied:

(1) it has policies and methodologies in place which ensure that the possible reduction of capital requirements which the *originator* achieves by the *securitisation* is justified by a commensurate transfer of credit risk to third parties; and

(2) that such transfer of credit risk to third parties is also recognised for the purposes of the *originator's* internal risk management and its internal capital allocation.

[**Note:** *BCD*, Annex IX, Part 2, Point 1, paragraph 1c and Point 2 paragraph 2c]

9.3.12 G ■ BIPRU 1.3.10 G sets out the *appropriate regulator's* approach to the granting of *waivers*. The conditions in ■ BIPRU 9.3.11D are minimum requirements. Satisfaction of those does not automatically mean the *appropriate regulator* will grant the relevant *waiver*. The *appropriate regulator* will in addition also apply the tests in section 138A (Modification or waiver of rules) of the *Act*.

9.3.13 G When considering an application for a *waiver* of the requirements in ■ BIPRU 9.3.7R and ■ BIPRU 9.3.8R, the *appropriate regulator* may undertake a visit to the *firm* in order to examine the *firm's* risk management and governance arrangements. Before such a visit, the *appropriate regulator* may request information from the *firm* additional or supplementary to that provided in the *waiver* application.

9.3.14 G An *originator* should clearly state the scope of the *waiver* of the requirements in ■ BIPRU 9.3.7R and ■ BIPRU 9.3.8R it is seeking in its application. For example, residential mortgage backed securities may be subdivided into prime and sub-prime with only one sub-category within the scope of the *waiver*. Relevant asset classes may therefore be defined according to a *firm's* internal usage of terms.

Origination criteria

9.3.15 R

9.3.16 R

9.3.17 R

9.3.18 R

9.3.19 R

9.3.20 R

9.3.21 G Subject to ■ BIPRU 9.3.22G, ■ BIPRU 9.15.9R and ■ BIPRU 9.15.10R, where the *originator* or *sponsor* of a *securitisation* fails to meet any of the requirements in ■ BIPRU 9.3.18R to ■ BIPRU 9.3.20R (disclosure requirements) in any material respect by reason of its negligence or omission, the *appropriate regulator* will use its powers under section 55J (Variation etc on the Authority's own initiative) of the *Act* to impose an additional *risk weight* of no less than 250% (capped at 1250%) of the *risk weight* that would otherwise apply to the relevant *securitisation positions* under the *rules* in ■ BIPRU 9.11 to ■ BIPRU 9.14. The additional *risk weight* imposed will be progressively increased with each relevant, subsequent infringement of the requirements in ■ BIPRU 9.3.18R to ■ BIPRU 9.3.20R.

[**Note:** *BCD*, Article 122a, paragraph 5]

9.3.22 G When calculating the additional *risk weight* it will impose, the *appropriate regulator* will take into account the exemption of certain *securitisations* from the scope of ■ BIPRU 9.15.3R under ■ BIPRU 9.15.9R and ■ BIPRU 9.15.10R and, if those exemptions are relevant, reduce the *risk weight* it would otherwise impose.

[**Note:** *BCD*, Article 122a, paragraph 5]

9.4 Traditional securitisation

Minimum requirements for recognition of significant credit risk transfer

9.4.1 R The *originator* of a *traditional securitisation* may exclude *securitised exposures* from the calculation of *risk weighted exposure amounts* and *expected loss* amounts if either of the following conditions is fulfilled:

(1) significant credit risk associated with the *securitised exposures* is considered to have been transferred to third parties; or

(2) the *originator* applies a 1250% *risk weight* to all *securitisation positions* it holds in the *securitisation* or deducts these *securitisation positions* from *capital resources* according to ■ GENPRU 2.2.237 R;

and the transfer complies with the conditions in ■ BIPRU 9.4.2R ■ BIPRU 9.4.14R.

[**Note:** *BCD* Annex IX Part 2 point 1, paragraph 1]

9.4.2 R The *securitisation* documentation must reflect the economic substance of the transaction.

[**Note:** *BCD* Annex IX Part 2 point 1 (part)]

9.4.3 R The *securitised exposures* must be put beyond the reach of the *originator* and its creditors, including in bankruptcy and receivership. This must be supported by the opinion of qualified legal counsel.

[**Note:** *BCD* Annex IX Part 2 point 1 (part)]

9.4.4 G Legal counsel's opinions should be reviewed as necessary. For example, an opinion should be reviewed if a relevant statutory provision is amended or where a new decision or judgment of a court might have a bearing on the conclusions reached.

9.4.5 R The securities issued must not represent payment obligations of the *originator*.

[**Note:** *BCD* Annex IX Part 2 point 1 (part)]

9.4.6 R The transferee must be a *securitisation special purpose entity*.

[**Note:** *BCD* Annex IX Part 2 point 1 (part)]

9.4.7 R The *originator* must not maintain effective or indirect control over the transferred *exposures*.

[**Note:** *BCD* Annex IX Part 2 point 1 (part)]

9.4.8 R Where there is a *clean-up call option*, the following conditions must be satisfied:

(1) the *clean-up call option* is exercisable at the discretion of the *originator*;

(2) the *clean-up call option* may only be exercised when 10% or less of the original value of the *exposures securitised* remains unamortised; and

(3) the *clean-up call option* is not structured to avoid allocating losses to *credit enhancement* positions or other positions held by investors and is not otherwise structured to provide *credit enhancement*.

[**Note:** *BCD* Annex IX Part 2 point 1 (part)]

9.4.9 R The *securitisation* documentation must not contain clauses that:

(1) other than in the case of *early amortisation provisions*, require positions in the *securitisation* to be improved by the *originator* including but not limited to altering the underlying credit exposures or increasing the yield payable to investors in response to a deterioration in the credit quality of the *securitised exposures*; or

(2) increase the yield payable to holders of positions in the *securitisation* in response to a deterioration in the credit quality of the underlying pool.

[**Note:** *BCD* Annex IX Part 2 point 1 (part)]

9.4.10 R For the purposes of ■ BIPRU 9.4.7 R, an *originator* will be considered to have maintained effective control over the transferred *exposures* if it has the right to repurchase from the transferee the previously transferred *exposures* in order to realise their benefits or if it is obligated to re-assume transferred risk. The *originator's* retention of servicing rights or obligations in respect of the *exposures* does not of itself constitute indirect control of the *exposures*.

[**Note:** *BCD* Annex IX Part 2 point 1 (part)]

9.4.11 R Significant credit risk will be considered to be transferred for an *originator* in the following cases:

(1) the *risk weighted exposure amounts* of the *mezzanine securitisation positions* held by the *originator* in the *securitisation* do not exceed 50% of the *risk weighted exposure amounts* of all *mezzanine securitisation positions* existing in this *securitisation*;

(2) where there are no *mezzanine securitisation positions* in a given *securitisation* and the *originator* can demonstrate that the exposure value of the *securitisation positions* that would be subject to deduction from *capital resources* or a 1250% *risk weight* exceeds a

reasoned estimate of the expected loss on the *securitised exposures* by a substantial margin, the *originator* does not hold more than 20% of the exposure values of the *securitisation positions* that would be subject to deduction from *capital resources* or a 1250% risk weight.

[**Note:** *BCD*, Annex IX, Part 2, Point 1, paragraph 1a]

9.4.12 R An *originator* must notify the *appropriate regulator* that it is relying on the deemed transfer of significant credit risk under ■ BIPRU 9.4.11R within a reasonable period before or after a relevant transfer, not being later than one month after the date of the transfer. The notification must include the following information:

(1) the *risk weighted exposure amount* of the *securitised exposures* and retained *securitisation positions*;

(2) the *exposure* value of the *securitised exposures* and the retained *securitisation positions*;

(3) details of the *securitisation positions*, including rating, *exposure* value broken down by *securitisation positions* sold and retained;

(4) a statement that sets out why the *firm* is satisfied that the reduction in *risk weighted exposure amounts* is justified by a commensurate transfer of credit risk to third parties;

(5) any relevant supporting documents, for example, a summary of the transaction.

9.4.13 G In the event that the *appropriate regulator* decides that the possible reduction in *risk weighted exposure amounts* which the *originator* would achieve by the *securitisation* referred to in ■ BIPRU 9.4.11R is not justified by a commensurate transfer of credit risk to third parties, it will use its powers under section 55J (Variation etc on the Authority's own initiative) of the *Act* to require the *firm* to increase its *risk weight exposure amount* to an amount commensurate with the *appropriate regulator's* assessment of the transfer of credit risk to third parties.

9.4.14 G An *originator* may be granted a *waiver* of the requirements in ■ BIPRU 9.4.11R and ■ BIPRU 9.4.12R.

9.4.15 D An *originator's* application for a *waiver* of the requirements in ■ BIPRU 9.4.11R and ■ BIPRU 9.4.12R must demonstrate that the following conditions are satisfied.

(1) it has policies and methodologies in place which ensure that the possible reduction of capital requirements which the *originator* achieves by the *securitisation* is justified by a commensurate transfer of credit risk to third parties; and

(2) that such a transfer of credit risk to third parties is also recognised for the purposes of all the *firm's* internal risk management and internal capital allocation.

[**Note:** *BCD*, Annex IX, Part 2, Point 1, paragraph 1c]

9.4.16 G ■ BIPRU 1.3.10 G sets out the *appropriate regulator's* approach to the granting of *waivers*. The conditions in ■ BIPRU 9.4.15D are minimum requirements. Satisfaction of those does not automatically mean the *appropriate regulator* will grant the relevant *waiver*. The *appropriate regulator* will in addition also apply the tests in section 138A (Modification or waiver of rules) of the *Act*.

9.4.17 G When considering an application for a *waiver* of the requirements in ■ BIPRU 9.4.11R and ■ BIPRU 9.4.12R, the *appropriate regulator* may undertake a visit to the *firm* in order to examine the *firm's* risk management and governance arrangements. Before such a visit, the *appropriate regulator* may request information from the *firm* additional or supplementary to that provided in the *waiver* application.

9.4.18 G An *originator* should clearly state the scope of the *waiver* of the requirements in ■ BIPRU 9.4.11R and ■ BIPRU 9.4.12R it is seeking in its application. For example, residential mortgage backed securities may be subdivided into prime and sub-prime with only one sub-category within the scope of the *waiver*. Relevant asset classes may therefore be defined according to a *firm's* internal usage of terms.

9.5 Synthetic securitisation

Minimum requirements for recognition of significant credit risk transfer

9.5.1 R (1) An *originator* of a *synthetic securitisation* may calculate *risk weighted exposure amounts*, and, as relevant, *expected loss* amounts, for the *securitised exposures* in accordance with ■ BIPRU 9.5.3 R and ■ BIPRU 9.5.4 R, if either of the following conditions is fulfilled:

(a) significant credit risk is considered to have been transferred to third parties, either through funded or unfunded credit protection; or

(b) the *originator* applies a 1250% *risk weight* to all *securitisation positions* he holds in this *securitisation* or deducts these *securitisation positions* from *capital resources* according to ■ GENPRU 2.2.237 R;

and the transfer complies with the conditions in (2)-(8).

[**Note:** *BCD*, Annex IX, Part 2, Point 2, paragraph 2]

(2) The *securitisation* documentation must reflect the economic substance of the transaction.

(3) The credit protection by which the credit risk is transferred must comply with the eligibility and other requirements under ■ BIPRU 5 (Credit risk mitigation) and, so far as applicable, ■ BIPRU 4.10 (Credit risk mitigation under the IRB approach) for the recognition of such credit protection. For the purposes of this *rule*, *securitisation special purpose entities* must not be recognised as eligible unfunded protection providers.

(4) The instruments used to transfer credit risk must not contain terms or conditions that:

(a) impose significant materiality thresholds below which credit protection is deemed not to be triggered if a credit event occurs;

(b) allow for the termination of the protection due to deterioration of the credit quality of the underlying *exposures*;

(c) other than in the case of *early amortisation provisions*, require positions in the *securitisation* to be improved by the *originator*; or

(d) increase the *originator's* cost of credit protection or the yield payable to holders of positions in the *securitisation* in response to a deterioration in the credit quality of the underlying pool.

(5) An opinion must be obtained from qualified legal counsel confirming the enforceability of the credit protection in all relevant jurisdictions.

[**Note:** *BCD* Annex IX Part 2 point 2]

(6) Significant credit risk will be considered to have been transferred if either of the following conditions is met:

(a) the *risk weighted exposure amounts* of the *mezzanine securitisation positions* which are held by the *originator* in this *securitisation* do not exceed 50% of the *risk weighted exposure amounts* of all *mezzanine securitisation positions* existing in this *securitisation*;

(b) where there are no *mezzanine securitisation positions* in a given *securitisation* and the *originator* can demonstrate that the *exposure* value of the *securitisation positions* that would be subject to deduction from *capital resources* or a 1250% *risk weight* exceeds a reasoned estimate of the expected loss on the securitised exposures by a substantial margin, the *originator* does not hold more than 20% of the exposure values of the *securitisation positions* that would be subject to deduction from *capital resources* or a 1250% risk weight.

[**Note:** *BCD*, Annex IX, Part 2, Point 2, paragraph 2a]

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(7) An *originator* must notify the *appropriate regulator* that it is relying on the deemed transfer of significant credit risk under ■ BIPRU 9.5.1R (6) within a reasonable period before or after a relevant transfer, not being later than one month after the date of the transfer. The notification must include the following information:

(a) the *risk weighted exposure amount* of the *securitised exposures* and retained *securitisation positions*;

(b) the *exposure* value of the *securitised exposures* and the retained *securitisation positions*;

(c) details of the *securitisation positions*, including rating, *exposure* value broken down by *securitisation positions* sold and retained;

(d) a statement that sets out why the *firm* is satisfied that the reduction in *risk weighted exposure amounts* is justified by a commensurate transfer of credit risk to third parties;

(e) any relevant supporting documents, for example, a summary of the transaction.

9.5.1A G An *originator* may be granted a *waiver* of the requirements in ■ BIPRU 9.5.1R (6) and ■ (7).

9.5.1B D An *originator's* application for a *waiver* of the requirements in ■ BIPRU 9.5.1R (6) and ■ (7) must demonstrate that the following conditions are satisfied:

(1) it has policies and methodologies in place which ensure that the possible reduction of capital requirements which the *originator* achieves by the *securitisation* is justified by a commensurate transfer of credit risk to third parties; and

(2) that such transfer of credit risk to third parties is also recognised for the purposes of all the *originator's* internal risk management and its internal capital allocation.

[**Note:** *BCD*, Annex IX, Part 2, Point 2, paragraph 2c]

9.5.1C G ■ BIPRU 1.3.10 G sets out the *appropriate regulator* approach to the granting of *waivers*. The conditions in ■ BIPRU 9.5.1BD are minimum requirements. Satisfaction of those does not automatically mean the *appropriate regulator* will grant the relevant *waiver*. The *appropriate regulator* will in addition also apply the tests in section 138A (Modification or waiver of rules) of the *Act*.

9.5.1D G When considering an application for a *waiver* of the requirements in ■ BIPRU 9.5.1R (6) and ■ (7), the *appropriate regulator* may undertake a visit to the *firm* in order to examine the *firm's* risk management and governance arrangements. Before such a visit, the *appropriate regulator* may request information from the *firm* additional or supplementary to that provided in the *waiver* application.

9.5.1E G An *originator* should clearly state the scope of the *waiver* of the requirements in ■ BIPRU 9.5.1R (6) and ■ (7) it is seeking in its application. For example, residential mortgage backed securities may be subdivided into prime and sub-prime with only one sub-category within the scope of the *waiver*. Relevant asset classes may therefore be defined according to a *firm's* internal usage of terms.

9.5.1F G In the event that the *appropriate regulator* decides that the possible reduction in *risk weighted exposure amounts* which the *originator credit institution* would achieve by the *securitisation* referred to in ■ BIPRU 9.5.1R (6) is not justified by a commensurate transfer of credit risk to third parties, it will use its powers under section 55J (Variation etc on the Authority's own initiative) of the *Act* to require the *firm* to increase its *risk weight exposure amount* to an amount commensurate with the *appropriate regulator's* assessment of the transfer of credit risk to third parties.

Originators' calculation of risk-weighted exposure amounts for exposures securitised in a synthetic securitisation

9.5.2 R ■ BIPRU 9.5.3 R-■ BIPRU 9.5.8 R apply to the calculation by an *originator* of *risk weighted exposure amounts* for *exposures securitised* in a *synthetic securitisation*.

9.5.3 R (1) In calculating *risk weighted exposure amounts* for the *securitised exposures*, where the conditions in ■ BIPRU 9.5.1 R are met, the *originator* of a *synthetic securitisation* must, subject to the treatment of maturity mismatches set out in ■ BIPRU 9.5.6 R-■ BIPRU 9.5.8 R, use the relevant calculation methodologies set out in ■ BIPRU 9.9-■ BIPRU 9.14and not those set out in ■ BIPRU 3 (Standardised credit risk) or ■ BIPRU 4 (IRB approach).

(2) For *firms* calculating *risk weighted exposure amounts* and *expected loss* amounts under the *IRB approach*, the *expected loss* amount in respect of such *exposures* must be zero.

(3) For clarity, this paragraph refers to the entire pool of *exposures* included in the *securitisation*.

[**Note:** *BCD* Annex IX Part 2 point 3 and point 4 (part)]

9.5.4 R Subject to the treatment of maturity mismatches set out in ■ BIPRU 9.5.6 R-■ BIPRU 9.5.8 R, the *originator* must calculate *risk weighted exposure amounts* in respect of all *tranches* in the *securitisation* in accordance with the provisions of ■ BIPRU 9.9-■ BIPRU 9.14. For example, where a *tranche* is transferred by means of unfunded credit protection to a third party, the *risk weight* of that third party must be applied to the *tranche* in the calculation of the *originators risk weighted exposure amount*.

[**Note:** *BCD* Annex IX Part 2 point 4 (part)]

Treatment of maturity mismatches in synthetic securitisations

9.5.5 R ■ BIPRU 9.5.6 R-■ BIPRU 9.5.8 R apply to the treatment of maturity mismatches in a *synthetic securitisation*.

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9.5.6 R For the purposes of calculating *risk weighted exposure amounts* in accordance with ■ BIPRU 9.5.3 R, any maturity mismatch between the credit protection by which the *tranching* is achieved and the *securitised exposures* must be taken into consideration in accordance with ■ BIPRU 9.5.7 R-■ BIPRU 9.5.8 R.

[**Note:** *BCD* Annex IX Part 2 point 5]

9.5.7 R The maturity of the *securitised exposures* must be taken to be the longest maturity of any of those *exposures* subject to a maximum of five years. The maturity of the credit protection must be determined in accordance with ■ BIPRU 5 (Credit risk mitigation) and, so far as relevant, ■ BIPRU 4.10 (Credit risk mitigation under the IRB approach).

[**Note:** *BCD* Annex IX Part 2 point 6]

9.5.8 R

(1) An *originator* must ignore any maturity mismatch in calculating *risk weighted exposure amounts* for *tranches* appearing pursuant to ■ BIPRU 9.9-■ BIPRU 9.14 with a *risk weight* of 1250%. For all other *tranches* the maturity mismatch treatment prescribed in ■ BIPRU 5.8 (Maturity mismatches) must be applied in accordance with the following formula:

RW* is [RW(SP) x (t-t*)/(T-t*)] + [RW(Ass) x (T-t)/(T-t*)]

(2) The following apply for the purposes of the formula in (1):

(a) RW* is *risk weighted exposure amounts*;

(b) RW(Ass) is *risk weighted exposure amounts* for *exposures* if they had not been *securitised* calculated on a pro-rata basis;

(c) RW(SP) is *risk weighted exposure amounts* calculated under BIPRU 9.6.3 G as if there was no maturity mismatch;

(d) T is maturity of the underlying *exposures* expressed in years;

(e) t is maturity of credit protection expressed in years; and

(f) t* is 0.25.

[**Note:** *BCD* Annex IX Part 2 point 7]

9.6 Implicit support

9.6.1 R An *originator* which, in respect of a securitisation in the *non-trading book*, has made use of ■ BIPRU 9.3.1 R in the calculation of *risk weighted exposure amounts*, or a *sponsor*, must not, with a view to reducing potential or actual losses to investors, provide support to the *securitisation* beyond its contractual obligations.

[**Note:** *BCD* Article 101(1)]

9.6.1A R An *originator* which has sold instruments in its *trading book* to an *SSPE* and no longer holds *market risk capital requirements* for these instruments, or a *sponsor*, must not, with a view to reducing potential or actual losses to investors, provide support to the *securitisation* beyond its contractual obligations.

[**Note**: *BCD* Article 101(1)]

9.6.2 R If an *originator* or *sponsor* fails to comply with ■ BIPRU 9.6.1 R or ■ BIPRU 9.6.1A R in respect of a *securitisation*, it must:

(1) hold capital against all of the *securitised exposures* associated with the *securitisation* transaction as if they had not been *securitised*; and

(2) disclose publicly:

(a) that it has provided non-contractual support; and

(b) the regulatory capital impact of doing so.

[**Note:** *BCD* Article 101(2)]

9.6.3 G (1) *Securitisation* documentation should make clear, where applicable, that any repurchase of *securitised exposures* or *securitisation positions* by the *originator* or *sponsor* beyond its contractual obligations is not mandatory and may only be made at fair market value. In general, any such repurchase should be subject to a *firm's* credit review and approval process, which should be adequate to ensure that the repurchase complies with ■ BIPRU 9.6.1 R.

(2) If an *originator* or *sponsor* repurchases *securitised exposures* or *securitisation positions*, it should be able to satisfy the *appropriate regulator* that it has adequately considered the following:

(a) the price of the repurchase;

(b) the *firm's* capital and liquidity position before and after repurchase;

(c) the performance of the *securitised exposures*; and

(d) the performance of the issued securities;

and has concluded that, taking into account those factors and any other relevant factors, the repurchase is not structured to provide support.

(3) A *firm* should keep adequate records of the matters in (1) and (2).

9.6.4 G If a *firm* is found to have provided implicit support to a *securitisation*, that fact increases the expectation that the *firm* will provide future support to its *securitisations* thus failing to achieve a significant transfer of risk. The *appropriate regulator* will consider taking appropriate measures to reflect this increased expectation after an instance of implicit support is found.

9.6.5 G A *firm* may need to consider three main situations to determine whether there is a breach of the prohibition against implicit support in ■ BIPRU 9.6.1 R:

(1) support given under a contractual obligation;

(2) support given under the contractual documentation for the *securitisation* which the *firm* is entitled, but not obliged, to give; and

(3) support which is not provided for under the contractual documentation for the *securitisation*.

9.6.6 G

(1) The support described in ■ BIPRU 9.6.5 G (1) is permitted by ■ BIPRU 9.6.1 R.

(2) The support described in ■ BIPRU 9.6.5 G (3) is not permitted by ■ BIPRU 9.6.1 R.

(3) The support described in ■ BIPRU 9.6.5 G (2) may be permitted by ■ BIPRU 9.6.1 R under the following conditions:

(a) the fact that the *firm* may give it is expressly set out in the contractual and marketing documents for the *securitisation*;

(b) the nature of the support that the *firm* may give is precisely described in the documentation;

(c) the maximum degree of support that can be given can be ascertained at the time of the *securitisation* both by the *firm* and by a *person* whose only information comes from the marketing documents for the *securitisation*;

(d) the assessment of whether there has been significant risk transfer and the amount of that transfer is made on the basis that the *firm* will provide support to the maximum degree possible; and

(e) the *firm's capital resources* and *capital resources requirement* are adjusted at the time of the *securitisation* on the basis that the *firm* has provided support to the maximum degree possible, whether by an immediate deduction from capital or appropriate *risk weighting*.

9.6.7 G A waiver of the right to future margin income may not breach the prohibition against implicit support:

(1) the degree of support that can be given can be defined precisely by reference to the *securitisation* contractual documentation , albeit the amount of support may not be ascertainable in absolute monetary terms; and

(2) no adjustment to the *firm's capital resources* or *capital resources requirement* is required, as a *firm* should not in any case reflect future margin income in its income or *capital resources*.

9.6.8 G For the purposes of ■ BIPRU 9.6.2 R (2), *firms* will be expected to include disclosure of implicit support in accordance with the general and technical requirements on public disclosure, as outlined in ■ BIPRU 11 (Disclosure).

9.7 Recognition of credit assessments of ECAIs

9.7.1 R An *ECAI's* credit assessment may be used to determine the *risk weight* of a *securitisation position* in accordance with ■ BIPRU 9.9 only if the *ECAI* is an *eligible ECAI*.

[**Note:** *BCD* Article 97(1)]

9.7.2 R

(1) A *firm* must not use a credit assessment of an *eligible ECAI* to determine the *risk weight* of a *securitisation position* in accordance with ■ BIPRU 9.9 unless it complies with the principles of credibility and transparency as elaborated in (2) to (6).

(2) There must be no mismatch between the types of payments reflected in the credit assessment and the types of payment to which the *firm* is entitled under the contract giving rise to the *securitisation position* in question.

(3) The credit assessment must be available publicly to the market. Credit assessments may only be treated as publicly available if:

(a) they have been published in a publicly accessible forum, and

(b) they are included in the *ECAI's* transition matrix.

(4) Credit assessments that are made available only to a limited number of entities may not be treated as publicly available.

(5) The credit assessment must not be based, or partly based, on unfunded support provided by the *firm* itself.

(6) In the case of a credit assessment referred to in (5), the *firm* must consider the relevant position as if it were not rated and must apply the relevant treatment of unrated positions as set out in ■ BIPRU 9.11 and ■ BIPRU 9.12.

[**Note:** *BCD* Article 97(5) and Annex IX Part 3 point 1]

9.7.2A G The requirements in ■ BIPRU 9.7.2R (5) and ■ (6) apply to situations where a *firm* holds *securitisation positions* which receive a lower *risk weight* by virtue of unfunded credit protection provided by the *firm* itself acting in a different capacity in the *securitisation* transaction. The assessment of whether a *firm* is providing unfunded support to its *securitisation positions* should take into account the economic substance of that support in the context of the overall

transaction and any circumstances in which the *firm* could become exposed to a higher credit risk in the absence of that support.

9.7.3 G The *guidance* in ■ BIPRU 3.3 (Recognition of ratings agencies) applies for the purposes of ■ BIPRU 9 as it does to *exposure risk weighting* in ■ BIPRU 3, save that the reference in ■ BIPRU 3.3 to the regulation 22 of the *Capital Requirements Regulations 2006* should be read as a reference to regulation 23 of the *Capital Requirements Regulations 2006* for the purposes of ■ BIPRU 9.

9.7.4 G Where ■ BIPRU 9.7.2R (5) applies to *securitisation positions* in an *ABCP programme*, the *firm* may be granted a *waiver* which allows it to use the *risk weight* assigned to a *liquidity facility* in order to calculate the *risk weighted exposure amount* for the positions in the *ABCP programme*, provided that the *liquidity facility* ranks pari passu with the positions in the *ABCP programme* so that they form overlapping positions and 100% of the commercial paper issued by the *ABCP programme* is covered by *liquidity facilities*. For the purposes of this provision, overlapping positions means that the positions represent, wholly or partially, an *exposure* to the same risk such that, to the extent of the overlap, there is a single *exposure*.

[**Note**: *BCD*, Annex IX, Part 4, Point 5]

9.8 Use of ECAI credit assessments for the determination of applicable risk weights

9.8.1 R The use of *ECAIs*' credit assessments for the calculation of a *firm's risk weighted exposure amounts* under ■ BIPRU 9 must be consistent and in accordance with ■ BIPRU 9.8.2 R■ BIPRU 9.8.7 R. Credit assessments must not be used selectively.

[**Note:** *BCD* Article 99]

9.8.2 R A *firm* may nominate one or more *eligible ECAIs* the credit assessments of which must be used in the calculation of its *risk weighted exposure amounts* under ■ BIPRU 9 (a *nominated ECAI*).

[**Note:** *BCD* Annex IX Part 3 point 2]

9.8.3 R Subject to ■ BIPRU 9.8.5 R■ BIPRU 9.8.7 R, a *firm* must use credit assessments from *nominated ECAIs* consistently in respect of its *securitisation positions*.

[**Note:** *BCD* Annex IX Part 3 point 3]

9.8.4 R Subject to ■ BIPRU 9.8.5 R and ■ BIPRU 9.8.6 R, a *firm* must not use an *ECAI's* credit assessments for its positions in some *tranches* and another *ECAI's* credit assessments for its positions in other *tranches* within the same structure that may or may not be rated by the first *ECAI*.

[**Note:** *BCD* Annex IX Part 3 point 4]

9.8.5 R Where a position has two credit assessments by *nominated ECAIs*, the *firm* must use the less favourable credit assessment.

[**Note:** *BCD* Annex IX Part 3 point 5]

9.8.6 R Where a position has more than two credit assessments by *nominated ECAIs*, the two most favourable credit assessments must be used. If the two most favourable assessments are different, the least favourable of the two must be used.

[**Note:** *BCD* Annex IX Part 3 point 6]

9.8.7 R (1) Where credit protection eligible under ■ BIPRU 5 (Credit risk mitigation) and, if applicable, ■ BIPRU 4.10 (Credit risk mitigation

under the IRB approach) is provided directly to the *SSPE*, and that protection is reflected in the credit assessment of a position by a *nominated ECAI*, the *risk weight* associated with that credit assessment may be used.

(2) If the protection is not eligible under ■ BIPRU 5 (Credit risk mitigation) and, if applicable, ■ BIPRU 4.10 (Credit risk mitigation under the IRB approach), the credit assessment must not be recognised.

(3) In the situation where the credit protection is not provided to the *SSPE* but rather is provided directly to a *securitisation position*, the credit assessment must not be recognised.

[**Note:** *BCD* Annex IX Part 3 point 7]

9.9 Calculation of risk-weighted exposure amounts for securitisation positions

9.9.1 R To calculate the *risk weighted exposure amount* of a *securitisation position*, the relevant *risk weight* must be assigned to the *exposure* value of the position in accordance with ■ BIPRU 9.9 - ■ BIPRU 9.14 based on the credit quality of the position.

[**Note:** *BCD* Article 96(1) (part) and Annex IX, Part 4 point 1]

9.9.2 R For the purpose of ■ BIPRU 9.9.1 R, the credit quality of a position may be determined by reference to an *ECAI* credit assessment or otherwise, as set out in ■ BIPRU 9.9■ BIPRU 9.14.

[**Note:** *BCD* Article 96(1) (part)]

9.9.3 R

(1) Where there is an *exposure* to different *tranches* in a *securitisation*, the *exposure* to each *tranche* must be considered a separate *securitisation position*.

(2) The providers of credit protection to *securitisation positions* must be treated as holding positions in the *securitisation*.

(3) *securitisation positions* include *exposures* to a *securitisation* arising from interest rate or currency derivative contracts.

[**Note:** *BCD* Article 96(2)]

9.9.4 R Subject to ■ BIPRU 9.9.5 R,

(1) where a *firm* calculates *risk weighted exposure amounts* under the *standardised approach* to *securitisations* outlined in ■ BIPRU 9.11, the *exposure* value of an on-balance sheet *securitisation position* must be its balance sheet value;

(2) where a *firm* calculates *risk weighted exposure amounts* under the *IRB approach* to *securitisations* outlined in ■ BIPRU 9.12, the *exposure* value of an on-balance sheet *securitisation position* must be measured gross of value adjustments;

(3) the *exposure* value of an off-balance sheet *securitisation position* must be its nominal value multiplied by a conversion figure as prescribed in this chapter; and

(4) the conversion figure referred to in (3) must be 100% unless otherwise specified.

[**Note:** *BCD* Annex IX Part 4 point 2]

9.9.5 R The *exposure* value of a *securitisation position* arising from a *financial derivative instrument* must be determined in accordance with ■ BIPRU 13 (Treatment of derivative instruments).

[**Note:** *BCD* Annex IX Part 4 point 3]

9.9.6 R Where a *securitisation position* is subject to funded credit protection, the *exposure* value of that position may be modified in accordance with and subject to the requirements of ■ BIPRU 5 (Credit risk mitigation) as further specified in ■ BIPRU 9.11.13 R and ■ BIPRU 9.14.

[**Note:** *BCD* Annex IX Part 4 point 4]

9.9.7 R Where a *securitisation position* is subject to funded or unfunded credit protection the *risk weight* to be applied to that position may be modified in accordance with ■ BIPRU 5 (Credit risk mitigation) and, if applicable, ■ BIPRU 4.10 (Credit risk mitigation under the IRB approach) read in conjunction with ■ BIPRU 9.14.

[**Note:** *BCD* Article 96(3)]

9.9.8 R

(1) Where a *firm* has two or more overlapping positions in a *securitisation* the *firm* must, to the extent that the positions overlap, include in its calculation of *risk weighted exposure amounts* only the position, or portion of a position, producing the higher *risk weighted exposure amounts*. The *firm* may also recognise such an overlap between capital charges for *specific risk* in relation to *positions* in the *trading book* and capital charges for positions in the *non-trading book*, provided that the *firm* is able to calculate and compare the capital charges for the relevant positions.

(2) For the purposes of (1), overlapping means that the positions, wholly or partially, represent an *exposure* to the same risk such that to the extent of the overlap there is a single *exposure*.

[**Note:** *BCD* Annex IX Part 4 point 5]

9.9.9 R Subject to the provisions of *GENPRU* that deal with the deduction of *securitisation positions* at stage M in the relevant *capital resources table*, the *risk weighted exposure amount* must be included in the *firm's* total of *risk weighted exposure amounts* for the purposes of the calculation of its *credit risk capital requirement*.

[**Note:** *BCD* Article 96(4)]

9.9.10 G Where ■ BIPRU 9.7.2R (5) applies to *securitisation positions* in an *ABCP programme*, the *firm* may be granted a *waiver* in the terms described in ■ BIPRU 9.7.4 G.

[**Note**: *BCD*, Annex IX, Part 4, Point 5]

9.10 Reduction in risk-weighted exposure amounts

9.10.1 R ■ BIPRU 9.10 applies as follows:

(1) ■ BIPRU 9.10.2 R and ■ BIPRU 9.10.3 R apply to both the *standardised approach* and the *IRB approach*; and

(2) ■ BIPRU 9.10.4 R■ BIPRU 9.10.7 R apply to the *IRB approach*.

9.10.2 R In respect of a *securitisation position* in respect of which a 1250% *risk weight* is assigned, a *firm* may, as an alternative to including the position in its calculation of *risk weighted exposure amounts*, deduct from its *capital resources* the *exposure* value of the position. For these purposes, the calculation of the *exposure* value may reflect eligible funded protection in a manner consistent with ■ BIPRU 9.14.

[**Note:** *BCD* Annex IX Part 4 points 35, 74 and 75(b)]

9.10.3 R Where a *firm* applies ■ BIPRU 9.10.2 R, 12.5 times the amount deducted in accordance with that paragraph must, for the purposes of ■ BIPRU 9.11.5 R and ■ BIPRU 9.12.8 R, be subtracted from the amount specified in whichever of those *rules* applies as the maximum *risk weighted exposure amount* to be calculated by a *firm* to which one of those *rules* applies.

[**Note:** *BCD* Annex IX Part 4 point 36 and point 76]

9.10.4 R The *risk weighted exposure amount* of a *securitisation position* to which a 1250% *risk weight* is assigned may be reduced by 12.5 times the amount of any value adjustments made by the *firm* in respect of the *securitised exposures*.

[**Note:** *BCD* Annex IX Part 4 point 72 (part)]

9.10.5 R To the extent that value adjustments are taken account of for the purposes of ■ BIPRU 9.10.4 R they must not be taken account of for the purposes of the calculation indicated in ■ BIPRU 4.3.8 R (Treatment of expected loss amounts).

[**Note:** *BCD* Annex IX Part 4 point 72 (part)]

9.10.6 R The *risk weighted exposure amount* of a *securitisation position* may be reduced by 12.5 times the amount of any value adjustments made by the *firm* in respect of the position.

[**Note:** *BCD* Annex IX Part 4 point 73]

9.10.7 R For the purposes of ■ BIPRU 9.10.2 R (as it applies to the *IRB approach*):

(1) the *exposure* value of the position may be derived from the *risk weighted exposure amounts* taking into account any reductions made in accordance with ■ BIPRU 9.10.4 R■ BIPRU 9.10.6 R;

(2) where the *supervisory formula method* is used to calculate *risk weighted exposure amounts* and L K_{IRBR} and [L+T] > K_{IRBR} the position may be treated as two positions with L equal to K_{IRBR} for the more senior of the positions.

[**Note:** *BCD* Annex IX Part 4 point 75(a) and (c)]

9.11 Calculation of risk weighted exposure amounts under the standardised approach to securitisations

9.11.1 R Subject to ■ BIPRU 9.11.5 R, the *risk weighted exposure amount* of a rated *securitisation position* or *resecuritisation position* must be calculated by applying to the *exposure* value the *risk weight* associated with the *credit quality step* with which the credit assessment has been determined to be associated, as prescribed in ■ BIPRU 9.11.2 R .

[**Note:** *BCD* Annex IX Part 4 point 6]

9.11.2 R Table:

This table belongs to ■ BIPRU 9.11.1 R

Credit Quality step	1	2	3	4 (only for credit assessments other than short-term credit assessments)	All other credit quality steps
Securitisation positions	20%	50%	100%	350%	1250%
Resecuritisation positions	40%	100%	225%	650%	1250%

[**Note**: For mapping of the *credit quality step* to the credit assessments of *eligible ECAIs*, refer to: http://www.fca.org.uk/your-fca/documents/fsa-ecais-securitisation for the *FCA* and http://www.bankofengland.co.uk/pra/Documents/publications/ss/2013/ss913.pdf for the *PRA*]

[**Note**: *BCD*, Annex IX, Part 4, point 6, Table 1]

9.11.3 R [deleted]

9.11.4 R Subject to ■ BIPRU 9.11.6 R■ BIPRU 9.11.12 R, the *risk weighted exposure amount* of an unrated *securitisation position* must be calculated by applying a *risk weight* of 1250%.

[**Note:** *BCD* Annex IX Part 4 point 7]

Originator and sponsor firms

9.11.5 R For an *originator* or *sponsor*, the *risk weighted exposure amounts* calculated in respect of its positions in a *securitisation* may be limited to the *risk weighted exposure amounts* which would be calculated for the *securitised exposures* had they not been *securitised* subject to the presumed application of a 150% *risk weight* to all past due items and items belonging to regulatory high risk categories (see ■ BIPRU 3.4.104 R and ■ BIPRU 3 Annex 3 R) amongst the *securitised exposures*.

[**Note:** *BCD* Annex IX Part 4 point 8]

Treatment of unrated securitisation positions

9.11.6 R

(1) A *firm* having an unrated *securitisation position* may apply the treatment set out in this paragraph for calculating the *risk weighted exposure amount* for that position provided the composition of the pool of *exposures securitised* is known at all times.

(2) A *firm* may apply the weighted-average *risk weight* that would be applied to the *securitised exposures* referred to in (1) under the *standardised approach* by a *firm* holding the *exposures* multiplied by a concentration ratio.

(3) This concentration ratio is equal to the sum of the nominal amounts of all the *tranches* divided by the sum of the nominal amounts of the *tranches* junior to, or pari passu with, the *tranche* in which the position is held including that *tranche* itself.

(4) The resulting *risk weight* must not be higher than 1250% or lower than any *risk weight* applicable to a rated more senior *tranche*.

(5) Where the *firm* is unable to determine the *risk weights* that would be applied to the *securitised exposures* under the *standardised approach*, it must apply a *risk weight* of 1250% to the position.

[**Note:** *BCD* Annex IX Part 4 points 9 and 10]

9.11.7 G

(1) This provision contains *guidance* on the requirement in ■ BIPRU 9.11.6 R (1) that the composition of the pool of *exposures securitised* must be known at all times.

(2) The composition should be known sufficiently at the time of purchase for the *firm* to be able accurately to calculate the *risk weighted exposure amounts* of the pool under the *standardised approach*.

(3) Thereafter, any change to the composition of the pool during the life of the transaction that would lead to an increase in the *risk weighted exposure amount* of the pool of *exposures* under the *standardised approach* should be either:

(a) prohibited by the documentation; or

(b) included in the *firm's* capital calculations.

(4) It would be sufficient for the purposes of (2) for the composition of the pool to be reported to the *firm* at least daily, via information service providers, secure web-sites or other appropriate sources.

Treatment of securitisation positions in a second loss tranche or better in an ABCP programme

9.11.8 R Subject to the availability of a more favourable treatment by virtue of the provisions concerning *liquidity facilities* in ■ BIPRU 9.11.10 R■ BIPRU 9.11.12 R, a *firm* may apply to *securitisation positions* meeting the conditions set out in ■ BIPRU 9.11.9 R a *risk weight* that is the greater of:

(1) 100%, or

(2) the highest of the risk weights that would be applied to any of the *securitised exposures* under the *standardised approach* by a *firm* holding the *exposures*.

[**Note:** *BCD* Annex IX Part 4 point 11]

9.11.9 R For the treatment in ■ BIPRU 9.11.8 R to be available,:

(1) the *securitisation position* must be in an *ABCP programme*;

(2) the *securitisation position* must be in a *tranche* which is economically in a second loss position or better in the *securitisation* and the first loss *tranche* must provide meaningful *credit enhancement* to the second loss *tranche*;

(3) the *securitisation position* must be of a quality the equivalent of investment grade or better; and

(4) the *firm* in question must not hold a position in the first loss *tranche*.

[**Note:** *BCD* Annex IX Part 4 point 12]

Treatment of unrated liquidity facilities

9.11.10 R When the conditions in this paragraph have been met, and in order to determine its *exposure* value, a conversion figure of 50% may be applied to the nominal amount of a *liquidity facility*. The *risk weight* to be applied is the highest *risk weight* that would be applied to any of the *securitised exposures* under the *standardised approach* by a *firm* holding the *exposures*. Those conditions are as follows:

(1) the *liquidity facility* documentation must clearly identify and limit the circumstances under which the facility may be drawn;

(2) it must not be possible for the facility to be drawn so as to provide credit support by covering losses already incurred at the time of draw for example, by providing liquidity in respect of *exposures* in default at the time of draw or by acquiring assets at more than fair value;

(3) the facility must not be used to provide permanent or regular funding for the *securitisation*;

(4) repayment of draws on the facility must not be subordinated to the claims of investors other than to claims arising in respect of interest rate or currency derivative contracts, fees or other such payments, nor be subject to waiver or deferral;

(5) it must not be possible for the facility to be drawn after all applicable *credit enhancements* from which the *liquidity facility* would benefit are exhausted; and

(6) the facility must include a provision that results in an automatic reduction in the amount that can be drawn by the amount of *exposures* that are in *default*, where *default* has the meaning given to it for the purposes of the *IRB approach*, or where the pool of *securitised exposures* consists of rated instruments, that terminates the facility if the average quality of the pool falls below investment grade.

[**Note:** *BCD* Annex IX Part 4 point 13]

Liquidity facilities that may be drawn only in the event of a general market disruption

9.11.11 R [deleted]

Cash advance facilities

9.11.12 R To determine its *exposure* value, a conversion figure of 0% may be applied to the nominal amount of a *liquidity facility* that is unconditionally cancellable provided that the conditions set out at ■ BIPRU 9.11.10 R are satisfied and that repayment of draws on the facility are senior to any other claims on the cash flows arising from the *securitised exposures*.

[**Note:** *BCD* Annex IX Part 4 point 15]

Standardised approach: recognition of credit risk mitigation on securitisation positions

9.11.13 R Where a *firm* calculates the *risk weighted exposure amount* of a *securitisation position* under the *standardised approach*, where credit protection is obtained on a *securitisation position*, the calculation of *risk weighted exposure amounts* may be modified in accordance with ■ BIPRU 5 (Credit risk mitigation).

[**Note:** *BCD* Annex IX Part 4 point 34]

9.12 Calculation of risk-weighted exposure amounts under the IRB approach

9.12.1 R ■ BIPRU 9.12 applies to the calculation of *risk weighted exposure amounts* of *securitisation positions* under the *IRB approach*.

[**Note:** *BCD* Annex IX Part 4 point 37 (part)]

Hierarchy of methods

9.12.2 R For a *rated position* or a position in respect of which an inferred rating may be used, the *ratings based method* must be used to calculate the *risk weighted exposure amount*.

[**Note:** *BCD* Annex IX Part 4 point 38]

9.12.3 R For an *unrated position* the *supervisory formula method* must be used except where a *firm* uses the *ABCP internal assessment approach*.

[**Note:** *BCD* Annex IX Part 4 point 39]

9.12.4 G In cases where both the *ABCP internal assessment approach* and the *supervisory formula method* are available, a firm should determine the most appropriate approach and apply that approach consistently.

9.12.5 R A *firm* other than an *originator* or a *sponsor* may not use the *supervisory formula method* unless its *IRB permission* expressly permits it to do so.

[**Note:** *BCD* Annex IX Part 4 point 40]

9.12.6 R Subject to any *IRB permission* of the type described in ■ BIPRU 9.12.28 G, in the case of an *originator* or *sponsor* unable to calculate K_{IRB} and which has not obtained approval to use the *ABCP internal assessment approach*, and in the case of other *firms* where they have not obtained approval to use the *supervisory formula method* or, for positions in *ABCP programmes*, the *ABCP internal assessment approach*, a *risk weight* of 1250% must be assigned to *securitisation positions* which are unrated and in respect of which an inferred rating may not be used.

[**Note:** *BCD* Annex IX Part 4 point 41]

Use of inferred ratings

9.12.7 R When the following minimum operational requirements are satisfied a *firm* must attribute to an *unrated position* an inferred credit assessment equivalent to the credit assessment of those *rated positions* (the reference positions) which are the most senior positions which are in all respects subordinate to the unrated *securitisation position* in question:

(1) the reference positions must be subordinate in all respects to the unrated *securitisation position*;

(2) the maturity of the reference positions must be equal to or longer than that of the *unrated position* in question; and

(3) on an ongoing basis, any inferred rating must be updated to reflect any changes in the credit assessment of the reference positions.

[**Note:** *BCD* Annex IX Part 4 point 42]

Maximum risk-weighted exposure amounts

9.12.8 R For an *originator*, a *sponsor*, or for other *firms* which can calculate K_{IRB}, the *risk weighted exposure amounts* calculated in respect of its positions in a *securitisation* may be limited to that which would produce an amount in respect of its *credit risk capital requirement* equal to the sum of 8% of the *risk weighted exposure amount* which would be produced if the *securitised* assets had not been *securitised* and were on the balance sheet of the *firm* plus the *expected loss* amounts of those *exposures*.

[**Note:** *BCD* Annex IX Part 4 point 45]

Ratings based method

9.12.9 R ■ BIPRU 9.12.10 R to ■ BIPRU 9.12.19 R apply to the calculation of *risk weighted exposure amount* of *securitisation positions* under the *ratings based method*.

9.12.10 R Under the *ratings based method*, the *risk weighted exposure amount* of a rated *securitisation position* or *resecuritisation position* must be calculated by applying to the *exposure* value the *risk weight* associated with the *credit quality step* with which the credit assessment is associated as prescribed in ■ BIPRU 9.12.11 R multiplied by 1.06.

[**Note:** *BCD* Annex IX Part 4 point 46]

9.12.11 R Table:

This table belongs to ■ BIPRU 9.12.10 R

Credit Quality Step		Securitisation positions			Resecuritisation positions	
Credit assessments other than short term	Short-term credit assessments	A	B	C	D	E
1	1	7%	12%	20%	20%	30%

Credit Quality Step		Securitisation positions			Resecuritisation positions	
Credit assessments other than short term	Short-term credit assessments	A	B	C	D	E
2		8%	15%	25%	25%	40%
3		10%	18%	35%	35%	50%
4	2	12%	20%		40%	65%
5		20%	35%		60%	100%
6		35%	50%		100%	150%
7	3	60%	75%		150%	225%
8		100%			200%	350%
9		250%			300%	500%
10		425%			500%	650%
11		650%			750%	850%
all other, unrated		1250%				

[**Note**: For mapping of the *credit quality step* to the credit assessments of eligible *ECAIs*, refer to: http://www.fca.org.uk/your-fca/documents/fsa-ecais-securitisation for the *FCA* and http://www.bankofengland.co.uk/publications/Documents/other/pra/policy/2013/ecaissecuritisation.pdf for the *PRA*.]

[**Note:** *BCD*, Annex IX, Part 4, point 46]

9.12.12 R [deleted]

9.12.13 R For the purposes of ■ BIPRU 9.12.10 R:

(1) the weightings in column C of ■ BIPRU 9.12.11 R must be applied where the *securitisation position* is not a *resecuritisation position* and where the effective number of *exposures* securitised is less than six;

(2) for the remainder of the *securitisation positions* that are not *resecuritisation positions*, the weightings in column B must be applied unless the position is in the most senior *tranche* of a *securitisation*, in which case the weightings in column A must be applied; and

(3) for *resecuritisation positions*, the weightings in column E must be applied unless the *resecuritisation position* is in the most senior *tranche* of the *resecuritisation* and none of the underlying *exposures* were themselves *resecuritisation exposures*, in which case column D must be applied.

[**Note:** *BCD* Annex IX Part 4 point 47(part)]

9.12.14 R When determining under ■ BIPRU 9.12.13 R whether a *tranche* is the most senior for these purposes, a *firm* need not take into consideration amounts

due under interest rate or currency derivative contracts, fees due, or other similar payments.

[**Note:** *BCD* Annex IX Part 4 point 47 (part)]

9.12.15 G A senior *liquidity facility* need not be taken into account for the purposes of determining the most senior tranche under ■ BIPRU 9.12.13 R.

9.12.16 R [deleted]

9.12.17 R In calculating the effective number of *exposures securitised*, multiple *exposures* to one obligor must be treated as one *exposure*. The effective number of *exposures* is calculated as:

$N = (((_i)(EAD_i))^2)/((_i)(EAD_i^2))$

where EAD_i represents the sum of the *exposure* values of all *exposures* to the ith obligor. If the portfolio share associated with the largest *exposure*, C1, is available, the *firm* may compute N as 1/C1.

[**Note:** *BCD* Annex IX Part 4 point 49]

9.12.18 R [deleted]

9.12.19 R [deleted]

The ABCP internal assessment approach

9.12.20 R

(1) If:

(a) a *firm's IRB permission* allows it to use this treatment; and

(b) the conditions in (2)(16) are satisfied,

a *firm* may attribute to an *unrated position* in an *asset backed commercial paper programme* a derived rating as laid down in (3).

(2) Positions in the commercial paper issued from the programme must be *rated positions*.

(3) Under the *ABCP internal assessment approach*, the *unrated position* must be assigned by the *firm* to one of the rating grades described in (5). The position must be attributed a derived rating that is the same as the credit assessments corresponding to that rating grade as laid down in (5). Where this derived rating is, at the inception of the *securitisation*, at the level of investment grade or better, it must be treated in the same way as an eligible credit assessment by an *eligible ECAI* for the purposes of calculating *risk weighted exposure amounts*.

(4) The internal assessment methodology must be used in the *firms* internal risk management processes, including its decision making, management information and capital allocation processes.

(5) The *firms* internal assessment methodology must include rating grades. There must be a correspondence between such rating grades

and the credit assessments of *eligible ECAIs*. This correspondence must be explicitly documented.

(6) The *firm* must be able to satisfy the *appropriate regulator* that its internal assessment of the credit quality of the position reflects the publicly available assessment methodology of one or more *eligible ECAIs*, for the rating of securities backed by the *exposures* of the type *securitised*.

(7) If a *firm's IRB permission* permits this, a *firm* need not comply with the requirement for the assessment methodology of the *ECAI* to be publicly available where it can demonstrate that due to the specific features of the *securitisation* for example its unique structure - there is as yet no publicly available *ECAI* assessment methodology.

(8) The *ECAIs*, the methodology of which must be reflected as required by (6), must include those *ECAIs* which have provided an external rating for the commercial paper issued from the programme. Quantitative elements such as stress factors used in assessing the position to a particular credit quality must be at least as conservative as those used in the relevant assessment methodology of the *ECAIs* in question.

(9) In developing its internal assessment methodology the *firm* must take into consideration relevant published ratings methodologies of the *eligible ECAIs* that rate the commercial paper of the *ABCP programme*. This consideration must be documented by the *firm* and updated regularly, as outlined in (15).

(10) The *ABCP programme* must have collections policies and processes that take into account the operational capability and credit quality of the servicer. The programme must mitigate seller/servicer risk through various methods, such as triggers based on current credit quality that would preclude commingling of funds.

(11) The *ABCP programme* must incorporate structural features for example wind down triggers - into the purchase of *exposures* in order to mitigate potential credit deterioration of the underlying portfolio.

(12) The *ABCP programme* must incorporate underwriting standards in the form of credit and investment guidelines. In deciding on an asset purchase, the programme administrator must consider the type of asset being purchased, the type and monetary value of the *exposures* arising from the provision of liquidity facilities and *credit enhancements*, the loss distribution, and the legal and economic isolation of the transferred assets from the entity selling the assets. A credit analysis of the asset sellers risk profile must be performed and must include analysis of past and expected future financial performance, current market position, expected future competitiveness, leverage, cash flow, and interest coverage, and debt rating. In addition, a review of the sellers underwriting standards, servicing capabilities, and collection processes must be performed.

(13) The *ABCP programme's* underwriting standards must establish minimum asset eligibility criteria that, in particular,

(a) exclude the purchase of assets that are significantly past due or defaulted;

(b) limit excess concentration to individual obligor or geographic area; and

(c) limit the tenor of the assets to be purchased.

(14) The aggregated estimate of loss on an asset pool that the *ABCP programme* is considering purchasing must take into account all sources of potential risk, such as credit risk and *dilution risk*. If the seller-provided *credit enhancement* is sized based on only credit-related losses, then a separate reserve must be established for *dilution risk*, if *dilution risk* is material for the particular *exposure* pool. In addition, in sizing the required enhancement level, the programme must review several years of historical information, including losses, delinquencies, dilutions, and the turnover rate of the receivables.

(15) Internal or external auditors, an *ECAI*, or the *firm's* internal credit review or risk management function must perform regular reviews of the internal assessment process and the quality of the internal assessments of the credit quality of the *firms exposures* to an *ABCP programme*. If the *firms* internal audit, credit review, or risk management functions perform the review, then these functions must be independent of the *ABCP programme* business line, as well as the customer relationship.

(16) The *firm* must track the performance of its internal ratings over time to evaluate the performance of its internal assessment methodology and must make adjustments, as necessary, to that methodology when the performance of the *exposures* routinely diverges from that indicated by the internal ratings.

[**Note:** *BCD* Annex IX Part 4 points 43 and 44]

Supervisory formula method

9.12.21 R Subject to any *permission* of the type described in BIPRU 9.12.28 G, under the *supervisory formula method*, the *risk weight* for a *securitisation position* must be the *risk weight* to be applied in accordance with BIPRU 9.12.22 R. However, the *risk weight* must be no less than 20% for *resecuritisation positions* and no less than 7% for all other *securitisation positions*.

[**Note:** *BCD* Annex IX Part 4 point 52]

9.12.22 R (1) Subject to any *permission* of the type described in BIPRU 9.12.28 G, the *risk weight* to be applied to the *exposure* amount must be:

12.5 (S[L+T] - S[L]) / T

(2) The remaining provisions of this paragraph define the terms used in the formulae in (1) and (3).

(3) $$S[x] = \begin{cases} x & when\ x \le K_{IRBR} \\ K_{IRBR} + K[x] - K[K_{IRBR}] + (d \cdot K_{IRBR}/\omega)\left(1 - e^{\omega(K_{IRBR} - x)/K_{IRBR}}\right) & when\ K_{IRBR} < x \end{cases}$$

(4) $$h = (1 - K_{IRBR} / ELGD)^N$$

(5) $$c = K_{IRBR} / (1 - h)$$

(6) $$v = \frac{(ELGD - K_{IRBR}) K_{IRBR} + 0.25 (1 - ELGD) K_{IRBR}}{N}$$

(7) $$f = \left(\frac{v + K_{IRBR}^2}{1 - h} - c^2\right) + \frac{(1 - K_{IRBR}) K_{IRBR} - v}{(1 - h)\tau}$$

(8) $$g = \frac{(1 - c)c}{f} - 1$$

(9) $$a = g \cdot c$$

(10) $$b = g \cdot (1 - c)$$

(11) $$d = 1 - (1 - h) \cdot (1 - Beta[K_{IRBR}; a, b])$$

(12) $$K[x] = (1 - h) \cdot ((1 - Beta[x; a, b])x + Beta[x; a + 1, b]c).$$

(13) $\tau = 1000$,

(14) $\omega = 20$.

(15) In these expressions, *Beta [x; a, b]*refers to the cumulative beta distribution with parameters a and b evaluated at x.

(16) T (the thickness of the *tranche* in which the position is held) is measured as the ratio of (a) the nominal amount of the *tranche* to (b) the sum of the *exposure* values of the *exposures* that have been *securitised*. For these purposes the *exposure* value of a *financial derivative instrument* must, where the current replacement cost is not a positive value, be the potential future credit exposure calculated in accordance with ■ BIPRU 13 (Treatment of derivative instruments).

(17) K_{IRBR} is the ratio of (a) K_{IRB} to (b) the sum of the *exposure* values of the *exposures* that have been *securitised*. K_{IRBR} is expressed in decimal form (for example, K_{IRB} equal to 15% of the pool would be expressed as K_{IRBR} of 0.15).

(18) L (the *credit enhancement* level) is measured as the ratio of the nominal amount of all *tranche*s subordinate to the *tranche* in which the position is held to the sum of the *exposure* values of the

exposures that have been *securitised*. Capitalised future income must not be included in the measured L. Amounts due by counterparties to *financial derivative instruments* that represent *tranche*s more junior than the *tranche* in question may be measured at their current replacement cost (without the potential future credit exposures) in calculating the enhancement level.

(19) N is the effective number of exposures calculated in accordance with ■ BIPRU 9.12.17 R - ■ BIPRU 9.12.18 R. In the case of *resecuritisations*, the *firm* must look at the number of *securitisation exposures* in the pool and not the number of underlying *exposures* in original pools from which the underlying *securitisation exposures* stem.

(20) ELGD, the *exposure*-weighted average loss-given-default, is calculated as follows:

$$ELGD = \frac{\sum_i LGD_i \cdot EAD_i}{\sum_i EAD_i}$$

(21) In (20) LGD_i represents the average *LGD* associated with all *exposures* to the ith obligor, where *LGD* is determined in accordance with ■ BIPRU 4. In the case of *resecuritisation*, an *LGD* of 100% must be applied to the *securitised* positions. When default risk and *dilution risk* for purchased receivables are treated in an aggregate manner within a *securitisation* (e.g. a single reserve or over-collateralisation is available to cover losses from either source), the *LGD* input must be constructed as a weighted average of the *LGD* for credit risk and the 75% *LGD* for *dilution risk*. The weights are the stand-alone capital charges for credit risk and *dilution risk* respectively.

[**Note:** *BCD* Annex IX Part 4 point 53 (part)]

Simplified inputs

9.12.23 R

(1) Under the *supervisory formula method*, if the *exposure* value of the largest *securitised exposure*, C_1, is no more than 3% of the sum of the *exposure* values of the *securitised exposures*, then for the purposes of the *supervisory formula method* the *firm* may set *LGD* equal 50% and N equal to either:

(a)

$$N = \left(C_1 C_m + \left(\frac{C_m - C_1}{m-1} \right) \max\{1 - m\, C_1, 0\} \right)^{-1}$$

;or

(b) $N = 1/C_1$.

(2) C_m is the ratio of the sum of the *exposure* values of the largest 'm' *exposures* to the sum of the *exposure* values of the *exposures securitised*. The level of m may be set by the *firm*.

(3) For *securitisations* involving *retail exposures*, the *supervisory formula method* may be implemented using the simplifications: *h* = 0 and *v* = 0.

[**Note:** *BCD* Annex IX Part 4 point 53 (part)]

9.12.24 G Where a *securitisation* of *retail exposures* has a sufficiently low value of N for the simplification in ■ BIPRU 9.12.23 R (3) to result in a material change in the capital charge as compared to the position if the approach in ■ BIPRU 9.12.23 R were not taken, a *firm* should discuss with the *appropriate regulator* the suitability of its use.

Liquidity Facilities

9.12.25 R The provisions in ■ BIPRU 9.12.26 R to ■ BIPRU 9.12.28 G apply for the purposes of determining the *exposure* value of an unrated *securitisation position* in the form of certain types of *liquidity facility*.

[**Note:** *BCD* Annex IX Part 4 point 55]

Liquidity facilities only available in the event of general market disruption

9.12.26 R [deleted]

Cash advance facilities

9.12.27 R A conversion figure of 0% may be applied to the nominal amount of a *liquidity facility* that meets the conditions set out in ■ BIPRU 9.11.12 R.

[**Note:** *BCD* Annex IX Part 4 point 57]

Exceptional treatment for liquidity facilities where KIRB cannot be calculated

9.12.28 G

(1) When it is not practical for the *firm* to calculate the *risk weighted exposure amounts* for the *securitised exposures* as if they had not been *securitised* and the position does not qualify for the *ABCP internal assessment approach*, a *firm* may apply to the *appropriate regulator* for a variation of its *IRB permission* under which, on an exceptional basis, it may temporarily apply the method in (2) for the calculation of *risk weighted exposure amounts* for an unrated *securitisation position* in the form of a *liquidity facility* that meets the conditions to be a *liquidity facility* set out in ■ BIPRU 9.11.10 R.

(2) Under the method in this paragraph, the highest *risk weight* that would be applied under the *standardised approach* to any of the *securitised exposures* had they not been *securitised* may be applied to the *securitisation position* represented by the *liquidity facility*. To determine the *exposure* value of the position a conversion figure of 50% may be applied to the nominal amount of the *liquidity facility* if the facility has an original maturity of one year or less. In other cases a conversion factor of 100% must be applied.

[**Note:** *BCD* Annex IX Part 4 points 58 and 59]

9.13 Securitisations of revolving exposures with early amortisation provisions

9.13.1 R Where there is a *securitisation* of *revolving exposures* subject to an *early amortisation provision*, the *originator* must calculate an additional *risk weighted exposure amount* in accordance with this section in respect of the risk that the levels of credit risk to which it is exposed may increase following the operation of the *early amortisation provision*. Accordingly this section sets out how an *originator* must calculate a *risk weighted exposure amount* when it sells *revolving exposures* into a *securitisation* that contains an *early amortisation provision*.

[**Note:** *BCD* Article 100(1), Annex IX Part 4 points 16 and 68]

Additional capital requirements for securitisations of revolving exposures with early amortisation provisions

9.13.2 R A *firm* must calculate a *risk weighted exposure amount* in respect of the sum of the *originators* interest and the investors interest.

[**Note:** *BCD* Annex IX Part 4 point 17]

9.13.3 R For *securitisation* structures where the *securitised exposures* comprise *revolving exposures* and non-revolving *exposures*, an *originator* must apply the treatment set out in this section to that portion of the underlying pool containing *revolving exposures*.

[**Note:** *BCD* Annex IX Part 4 point 18]

9.13.4 R For the purposes of this section, subject to ■ BIPRU 9.13.6 R:

(1) *originators* interest means the exposure value of that notional part of a pool of drawn amounts sold into a *securitisation*, the proportion of which in relation to the amount of the total pool sold into the structure determines the proportion of the cash-flows generated by principal and interest collections and other associated amounts which are not available to make payments to those having *securitisation positions* in the *securitisation*;

(2) to qualify as such the *originators* interest may not be subordinate to the investors interest; and

(3) investors interest means the exposure value of the remaining notional part of the pool of drawn amounts.

[**Note:** *BCD* Annex IX Part 4 point 19]

9.13.5 R Subject to ■ BIPRU 9.13.7 R, the *exposure* of the *originator* associated with its rights in respect of the *originators* interest must not be treated as a *securitisation position* but as a pro rata *exposure* to the *securitised exposures* as if they had not been *securitised*.

[**Note:** *BCD* Annex IX Part 4 point 20]

9.13.6 R

(1) For *firms* using the *IRB approach* set out in ■ BIPRU 4, this paragraph applies in place of ■ BIPRU 9.13.4 R.

(2) For the purposes of this section, *originators* interest means the sum of:

(a) the exposure value of that notional part of a pool of drawn amounts sold into a *securitisation*, the proportion of which in relation to the amount of the total pool sold into the structure determines the proportion of the cash-flows generated by principal and interest collections and other associated amounts which are not available to make payments to those having *securitisation positions* in the *securitisation*; and

(b) the exposure value of that part of the pool of undrawn amounts of the credit lines, the drawn amounts of which have been sold into the *securitisation*, the proportion of which to the total amount of such undrawn amounts is the same as the proportion of the exposure value described in (a) to the exposure value of the pool of drawn amounts sold into the *securitisation*.

(3) To qualify as such the *originators* interest may not be subordinate to the investors interest.

(4) Investors interest means the exposure value of the notional part of the pool of drawn amounts not falling within (2)(a) plus the exposure value of that part of the pool of undrawn amounts of credit lines, the drawn amounts of which have been sold into the *securitisation*, not falling within (2)(b).

[**Note:** *BCD* Annex IX Part 4 points 69 and 70]

9.13.7 R For *firms* using the *IRB approach* set out in ■ BIPRU 4, this paragraph applies in place of ■ BIPRU 9.13.5 R. The *exposure* of the *originator* associated with its rights in respect of that part of the *originators* interest described in ■ BIPRU 9.13.6 R (2)(a) must not be treated as a *securitisation position* but as a pro rata *exposure* to the *securitised* drawn amounts as if they had not been *securitised* in an amount equal to that described in ■ BIPRU 9.13.6 R (2)(a). The *originator* must also be considered to have a pro rata exposure to the undrawn amounts of the credit lines, the drawn amounts of which have been sold into the *securitisation*, in an amount equal to that described in ■ BIPRU 9.13.6 R (2)(b).

[**Note:** *BCD* Annex IX Part 4 point 71]

Exemptions from early amortisation treatment

9.13.8 R *Originators* of the following types of *securitisation* are exempt from the capital requirement in ■ BIPRU 9.13.1 R:

(1) *securitisations* of *revolving exposures* whereby investors remain fully exposed to all future draws by borrowers so that the risk on the underlying facilities does not return to the *originator* even after an early amortisation event has occurred; and

(2) *securitisations* where any *early amortisation provision* is solely triggered by events not related to the performance of the *securitised* assets or the *originator*, such as material changes in tax laws or regulations.

[**Note:** *BCD* Annex IX Part 4 point 21]

Maximum capital requirement

9.13.9 R For an *originator* subject to the capital requirement in ■ BIPRU 9.13.1 R the total of the *risk weighted exposure amounts* in respect of its positions in the investors interest (as defined in ■ BIPRU 9.13.4 R or ■ BIPRU 9.13.6 R) and the *risk weighted exposure amounts* calculated under ■ BIPRU 9.13.1 R must be no greater than the greater of:

(1) the *risk weighted exposure amounts* calculated in respect of its positions in the investors interest (as so defined); and

(2) the *risk weighted exposure amounts* that would be calculated in respect of the *securitised exposures* by a *firm* holding the *exposures* as if they had not been *securitised* in an amount equal to the investors interest (as so defined).

[**Note:** *BCD* Annex IX Part 4 point 22]

9.13.10 R Deduction of net gains, if any, arising from the capitalisation of future income required under ■ GENPRU 2.2.90 R (Core tier one capital: profit and loss account and other reserves: Securitisation) must be treated outside the maximum amount indicated in ■ BIPRU 9.13.9 R.

[**Note:** *BCD* Annex IX Part 4 point 23]

Calculation of risk-weighted exposure amounts

9.13.11 R The *risk weighted exposure amount* to be calculated in accordance with ■ BIPRU 9.13.1 R must be determined by multiplying the amount of the investors interest (as defined in ■ BIPRU 9.13.4 R or ■ BIPRU 9.13.6 R) by the product of:

(1) the appropriate conversion figure as indicated in ■ BIPRU 9.13.16 R, ■ BIPRU 9.13.19 R or ■ BIPRU 9.13.20 R; and

(2) the weighted average *risk weight* that would apply to the *securitised exposures* if the *exposures* had not been *securitised*.

[**Note:** *BCD* Annex IX Part 4 point 24]

9.13.12 R An *early amortisation provision* must be treated as controlled for the purposes of this section where the following conditions are met:

(1) the *originator* has an appropriate capital/liquidity plan in place to ensure that it has sufficient capital and liquidity available in the event of an early amortisation;

(2) throughout the duration of the transaction there is a pro rata sharing between the *originators* interest and the investors interest (as defined in ■ BIPRU 9.13.4 R or ■ BIPRU 9.13.6 R) of payments of interest and principal, expenses, losses and recoveries based on the balance of receivables outstanding at one or more reference points during each month;

(3) the amortisation period is considered sufficient for 90% of the total debt (*originators* and investors interest (as defined in ■ BIPRU 9.13.4 R or ■ BIPRU 9.13.6 R)) outstanding at the beginning of the early amortisation period to have been repaid or recognised as in default; and

(4) the speed of repayment is no more rapid than would be achieved by straight-line amortisation over the period set out in (3).

[**Note:** *BCD* Annex IX Part 4 point 25]

9.13.13 R In the case of a *securitisation* meeting the following conditions:

(1) it is subject to an *early amortisation provision*;

(2) the *securitisation* is of *retail exposures* which are uncommitted and unconditionally cancellable without prior notice; and

(3) the early amortisation is triggered by the *excess spread* level falling to a specified level

a *firm* must, to calculate the appropriate conversion figure referred to in ■ BIPRU 9.13.11 R, compare the three-month average *excess spread* level with the *excess spread* levels at which *excess spread* is required to be trapped.

[**Note:** *BCD* Annex IX Part 4 point 26]

9.13.14 R Where the *securitisation* does not require *excess spread* to be trapped, the trapping point is deemed to be 4.5 percentage points greater than the *excess spread* level at which an early amortisation is triggered.

[**Note:** *BCD* Annex IX Part 4 point 27]

9.13.15 R The conversion figure to be applied must be determined by the level of the actual three month average *excess spread* in accordance with ■ BIPRU 9.13.16 R.

[**Note:** *BCD* Annex IX Part 4 point 28]

9.13.16 R Table: Conversion figures

This table belongs to ■ BIPRU 9.13.15 R

3 months average *excess spread*	Securitisations subject to a controlled early amortisation provision Conversion figure	Securitisation subject to a non-controlled early amortisation provision Conversion figure
Above level A	0%	0%
Level A	1%	5%
Level B	2%	15%
Level C	10%	50%
Level D	20%	100%
Level E	40%	100%

9.13.17 R In ■ BIPRU 9.13.16 R:

(1) Level A means levels of *excess spread* less than 133.33% of the trapping level of *excess spread* but not less than 100% of that trapping level;

(2) Level B means levels of *excess spread* less than 100% of the trapping level of *excess spread* but not less than 75% of that trapping level;

(3) Level C means levels of *excess spread* less than 75% of the trapping level of *excess spread* but not less than 50% of that trapping level;

(4) Level D means levels of *excess spread* less than 50% of the trapping level of *excess spread* but not less than 25% of that trapping level; and

(5) Level E means levels of *excess spread* less than 25% of the trapping level of *excess spread*.

[**Note:** *BCD* Annex IX Part 4 point 29]

9.13.18 G In the case of a *securitisation* meeting the conditions in this paragraph, a *firm* may apply to the *appropriate regulator* for a *waiver* that would allow a treatment which approximates closely to that prescribed in ■ BIPRU 9.13.13 R to ■ BIPRU 9.13.17 R for determining the conversion figure indicated. If a *firm* wants such a *waiver*, it should satisfy the *appropriate regulator* that:

(1) the *securitisation* is subject to an *early amortisation provision* of retail *exposures*;

(2) those retail *exposures* are uncommitted and unconditionally cancellable without prior notice;

(3) the early amortisation is triggered by a quantitative value in respect of something other than the three month average *excess spread*;

(4) the *firm* can establish a quantitative measure equivalent, in relation to the value in (3), to the trapping level of *excess spread*; and

(5) that treatment is a prudent measure of the risk that the levels of credit risk to which it is exposed may increase following the operation of the *early amortisation provision* (referred to in BIPRU 9.13.1R).

[**Note:** *BCD* Annex IX Part 4 point 30]

9.13.19 R All other *securitisations* subject to a controlled *early amortisation provision* of *revolving exposures* are subject to a credit conversion figure of 90%.

[**Note:** *BCD* Annex IX Part 4 point 32]

9.13.20 R All other *securitisations* subject to a non-controlled *early amortisation provision* of *revolving exposures* are subject to a credit conversion figure of 100%.

[**Note:** *BCD* Annex IX Part 4 point 33]

Liquidity plans

9.13.21 R A *firm* which is an *originator* of a revolving *securitisation* transaction involving *early amortisation provisions* should have liquidity plans to address the implications of both scheduled and early amortisation.

[**Note:** *BCD* Annex V point 9]

9.14 Recognition of credit risk mitigation on securitisation positions under the IRB approach

9.14.1 R This section applies to *credit risk mitigation* in relation to a *securitisation position* for a *firm* calculating *risk weighted exposure amounts* using the *IRB approach*.

[**Note:** *BCD* Annex IX Part 4 point 37 (part)]

9.14.2 R Where a *firm* uses the *ratings based method* to calculate the *risk weighted exposure amounts* of *securitisation positions*, the *firm* may recognise *credit risk mitigation* in accordance with ■ BIPRU 9.14.4 R to ■ BIPRU 9.14.6 R.

[**Note:** *BCD* Annex IX Part 4 point 51]

9.14.3 R Where a *firm* uses the *supervisory formula method* to calculate the *risk weighted exposure amounts* of *securitisation positions*, the *firm* may recognise *credit risk mitigation* in accordance with ■ BIPRU 9.14.4 R to ■ BIPRU 9.14.5 R and ■ BIPRU 9.14.7 R to ■ BIPRU 9.14.13 R.

[**Note:** *BCD* Annex IX Part 4 point 54]

Funded protection

9.14.4 R Eligible funded protection is limited to that which is eligible for the calculation of *risk weighted exposure amounts* under the *standardised approach* as laid down under ■ BIPRU 5 and recognition is subject to compliance with the relevant minimum requirements as laid down under ■ BIPRU 5.

[**Note:** *BCD* Annex IX Part 4 point 60]

Unfunded credit protection

9.14.5 R Eligible unfunded credit protection and unfunded protection providers are limited to those which are eligible under ■ BIPRU 5 (Credit risk mitigation) and ■ BIPRU 4.10 (Credit risk mitigation under the IRB approach) and recognition is subject to compliance with the relevant minimum requirements laid down under those provisions.

[**Note:** *BCD* Annex IX Part 4 point 61]

Credit risk mitigation under the ratings based method

9.14.6 R Where *risk weighted exposure amounts* are calculated using the *ratings based method*, the *exposure* value and/or the *risk weighted exposure amount* for a *securitisation position* in respect of which credit protection has been obtained may be modified in accordance with the provisions of ■ BIPRU 5 (Credit risk mitigation) as they apply for the calculation of *risk weighted exposure amounts* under the *standardised approach* set out in ■ BIPRU 3.

[**Note:** *BCD* Annex IX Part 4 point 62]

Credit risk mitigation under the supervisory formula method full credit protection

9.14.7 R ■ BIPRU 9.14.8 R ■ BIPRU 9.14.10 R apply where *risk weighted exposure amounts* are calculated using the *supervisory formula method* where there is full credit protection.

[**Note:** *BCD* Annex IX Part 4 point 63 (part)]

9.14.8 R A *firm* must determine the effective *risk weight* of the position. It must do this by dividing the *risk weighted exposure amount* of the position by the *exposure* value of the position and multiplying the result by 100.

[**Note:** *BCD* Annex IX Part 4 point 63 (part)]

9.14.9 R In the case of funded credit protection, the *risk weighted exposure amount* of the *securitisation position* must be calculated by multiplying the funded protection-adjusted *exposure* amount of the position (E*, as calculated under ■ BIPRU 5.4.28 R (3), taking the amount of the *securitisation position* to be E) by the effective *risk weight*.

[**Note:** *BCD* Annex IX Part 4 point 64]

9.14.10 R In the case of unfunded credit protection, the *risk weighted exposure amount* of the *securitisation position* must be calculated by multiplying G_A (the amount of the protection adjusted for any currency mismatch and maturity mismatch in accordance ■ BIPRU 5.7.23 R (2)) by the *risk weight* of the protection provider; and adding this to the amount arrived at by multiplying the amount of the *securitisation position* minus G_A by the effective *risk weight*.

[**Note:** *BCD* Annex IX Part 4 point 65]

Credit risk mitigation under the supervisory formula method partial protection

9.14.11 R ■ BIPRU 9.14.12 R ■ BIPRU 9.14.13 R apply where *risk weighted exposure amounts* are calculated using the *supervisory formula method* where there is partial protection.

9.14.12 R If the *credit risk mitigation* covers the first loss or losses on a proportional basis on the *securitisation position*, a *firm* may apply ■ BIPRU 9.14.7 R to ■ BIPRU 9.14.10 R.

[**Note:** *BCD* Annex IX Part 4 point 66]

9.14.13 R In other cases the *firm* must treat the *securitisation position* as two or more positions with the uncovered portion being the position with the lower credit quality. For the purposes of calculating the *risk weighted exposure amount* for this position, the provisions in ■ BIPRU 9.12.22 R to ■ BIPRU 9.12.24 G apply subject to the modifications that T is adjusted to e* in the case of funded credit protection; and to T-g in the case of unfunded credit protection, where e* denotes the ratio of E* to the total notional amount of the underlying pool, where E* is the adjusted *exposure* amount of the *securitisation position* calculated in accordance with ■ BIPRU 5.4.28 R (3) taking the amount of the *securitisation position* to be E; and g is the ratio of the nominal amount of credit protection (adjusted for any currency or maturity mismatch in accordance with the provisions of ■ BIPRU 5 (Credit risk mitigation)) to the sum of the *exposure* amounts of the *securitised exposures*. In the case of unfunded credit protection the *risk weight* of the protection provider must be applied to that portion of the position not falling within the adjusted value of T.

[**Note:** *BCD* Annex IX Part 4 point 67]

9.15 Requirements for investors

9.15.1 R

9.15.1A R

9.15.1B G

9.15.2 G

9.15.3 R

9.15.4 R

9.15.5 R

9.15.6 R

9.15.7 R

9.15.8 R

9.15.9 R

9.15.10 R

9.15.11 R

9.15.12 R

9.15.13 R

9.15.14 R

9.15.15 R

9.15.16 R

9.15.16A R

9.15.16B R

9.15.16C G

9.15.16D G

9.15.16E G

9.15.17 G

9.15.18 G

Chapter 11

Disclosure (Pillar 3)

11.1 Application and purpose

Application

11.1.1 R BIPRU 11 applies to a *BIPRU firm*.

Purpose

11.1.2 G Pursuant to the third paragraph of article 95(2) of the *UK CRR*, the purpose of *BIPRU* 11 is to apply requirements that correspond to:

(1) (a) Article 68(3);

(b) Article 72;

(c) Articles 145 to 149; and

(d) Annex XII;

of the *Banking Consolidation Directive*; and

(2) (a) Article 2, in part;

(b) Point 3 of Article 23, in part; and

(c) Article 39;

of the *Capital Adequacy Directive*.

11.2 Basis of disclosures

Disclosure on an individual basis

11.2.1 R The following must comply with the obligations laid down in ■ BIPRU 11.3 on an individual basis:

(1) a *firm* which is neither a *parent undertaking* nor a *subsidiary undertaking*;

(2) a *firm* which is excluded from a *UK consolidation group* or *non-UK sub-group* pursuant to ■ BIPRU 8.5; and

[**Note**: *BCD* Article 68(3)]

(3) a *firm* which is part of a *group* which has been granted an *investment firm consolidation waiver* under ■ BIPRU 8.4;

[**Note**: *CAD*.Article 23]

Parent institutions in the UK

11.2.2 R A *firm* which is a *parent institutions in the UK* must comply with the obligations laid down in ■ BIPRU 11.3 on the basis of its consolidated financial situation.

[**Note**: *BCD* Article 72(1)]

11.2.3 R A *firm* which is a significant subsidiary of a *parent institutions in the UK* must disclose the information specified in ■ BIPRU 11.4.5 R on an individual or sub-consolidated basis.

Firms controlled by a parent financial holding company in the UK

11.2.4 R A *firm controlled* by a *parent financial holding company in the UK* or a *parent mixed financial holding company in the UK* must comply with the obligations laid down in ■ BIPRU 11.3 on the basis of the consolidated financial situation of that *parent financial holding company in the UK* or *parent mixed financial holding company in the UK*.

[**Note**: *BCD* Article 72(2)]

11.2.5 R A *firm* which is a significant subsidiary of a *parent financial holding company in the UK* or a *parent financial holding company in the UK* must disclose the

information specified in ■ BIPRU 11.4.5 R on an individual or sub-consolidated basis.

Waiver: Comparable disclosures provided on a consolidated basis by a parent undertaking established in a third country

11.2.6 G A *firm* which is included within comparable disclosures provided on a consolidated basis by a *parent undertaking* whose head office is not in the *UK* may apply for a *waiver* from the relevant disclosure requirements in ■ BIPRU 11.2.2 R - ■ BIPRU 11.2.5 R. The *appropriate regulator's* approach to granting *waivers* is set out in the Supervision manual (see ■ SUP 8).

[**Note**: *BCD* Article 72(3)]

11.2.7 G A *firm* applying for a *waiver* from one or more of the disclosure requirements in ■ BIPRU 11.2.2 R - ■ BIPRU 11.2.5 R will need to:

(1) satisfy the *appropriate regulator* that it is included within comparable disclosures provided on a consolidated basis by a *parent undertaking* whose head office is not in the *UK*; and

(2) notify the *appropriate regulator* of the location where the comparable disclosures are provided.

11.3 Disclosures: Information to be disclosed; Frequency, media and location of disclosures; Verification

Information to be disclosed

11.3.1 R A *firm* must publicly disclose the information laid down in ■ BIPRU 11.5 subject to the provisions laid down in ■ BIPRU 11.3.5 R to ■ BIPRU 11.3.7 R.

[**Note**: *BCD* Article 145(1), *CAD* Article 39]

11.3.2 R

(1) A *firm* which has an *IRB permission* must publicly disclose the information laid down in ■ BIPRU 11.6.1 Rto ■ BIPRU 11.6.4 R.

(2) A *firm* which recognises *credit risk mitigation* in accordance with ■ BIPRU 5 must publicly disclose the information laid down in ■ BIPRU 11.6.5 R.

(3) [deleted]

[**Note**: *BCD* Article 145(2), *CAD* Article 39]

Disclosure policy

11.3.3 R

(1) A *firm* must adopt a formal policy to comply with the disclosure requirements laid down in ■ BIPRU 11.3.1 R and ■ BIPRU 11.3.2 R and have policies for assessing the appropriateness of its disclosures, including their verification and frequency.

(2) A *firm* must also have policies for assessing whether its disclosures convey its risk profile comprehensively to market participants. Where those disclosures do not convey its risk profile comprehensively to market participants, a *firm* must publicly disclose the information necessary in addition to that required according to ■ BIPRU 11.3.3R (1). However, a *firm* may omit one or more items of information if those items are not, in the light of the criterion specified in ■ BIPRU 11.4.1 R, regarded as material, or if those items are, in the light of the criteria specified in ■ BIPRU 11.4.2 R and ■ BIPRU 11.4.3 R, regarded as proprietary or confidential.

[**Note**: *BCD* Article 145(3)]

Rating decisions

11.3.4 R A *firm* must, if requested, explain its rating decisions to SMEs and other corporate applicants for loans, providing an explanation in writing when

asked. The administrative costs of the explanation have to be at an appropriate rate to the size of the loan.

[**Note**: *BCD* Article 145(4)]

Exemption from disclosure: Materiality

11.3.5 R A *firm* may omit one or more of the disclosures listed in ■ BIPRU 11.5 if the information provided by such disclosures is not, in the light of the criterion specified in ■ BIPRU 11.4.1 R, regarded as material.

[**Note**: *BCD* Article 146(1)]

Exemption from disclosure: Proprietary or confidential information

11.3.6 R A *firm* may omit one or more items of information included in the disclosures listed in ■ BIPRU 11.5 and ■ BIPRU 11.6 if those items include information which, in the light of the criteria specified in ■ BIPRU 11.4.2 R and ■ BIPRU 11.4.3 R, is regarded as proprietary or confidential.

[**Note**: *BCD* Article 146(2)]

11.3.7 R In the exceptional cases referred to in ■ BIPRU 11.3.6 R, a *firm* must:

(1) state in its disclosures:

(a) the fact that the specific items of information are not disclosed; and

(b) the reason for non-disclosure; and

(2) publish more general information about the subject matter of the disclosure requirement, except where these are to be classified as secret or confidential under the criteria set out in ■ BIPRU 11.4.2 R and ■ BIPRU 11.4.3 R.

[**Note**: *BCD* Article 146(3)]

Frequency of publication

11.3.8 R A *firm* must:

(1) publish the disclosures required under ■ BIPRU 11.3.1 R to ■ BIPRU 11.3.5 R on an annual basis at a minimum;

(2) publish disclosures as soon as practicable.

[**Note**: *BCD* Article 147(1)]

11.3.9 R A *firm* must also determine whether more frequent publication than is provided for in ■ BIPRU 11.3.8 R is necessary in the light of the criteria set out in ■ BIPRU 11.4.4 R.

[**Note**: *BCD* Article 147(2)]

Media and location of publication

11.3.10 R

(1) A *firm* may determine the appropriate medium, location and means of verification to comply effectively with the disclosure requirements laid down in ■ BIPRU 11.3.1 R to ■ BIPRU 11.3.4 R.

(2) To the degree feasible, a *firm* must provide all disclosures in one medium or location.

(3) Equivalent disclosures made by a *firm* under accounting, *listing* or other requirements may be deemed to constitute compliance with ■ BIPRU 11.3.1 R to ■ BIPRU 11.3.4 R.

(4) If disclosures are not included in the financial statements, a *firm* must indicate where they can be found.

[**Note**: *BCD* Article 148]

11.4 Technical criteria on disclosure: General criteria

Criterion for materiality

11.4.1 R A *firm* must regard information as material in disclosures if its omission or misstatement could change or influence the assessment or decision of a user relying on that information for the purpose of making economic decisions.

[**Note**: *BCD* Annex XII Part 1 point 1]

Criteria: Proprietary or confidential information

11.4.2 R (1) A *firm* must regard information as proprietary information if sharing that information with the public would undermine its competitive position.

(2) Proprietary information may include information on products or systems which, if shared with competitors, would render a *firm's* investments therein less valuable.

[**Note**: *BCD* Annex XII Part 1 point 2]

11.4.3 R A *firm* must regard information as confidential if there are obligations to customers or other counterparty relationships binding the *firm* to confidentiality.

[**Note**: *BCD* Annex XII Part 1 point 3]

Criteria: Frequency of publication

11.4.4 R (1) A *firm* must assess the need to publish some or all disclosures more frequently than annually in the light of the relevant characteristics of its business such as:

(a) scale of operations;

(b) range of activities;

(c) presence in different countries;

(d) involvement in different financial sectors;

(e) participation in international financial markets; and

(f) participation in payment, settlement and clearing systems.

(2) In making its assessment under (1) a *firm* must pay particular attention to the possible need for more frequent disclosure of:

(a) items of information laid down in ■ BIPRU 11.5.3 R (2) and ■ BIPRU 11.5.3 R (5), and ■ BIPRU 11.5.4 R (2) - ■ BIPRU 11.5.4 R (5);

(b) information on risk exposure and other items prone to rapid change.

[**Note**: *BCD* Annex XII Part 1 point 4]

Disclosures: Significant subsidiaries

11.4.5 R A *firm* which is a significant subsidiary of:

(1) a *parent institution in the UK*; or

(2) a *parent financial holding company in the UK*; or

(3) a *parent mixed financial holding company in the UK*;

must disclose the information specified in ■ BIPRU 11.5.3 R to ■ BIPRU 11.5.4 R on an individual or sub-consolidated basis.

[**Note**: *BCD* Annex XII Part 1 point 5]

11.5 Technical criteria on disclosure: General requirements

Disclosure: Risk management objectives and policies

11.5.1 R A *firm* must disclose its risk management objectives and policies for each separate category of risk, including the risks referred to under ■ BIPRU 11.5.1 R to ■ BIPRU 11.5.17 R. These disclosures must include:

(1) the strategies and processes to manage those risks;

(2) the structure and organisation of the relevant risk management function or other appropriate arrangements;

(3) the scope and nature of risk reporting and measurement systems; and

(4) the policies for hedging and mitigating risk, and the strategies and processes for monitoring the continuing effectiveness of hedges and mitigants.

[**Note**: *BCD* Annex XII Part 2 point 1]

Disclosure: Scope of application of directive requirements

11.5.2 R A *firm* must disclose the following information regarding the scope of application of the requirements of *GENPRU* and *BIPRU*:

(1) the name of the *firm* which is the subject of the disclosures;

(2) an outline of the differences in the basis of consolidation for accounting and prudential purposes, with a brief description of the entities that are:

(a) fully consolidated;

(b) proportionally consolidated;

(c) deducted from *capital resources*;

(d) neither consolidated nor deducted;

(3) any current or foreseen material practical or legal impediment to the prompt transfer of *capital resources* or repayment of liabilities among the *parent undertaking* and its *subsidiary undertakings*;

(4) the aggregate amount by which the actual *capital resources* are less than the required minimum in all *subsidiary undertakings* not included in the consolidation, and the name or names of such *subsidiary undertakings*; and

(5) if applicable, the circumstance of making use of the provisions laid down in ■ BIPRU 2.1 (Solo consolidation waiver).

[**Note**: *BCD* Annex XII Part 2 point 2]

Disclosure: Capital resources

11.5.3 R A *firm* must disclose the following information regarding its *capital resources*:

(1) summary information on the terms and conditions of the main features of all *capital resources* items and components thereof, including:

(a) *hybrid capital*;

(b) *capital instruments* which provide an incentive for the *firm* to redeem them; and

(c) *capital instruments* which the *firm* treats as *tier one capital* under ■ GENPRU TP8A;

(2) *tier one capital resources*, with separate disclosure of:

(a) all positive items and deductions;

(b) the overall amount of *hybrid capital*, with specification of those instruments treated as *tier one capital* under ■ GENPRU TP 8A.1; and

(c) the overall amount of *capital instruments* that provide for an incentive to redeem them, with specification of those instruments treated as *tier one capital* under ■ GENPRU TP 8A.1;

(3) the total amount (for the purposes of (3), the total amount must be stated gross of deductions) of:

(a) *tier two capital resources* plus any *innovative tier one capital resources*; and

(b) *tier three capital resources*;

(4) deductions from *tier one capital resources* and *tier two capital resources*, with separate disclosure of items referred to in ■ GENPRU 2.2.236 R; and

(5) total *capital resources*, net of deductions in ■ GENPRU 2.2 and limits laid down in ■ GENPRU 2.2.25 R to ■ GENPRU 2.2.30 R and ■ GENPRU 2.2.42 R to ■ GENPRU 2.2.50 R.

[**Note**: *BCD* Annex XII Part 2 point 3]

Disclosure: Compliance with BIPRU 3, BIPRU 4, BIPRU 7 and the overall Pillar 2 rule

11.5.4 R A *firm* must disclose the following information regarding compliance with ■ BIPRU 3, ■ BIPRU 4, , ■ BIPRU 7, and the *overall Pillar 2 rule*:

(1) a summary of the *firm's* approach to assessing the adequacy of its internal capital to support current and future activities;

(2) for a *firm* calculating *risk weighted exposure amounts* in accordance with the *standardised approach* to credit risk, 8% of the *risk weighted exposure amounts* for each of the *standardised credit risk exposure classes*;

(3) for a *firm* calculating *risk weighted exposure amounts* in accordance with the *IRB approach*, 8% of the *risk weighted exposure amounts* for each of the *IRB exposure classes*;

[**Note**: *BCD* Annex XII Part 2 point 4 (part)]

(4) the *firm's* minimum capital requirements for the following:

(a) in respect of its *trading-book* business, its:

(i) *interest rate PRR*;

(ii) *equity PRR*;

(iii) *option PRR*;

(iv) *collective investment schemes PRR*;

(v) *counterparty risk capital component*; and

(vi) [deleted]

(b) in respect of all of its business activities, its:

(i) *commodity PRR*; and

(ii) *foreign currency PRR*.

(5) [deleted]

11.5.5 R For *retail exposures*, the requirement under ■ BIPRU 11.5.4 R (3) applies to each of the following categories:

(1) *exposures* to *retail SMEs*;

(2) *retail exposures* secured by real estate collateral;

(3) *qualifying revolving retail exposures*; and

(4) other *retail exposures*.

[**Note**: *BCD* Annex XII Part 2 point 4(part)]

11.5.6 R For *equity exposures*, the requirement under ■ BIPRU 11.5.4 R (3) applies to:

(1) each of the approaches (the simple risk weight approach, the PD/LGD approach and the internal models approach) provided for in ■ BIPRU 4.7.5 R to ■ BIPRU 4.7.6 R, ■ BIPRU 4.7.9 R to ■ BIPRU 4.7.11 R, ■ BIPRU 4.7.14 R to ■ BIPRU 4.7.16 R, ■ BIPRU 4.7.24 R to ■ BIPRU 4.7.25 R;

(2) exchange traded *exposures*, private *equity exposures* in sufficiently diversified portfolios, and other *exposures*;

(3) *exposures* subject to supervisory transition regarding capital requirements; and

(4) *exposures* subject to grandfathering provisions regarding capital requirements.

[**Note**: *BCD* Annex XII Part 2 point 4(part)]

11.5.7 R A *firm* must disclose the following information regarding its *exposure* to *counterparty credit risk*:

(1) a discussion of the methodology used to assign internal capital and credit limits for counterparty credit *exposures*;

(2) a discussion of policies for securing collateral and establishing credit reserves;

(3) a discussion of policies with respect to wrong-way risk *exposures*;

(4) a discussion of the impact of the amount of collateral the *firm* would have to provide given a downgrade in its credit rating;

(5) gross positive fair value of contracts, netting benefits, netted current credit *exposure*, collateral held and 'net derivatives credit *exposure*', where 'net derivatives credit *exposure*' is the credit *exposure* on derivatives transactions after considering both the benefits from legally enforceable netting agreements and collateral arrangements;

(6) measures for exposure value under the *CCR mark to market method*, the *CCR standardised method* or the *CCR internal model method*, whichever is applicable;

(7) the notional value of credit derivative hedges, and the distribution of current credit *exposure* by types of credit *exposure*;

(8) credit derivative transactions (notional), segregated between use for the *firm's* own credit portfolio, as well as in its intermediation activities, including the distribution of the credit derivatives products used, broken down further by protection bought and sold within each product group; and

(9) the estimate of alpha (α) if the *firm's CCR internal model method permission* permits it to estimate α.

[**Note**: *BCD* Annex XII Part 2 point 5]

Disclosure: Credit risk and dilution risk

11.5.8 R A *firm* must disclose the following information regarding its *exposure* to credit risk and *dilution risk*:

(1) the definitions for accounting purposes of past due and impaired;

(2) a description of the approaches and methods adopted for determining value adjustments and provisions;

(3) the total amount of *exposures* after accounting offsets and without taking into account the effects of *credit risk mitigation*, and the average amount of the *exposures* over the period broken down by different types of *exposure* classes;

(4) the geographic distribution of the *exposures*, broken down in significant areas by material *exposure* classes, and further detailed if appropriate;

(5) the distribution of the *exposures* by industry or counterparty type, broken down by *exposure* classes, and further detailed if appropriate;

(6) the residual maturity breakdown of all the *exposures*, broken down by *exposure* classes, and further detailed if appropriate;

(7) by significant industry or counterparty type, the amount of:

(a) impaired *exposures* and past due *exposures*, provided separately;

(b) value adjustments and provisions; and

(c) charges for value adjustments during the period;

(8) the amount of the impaired *exposures* and past due *exposures*, provided separately, broken down by the significant geographical areas including, if practical, the amounts of value adjustments and provisions related to each geographical area;

(9) the reconciliation of changes in the value adjustments and provisions for impaired *exposures*, shown separately; and

(10) value adjustments and recoveries recorded directly to the income statement must be disclosed separately.

[**Note**: BCD Annex XII Part 2 point 6 (part)]

11.5.9 R The information to be disclosed under ■ BIPRU 11.5.8 R (9) must comprise:

(1) a description of the type of value adjustments and provisions;

(2) the opening balances;

(3) the amounts taken against the provisions during the period;

(4) the amounts set aside or reversed for estimated probable losses on *exposures* during the period, any other adjustments including those determined by exchange rate differences, business combinations, acquisitions and disposals of *subsidiary undertakings*, and transfers between provisions; and

(5) the closing balances.

[**Note**: *BCD* Annex XII Part 2 point 6 (part)]

Disclosure: Firms calculating risk weighted exposure amounts in accordance with the standardised approach

11.5.10 R For a *firm* calculating *risk weighted exposure amounts* in accordance with the *standardised approach* to credit risk, the following information must be disclosed for each of the *standardised credit risk exposure classes*;

(1) the names of the *nominated ECAIs* and export credit agencies and the reasons for any changes;

(2) the *standardised credit risk exposure classes* for which each *ECAI* or export credit agency is used;

(3) a description of the process used to transfer the issuer and issue credit assessments onto items not included in the *trading book*;

(4) the association of the external rating of each *nominated ECAI* or export credit agency with the *credit quality steps* prescribed in ■ BIPRU 3, taking into account that this information need not be disclosed if the *firm* complies with the *credit quality assessment scale*; and

(5) the *exposure* values and the *exposure* values after *credit risk mitigation* associated with each *credit quality step* prescribed in ■ BIPRU 3, as well as those deducted from *capital resources*.

[**Note**: *BCD* Annex XII Part 2 point 7]

Disclosure: Firms calculating risk weighted exposure amounts using the IRB approach

11.5.11 R A *firm* calculating *risk weighted exposure amounts* for *specialised lending exposures* in accordance with ■ BIPRU 4.5.8 R to ■ BIPRU 4.5.10 R or *equity exposures* in accordance with ■ BIPRU 4.7.9 R to ■ BIPRU 4.7.10 R (the simple risk weight approach) must disclose the *exposures* assigned:

(1) to each category of the table in ■ BIPRU 4.5.9 R; or

(2) to each *risk weight* mentioned in ■ BIPRU 4.7.9 R to ■ BIPRU 4.7.10 R.

[**Note**: *BCD* Annex XII Part 2 point 8]

Disclosure: Market risk

11.5.12 R A *firm* must disclose its *capital resources requirements* separately for each risk referred to in (1), (2) and (3):

(1) in respect of its *trading-book* business, its:

(a) *interest rate PRR*;

(b) *equity PRR*;

(c) *option PRR*;

(d) *collective investment schemes PRR*;

(e) *counterparty risk capital component*; and

(f) [deleted]

(2) in respect of all of its business activities, its:

(a) *commodity PRR*; and

(b) *foreign currency PRR*; and

(3) its specific interest-rate risk of *securitisation positions*.

[**Note**: *BCD* Annex XII Part 2 point 9]

Disclosure: Use of VaR model for calculation of market risk capital requirement

11.5.13 R The following information must be disclosed by a *firm* which calculates its *market risk capital requirement* using a *VaR model*:

(1) for each sub-portfolio covered:

(a) the characteristics of the models used;

(b) a description of stress testing applied to the sub-portfolio;

(c) a description of the approaches used for back-testing and validating the accuracy and consistency of the internal models and modelling processes;

(d) for the capital charges calculated according to the *incremental risk charge* and the *all price risk measure* separately, the methodologies used and the risks measured through the use of an internal model, including a description of the approach used by the *firm* to determine liquidity horizons, the methodologies used to achieve a capital assessment that is consistent with the required soundness standard and the approaches used in the validation of the model;

(2) the scope of the *firm's VaR model permission*;

(3) a description of the extent and methodologies for compliance with the requirements set out in ■ GENPRU 1.3.13 R (2) and ■ GENPRU 1.3.13 R (3) and ■ GENPRU 1.3.14 R to ■ GENPRU 1.3.34 R;

(4) the highest, the lowest and the mean of the following:

(a) the daily *VaR measures* over the reporting period and the *VaR measure* as per the period end;

(b) the *stressed VaR* measures over the reporting period and the *stressed VaR* measure as per the period end;

(c) the capital charge according to the *incremental risk charge* over the reporting period and as per the period end;

(d) the capital charge according to the *all price risk measure* over the reporting period and as per the period end;

(5) the amount of capital according to the *incremental risk charge* and the amount of capital according to the *all price risk measure* shown separately, together with the weighted average liquidity horizon for each sub-portfolio covered; and

(6) a comparison of the daily end-of-day *VaR measures* to the one-day changes of the portfolio's value by the end of the subsequent *business day* together with an analysis of any important overshooting during the reporting period.

[**Note**: *BCD* Annex XII Part 2 point 10]

Disclosure: Non-trading book exposures in equities

11.5.15 R A *firm* must disclose the following information regarding the *exposures* in *equities* not included in the *trading book*:

(1) the differentiation between *exposures* based on their objectives, including for capital gains relationship and strategic reasons, and an overview of the accounting techniques and valuation methodologies used, including key assumptions and practices affecting valuation and any significant changes in these practices;

(2) the balance sheet value, the fair value and, for those exchange-traded, a comparison to the market price where it is materially different from the fair value;

(3) the types, nature and amounts of exchange-traded *exposures*, private *equity exposures* in sufficiently diversified portfolios, and other *exposures*;

(4) the cumulative realised gains or losses arising from sales and liquidations in the period; and

(5) the total unrealised gains or losses, the total latent revaluation gains or losses, and any of these amounts included in *tier one*, *tier two* or *tier three capital resources*.

[**Note**: *BCD* Annex XII Part 2 point 12]

Disclosures: Exposures to interest rate risk in the non-trading book

11.5.16 R A *firm* must disclose the following information on its *exposure* to interest rate risk on positions not included in the *trading book*:

(1) the nature of the interest rate risk and the key assumptions (including assumptions regarding loan prepayments and behaviour of non-maturity deposits), and frequency of measurement of the interest rate risk; and

(2) the variation in earnings, economic value or other relevant measure used by the management for upward and downward rate shocks according to management's method for measuring the interest rate risk, broken down by currency.

[**Note**: *BCD* Annex XII Part 2 point 13]

Disclosures: Securitisation

11.5.17 R A *firm* calculating *risk weighted exposure amounts* in accordance with ■ BIPRU 9 or *capital resource requirements* according to ■ BIPRU 7.2.48A R to ■ BIPRU 7.2.48K R must disclose the following information, where relevant separately for its *trading book* and *non-trading book*:

(1) a description of the *firm's* objectives in relation to *securitisation* activity;

(1A) the nature of other risks, including *liquidity risk* inherent in securitised assets;

(1B) the type of risks in terms of seniority of underlying *securitisation positions* and in terms of assets underlying these latter *securitisation positions* assumed and retained with *resecuritisation* activity;

(2) the different roles played by the *firm* in the *securitisation* process;

(3) an indication of the extent of the *firm's* involvement in each of them;

(3A) a description of the processes in place to monitor changes in the credit and market risk of *securitisation exposures*, including how the behaviour of the underlying assets impacts *securitisation positions* and a description of how those processes differ for *resecuritisation positions*;

(3B) a description of the *firm's* policy governing the use of hedging and unfunded protection to mitigate the risks of retained *securitisation* and *resecuritisation positions*, including identification of material hedge counterparties by relevant type of risk exposure;

(4) the approaches to calculating *risk weighted exposure amounts* that the *firm* follows for its *securitisation* activities, including the types of *securitisation exposures* to which each approach applies;

(4A) the types of *SSPEs* that the *firm*, as *sponsor*, uses to securitise third-party *exposures*, including whether, and in what form, and to what extent, the *firm* has *exposures* to these *SSPEs*, separately for on and off-balance sheet *exposures*, as well as a list of the entities that the *firm* manages, or advises, and that invest in either the *securitisation positions* that the *firm* has securitised or in *SSPEs* that the *firm* sponsors;

(5) a summary of the *firm's* accounting policies for *securitisation* activities, including:

(a) whether the transactions are treated as sales or financings;

(b) the recognition of gains on sales;

(c) the methods, key assumptions, inputs and the changes from the previous period for valuing *securitisation positions*;

(d) the treatment of *synthetic securitisations* if this is not covered by other accounting policies;

(e) how assets awaiting *securitisation* are valued and whether they are recorded in the *firm's non-trading book* or *trading book*; and

(f) policies for recognising liabilities on the balance sheet for arrangements that could require the *firm* to provide financial support for securitised assets;

(6) the names of the *ECAIs* used for *securitisations* and the types of *exposure* for which each agency is used;

(6A) where applicable, a description of the *ABCP internal assessment approach* as set out in ■ BIPRU 9.12.20 R including the structure of the internal assessment process and relation between internal assessment and external ratings, the use of internal assessment other than for *ABCP internal assessment approach* capital purposes, the control mechanisms for the internal assessment process (including discussion of independence, accountability, and internal assessment process review), the *exposure* types to which the internal assessment process is applied and the stress factors used for determining *credit enhancement* levels, by *exposure* type;

(6B) an explanation of significant changes to any of the quantitative disclosures in (8) and (13) to (15) since the last reporting period;

(7) [deleted]

(8) for the *non-trading book* and for *exposures securitised* by the *firm*, the amount of impaired and past due *exposures securitised*, and the losses recognised by the *firm* during the current period, broken down by exposure type;

(9) [deleted]

(10) [deleted]

(11) [deleted]

(12) [deleted]

(13) separately for the *trading book* and the *non-trading book*, the following information broken down by *exposure* type:

(a) the total outstanding amount of *exposures securitised* by the *firm*, separately for *traditional securitisations* and *synthetic securitisations*, and *securitisations* for which the *firm* acts only as *sponsor*;

(b) the aggregate amount of on-balance sheet *securitisation positions* retained or purchased, and off-balance sheet *securitisation exposures*;

(c) the aggregate amount of assets awaiting *securitisation*;

(d) for securitised facilities subject to an *early amortisation provision*, the aggregate drawn-down *exposures* attributed to the *originator's* and investors' interests respectively, the aggregate *capital resources requirement* incurred by the *firm* against the *originator's* interest and the aggregate *capital resources requirement* incurred by the *firm* against the investors' shares of drawn balances and undrawn lines;

(e) the amount of *securitisation positions* that have been *risk weighted* at 1250% or deducted; and

(f) a summary of the *securitisation* activity of the current period, including the amount of *exposures securitised* and recognised gain or loss on sale;

(14) separately for the *trading book* and the *non-trading book*, the following information:

(a) the aggregate amount of *securitisation positions* retained or purchased and the associated *capital resources requirements*, broken down by *securitisation* and *resecuritisation exposures*, and further broken down into a meaningful number of *risk weight* or *capital resources requirement* bands, for each *capital resources requirement* approach used; and

(b) the aggregate amount of *resecuritisation exposures* retained or purchased, broken down according to the *exposure* before and after hedging or insurance, and the *exposure* to financial guarantors, broken down according to guarantor credit worthiness categories or guarantor name; and

(15) for the *trading book*, the total outstanding *exposures securitised* by the *firm* and subject to a *market risk capital requirement*, broken down into *traditional* and *synthetic*, and by *exposure* type.

[**Note**: *BCD* Annex XII Part 2 point 14]

Disclosures: remuneration

11.5.18 **R** A *firm* must disclose the following information, including regular, at least annual, updates, regarding its remuneration policy and practices for those categories of staff whose professional activities have a material impact on its risk profile:

(1) information concerning the decision-making process used for determining the remuneration policy, including if applicable, information about the composition and the mandate of a remuneration committee, the external consultant whose services have been used for the determination of the remuneration policy and the role of the relevant stakeholders;

(2) information on the link between pay and performance;

(3) the most important design characteristics of the remuneration system, including information on the criteria used for performance measurement and risk adjustment, deferral policy and vesting criteria;

(4) information on the performance criteria on which the entitlement to shares, options or variable components of remuneration is based;

(5) the main parameters and rationale for any variable component scheme and any other non-cash benefits;

(6) aggregate quantitative information on remuneration, broken down by business area;

(7) aggregate quantitative information on remuneration, broken down by senior management and members of staff whose actions have a material impact on the risk profile of the *firm*, indicating the following:

(a) the amounts of remuneration for the financial year, split into fixed and variable remuneration, and the number of beneficiaries;

(b) the amounts and forms of variable remuneration, split into cash, shares, share-linked instruments and other types;

(c) the amounts of outstanding deferred remuneration, split into vested and unvested portions;

(d) the amounts of deferred remuneration awarded during the financial year, paid out and reduced through performance adjustments;

(e) new sign-on and severance payments made during the financial year, and the number of beneficiaries of those payments;

(f) the amounts of severance payments awarded during the financial year, number of beneficiaries and highest such award to a single person.

[**Note:** Paragraph 15 of Annex XII to the *Banking Consolidation Directive*.]

11.5.19 G The *appropriate regulator* would normally consider the requirements to publish disclosures in accordance with ■ BIPRU 11.3.8 R and ■ 11.3.9 R in respect of ■ BIPRU 11.5 as a whole to meet the requirement to publish "regular, at least annual, updates" ■ BIPRU 11.5.18 R.

11.5.20 R

(1) A *firm* that is significant in terms of its size, internal organisation and the nature, scope and the complexity of its activities must also disclose the quantitative information referred to in ■ BIPRU 11.5.18 R at the level of *senior personnel*.

(2) *Firms* must comply with the requirements set out in ■ BIPRU 11.5.18 R in a manner that is appropriate to their size, internal organisation and the nature, scope and complexity of their activities and without prejudice to the *General Data Protection Regulation*.

[**Note:** Paragraph 15 of Annex XII to the *Banking Consolidation Directive*.]

[**Note:** The *appropriate regulator* has given *guidance* for the purpose of providing a framework for complying with the disclosure requirements of ■ BIPRU 11.5.18 R in accordance with the proportionality test set out in ■ BIPRU 11.5.20 R (2).]

11.5.21 G In the *appropriate regulator's* view, the exemptions from disclosure provided for in ■ BIPRU 11.3.5 R (materiality) and ■ BIPRU 11.3.6 R (proprietary or confidential information) are unlikely to apply to the disclosure required by ■ BIPRU 11.5.18 R (having regard, amongst other things, to the fact that the requirements set out in ■ BIPRU 11.5.18 R are to be complied with in the manner described in ■ BIPRU 11.5.20 R (2)).

11.6 Qualifying requirements for the use of particular instruments or methodologies

Disclosures: Firms using the IRB approach

11.6.1 R A *firm* calculating *risk weighted exposure amounts* in accordance with the *IRB approach* must disclose the following information:

(1) the scope of the *firm's IRB permission*;

(2) an explanation and review of:

(a) the structure of internal *rating systems* and relation between internal and external ratings;

(b) the use of internal estimates other than for calculating *risk weighted exposure amounts* in accordance with the *IRB approach*;

(c) the process for managing and recognising *credit risk mitigation*; and

(d) the control mechanisms for *rating systems* including a description of independence, accountability, and *rating systems* review;

(3) a description of the internal ratings process, provided separately for the following *IRB exposure classes*:

(a) central governments and *central banks*;

(b) institutions;

(c) corporate, including SMEs, *specialised lending* and purchased corporate receivables;

(d) retail, for *exposures* to *retail SMEs exposures*, *retail exposures* secured by real estate collateral, *qualifying revolving retail exposures*, and other *retail exposures*; and

(e) equities;

(4) the *exposure* values for each of the *IRB exposure classes*;

(5) for each of the *IRB exposure classes* central governments and *central banks*, *institutions*, *corporate* and *equity*, and across a sufficient number of *obligor grades* (including *default*) to allow for a meaningful differentiation of credit risk, a *firm* must disclose:

(a) the total *exposures* (for the *IRB exposure classes* central governments and *central banks*, *institutions* and *corporate exposures*, the sum of outstanding loans and *exposure* values for

undrawn commitments; for *equity exposures*, the outstanding amount);

(b) for a *firm* using own *LGD* estimates for the calculation of *risk weighted exposure amounts*, the *exposure*-weighted average *LGD* in percentage;

(c) the *exposure*-weighted average *risk weight*; and

(d) for a *firm* using own estimates of *conversion factors* for the calculation of *risk weighted exposure amounts*, the amount of undrawn commitments and *exposure*-weighted average *exposure* values for each *IRB exposure class*;

(6) for the *retail exposure* class and for each of the categories of:

(a) *exposures* to *retail SMEs*;

(b) *retail exposures* secured by real estate collateral;

(c) *qualifying revolving retail exposures*; and

(d) other *retail exposures*;

either the disclosures outlined under (5) (if applicable, on a pooled basis), or an analysis of *exposures* (outstanding loans and *exposure* values for undrawn commitments) against a sufficient number of *EL* grades to allow for a meaningful differentiation of credit risk (if applicable, on a pooled basis);

(7) the actual value adjustments in the preceding period for each *IRB exposure class* (for *retail exposures*, for each of the categories in (6)(a) to (d)) and how they differ from past experience;

(8) a description of the factors that impacted on the loss experience in the preceding period (for example, whether the *firm* experienced higher than average *default* rates, or higher than average *LGDs* and *conversion factors*); and

(9) the *firm's* estimates against actual outcomes over a longer period including, at a minimum, information on estimates of losses against actual losses in each *IRB exposure class* (for *retail exposures*, for each of the categories in (6)(a) to (d)) over a period sufficient to allow for a meaningful assessment of the performance of the internal rating processes for each *IRB exposure class* (for *retail exposures*, for each of the categories in (6)(a) to (d)).

[**Note**: *BCD* Annex XII Part 3 point 1 (part)]

11.6.2 R For the purposes of ■ BIPRU 11.6.1 R (3), the description must include the types of *exposure* included in the *IRB exposure class*, the definitions, methods and data for estimation and validation of *PD* and, if applicable, *LGD* and *conversion factors*, including assumptions employed in the derivation of these variables, and the descriptions of material deviations from the definition of *default*, including the broad segments affected by such deviations.

[**Note**: *BCD* Annex XII Part 3 point 1 (part)]

11.6.3 R For the purposes of ■ BIPRU 11.6.1 R (4), where a *firm* uses its own estimates of *LGDs* or *conversion factors* for the calculation of *risk weighted exposure*

amounts for *exposures* falling into the *sovereign, institution and corporate IRB exposure class*, the *firm* must disclose those *exposures* separately from *exposures* for which it does not use such estimates.

[**Note**: *BCD* Annex XII Part 3 point 1 (part)]

11.6.4 R For the purposes of ■ BIPRU 11.6.1 R (9), where appropriate, a *firm* must further decompose the information to provide analysis of *PD* and, for a *firm* using own estimates of *LGDs* and/or *conversion factors*, *LGD* and *conversion factor* outcomes against estimates provided in the quantitative risk assessment disclosures under ■ BIPRU 11.6.1 R to ■ BIPRU 11.6.4 R.

[**Note**: *BCD* Annex XII Part 3 point 1 (part)]

Disclosures: Credit risk mitigation

11.6.5 R A *firm* applying *credit risk mitigation* techniques must disclose the following information:

(1) the policies and processes for, and an indication of the extent to which the *firm* makes use of, on- and off-balance sheet netting;

(2) the policies and processes for collateral valuation and management;

(3) a description of the main types of collateral taken by the *firm*;

(4) the main types of guarantor and credit derivative counterparty and their creditworthiness;

(5) information about *market risk* or credit risk concentrations within the credit mitigation taken;

(6) for *firms* calculating *risk weighted exposure amounts* using the *standardised approach* to credit risk or the *IRB approach*, but not providing own estimates of *LGDs* or *conversion factors* in respect of the *exposure* class, separately for each *exposure* class, the total *exposure* value (after, where applicable, on- or off-balance sheet netting) that is covered - after the application of volatility adjustments - by eligible financial collateral, and other eligible *collateral*; and

(7) for *firms* calculating *risk weighted exposure amounts* using the *standardised approach* or the *IRB approach*, separately for each *exposure* class, the total *exposure* (after, where applicable, on- or off-balance sheet netting) that is covered by guarantees or credit derivatives; for *equity exposures*, this requirement applies to each of the approaches (the simple risk weight approach, the PD/LGD approach and the internal models approach) provided for in ■ BIPRU 4.7.5 R to ■ BIPRU 4.7.6 R, ■ BIPRU 4.7.9 R to ■ BIPRU 4.7.11 R, ■ BIPRU 4.7.14 R to ■ BIPRU 4.7.16 R, ■ BIPRU 4.7.24 R to ■ BIPRU 4.7.25 R.

[**Note**: *BCD* Annex XII Part 3 point 2]

Chapter 12

Liquidity standards

12.1 Application

12.1.1 R

12.1.1A R Subject to ■ BIPRU 12.1.2 R, ■ BIPRU 12 applies to:

(1) an *IFPRU investment firm*; and

(2) a *BIPRU firm*.

12.1.2 R ■ BIPRU 12.5 (Individual Liquidity Adequacy Standards), ■ BIPRU 12.6 (Simplified ILAS), ■ BIPRU 12.7 (Liquid assets buffer) and ■ BIPRU 12.9 (Individual liquidity guidance and regulatory intervention points) apply only to an *ILAS BIPRU firm*.

12.1.3 G A *firm* that is an An exempt full scope IFPRU investment firm is not an *ILAS BIPRU firm*.

12.1.4 R

(1) An exempt full scope IFPRU investment firm is a *full-scope IFPRU investment firm* that at all times has total net assets which are less than or equal to £50 million.

(2) In this *rule*, total net assets are the sum of a *firm's* total *trading book* assets and its total *non-trading book* assets, less the sum of its called up share capital, reserves and minority interests.

(3) For the purpose of (2), the value attributed to each of the specified balance sheet items must be that which is reported to the *FCA* in the *firm's* most recent *data item*.

12.1.5 G The effect of ■ BIPRU 12.1.4R is therefore to require the *firm* to sum the values of cell entries 20A and 20B in *data item* FSA001 and deduct from that total the sum of the values of cell entries 42, 43 and 44 in the same *data item*.

12.1.6 G There are some provisions in other sections of ■ BIPRU 12 which apply only to an *ILAS BIPRU firm*. Where this is the case, the provision in question says so.

12.1.7 R [deleted]

12.2 Adequacy of liquidity resources

The overall liquidity adequacy rule

12.2.1 R

(1) A *firm* must at all times maintain liquidity resources which are adequate, both as to amount and quality, to ensure that there is no significant risk that its liabilities cannot be met as they fall due.

(2) For the purpose of (1):

(a) a *firm* may not include liquidity resources that can be made available by other members of its *group*;

(b) [deleted]

(c) a *firm* may not include liquidity resources that may be made available through emergency liquidity assistance from a central bank (including the European Central Bank).

12.2.2 G

BIPRU 12.2.1R is the *overall liquidity adequacy rule*.

Branch liquidity resources

12.2.3 R

[deleted]

12.2.4 G

[deleted]

Liquidity resources: general

12.2.5 G

For the purposes of the *overall liquidity adequacy rule*, liquidity resources are not confined to the amount or value of a *firm's* marketable, or otherwise realisable, assets. Rather, in assessing the adequacy of those resources, a *firm* should have regard to the overall character of the resources available to it which enable it to meet its liabilities as they fall due. Therefore, for the purposes of that *rule*, a *firm* should ensure that:

(1) it holds sufficient assets which are marketable, or otherwise realisable;

(2) it is able to generate funds from those assets in a timely manner;

(3) it maintains a prudent funding profile in which its assets are of appropriate maturities, taking account of the expected timing of that *firm's* liabilities; and

(4) it is able to generate unsecured funding of appropriate tenor in a timely manner.

12.2.6 G The *overall liquidity adequacy rule* is expressed to apply to each *firm* on a solo basis. Each *firm* must be able to satisfy that *rule* relying solely on its own liquidity resources.

12.2.7 G The starting point, therefore, is that each *firm* must be self-sufficient in terms of its own liquidity adequacy. The *appropriate regulator* does, however, recognise that there are circumstances in which it may be appropriate for a *firm* to rely on liquidity support provided by other entities in its *group* or from elsewhere within the *firm*. A *firm* wishing to rely on support of this kind may only do so with the consent of the *appropriate regulator*, given by way of a *waiver* under section 138A (Modification or waiver of rules) of the *Act* to the *overall liquidity adequacy rule*.

Liquid assets buffer and funding profile

12.2.8 R For the purposes of the *overall liquidity adequacy rule*, an *ILAS BIPRU firm* must also ensure that:

(1) its liquidity resources contain an adequate buffer of high quality, unencumbered assets; and

(2) it maintains a prudent funding profile.

12.2.9 G The purpose of ■ BIPRU 12.2.8R is to ensure that an *ILAS BIPRU firm* has a buffer of liquid assets which are available to meet those liabilities which fall due in periods of stress experienced by that *firm*. Those periods of stress may be both market-wide and idiosyncratic in nature. The *appropriate regulator* acknowledges that in periods of stress a *firm's* liquid assets buffer may be eroded.

12.2.10 G The *appropriate regulator* recognises, however, that it may take time for a *firm* to build a buffer which is of a sufficient size and quality to help reduce the effect of periods of stress on the *firm*. In particular, the *appropriate regulator* recognises that the transition from the *appropriate regulator's* liquidity regime in force immediately prior to the ■ BIPRU 12 regime is likely to be a gradual one for many *firms*. The *appropriate regulator* will seek to agree with a *firm* an appropriate period of time over which its liquid assets buffer ought to be built. The *appropriate regulator* will, in any event, incorporate into the *individual liquidity guidance* which it gives to the *firm* details of the steps that it expects the *firm* to take so that it may establish an appropriately robust liquid assets buffer.

12.2.11 R In complying with ■ BIPRU 12.2.8R, a *simplified ILAS BIPRU firm* must ensure that its liquid assets buffer is at least equal to the amount of liquidity resources required by the *simplified buffer requirement*.

12.2.12 G The *appropriate regulator* is likely to regard a *simplified ILAS BIPRU firm* whose liquid assets buffer accords with the *simplified buffer requirement* as

having an adequate buffer of assets and a prudent funding profile for the purpose of ■ BIPRU 12.2.8R. Further *guidance* on this matter is provided in ■ BIPRU 12.6.5G.

12.2.13 G ■ BIPRU 12.7 contains more detailed *rules* and *guidance* about the type of assets that an *ILAS BIPRU firm* is permitted to hold in order to satisfy ■ BIPRU 12.2.8R.

Individual assessments of liquidity adequacy

12.2.14 G The adequacy of an *ILAS BIPRU firm's* liquidity resources needs to be assessed both by that *firm* and by the *appropriate regulator*. This process involves:

(1) in the case of a *standard ILAS BIPRU firm*, an *Individual Liquidity Adequacy Assessment* (*ILAA*) which such a *firm* is obliged to carry out in accordance with ■ BIPRU 12.5;

(2) in the case of a *simplified ILAS BIPRU firm*, an *Individual Liquidity Systems Assessment (ILSA)* which such a *firm* is obliged to carry out in accordance with ■ BIPRU 12.6; and

(3) a *Supervisory Liquidity Review Process* (*SLRP*), which is conducted by the *appropriate regulator*.

12.2.15 G ■ BIPRU 12.5 sets out the *ILAS* framework. That section describes some of the stress tests that a *standard ILAS BIPRU firm* must carry out in conducting its *ILAA* and identifies a number of sources of *liquidity risk* in relation to which a *firm* is required to assess the impact of those stresses. For a *standard ILAS BIPRU firm*, the requirements in ■ BIPRU 12.5 are in addition to the stress testing requirements in ■ BIPRU 12.4. The *rules* in ■ BIPRU 12.5 require a *standard ILAS BIPRU firm* to report the results of both sets of stress tests in its *ILAA*, while the *rules* in ■ BIPRU 12.6 require a *simplified ILAS BIPRU firm* to report those results in its *ILSA*.

12.2.16 G As part of its *SLRP*, the *appropriate regulator* will, having regard to the *liquidity risk* profile of the *firm*, consider:

(1) the adequacy, both as to amount and quality, of the liquidity resources (including the liquid assets buffer) held by the *firm*; and

(2) the degree of prudence reflected in the *firm's* funding profile.

12.2.17 G In assessing the adequacy of those resources, the *appropriate regulator* will consider a *firm's* overall ability to generate funding in a way that ensures that it can meet its liabilities as they fall due both in stressed and in ordinary business conditions.

12.2.18 G After completing a review of the *ILAA* as part of the *SLRP*, the *appropriate regulator* will give a *standard ILAS BIPRU firm individual liquidity guidance*, advising it of the amount and quality of liquidity resources which the *appropriate regulator* considers are appropriate having regard to the *liquidity risk* profile of the *firm*. In giving *individual liquidity guidance*, the *appropriate regulator* will also advise the *firm* of what it considers to be a prudent funding profile for the *firm*. In giving the *firm individual liquidity guidance* as to its funding profile, the *appropriate regulator* will consider the extent to which the *firm's* liabilities are adequately matched by assets of appropriate maturities. Although the *appropriate regulator* may have given a *firm individual liquidity guidance*, this does not remove the need for the *firm* to monitor its *liquidity risk* profile on an ongoing basis and to consider whether it should be holding liquidity resources that are greater in amount or higher in quality, or maintaining a more prudent funding profile, than those advised in its *individual liquidity guidance*.

12.2.19 G ■ BIPRU 12.5 sets out in greater detail the *appropriate regulator's ILAS* regime. ■ BIPRU 12.9 sets out in greater detail the *appropriate regulator's* process for issuing an *ILAS BIPRU firm* with *individual liquidity guidance* and its approach to monitoring a *firm's* adherence to that *guidance* or, as the case may be, to the *simplified buffer requirement*.

12.3 Liquidity risk management

12.3.1 G The approach taken in ■ BIPRU 12.3 is to set out:

(1) overarching systems and controls provisions in relation to a *firm's* management of its *liquidity risk*;

(2) provisions outlining the responsibilities of that *firm's governing body* and *senior managers* for the oversight of *liquidity risk*;

(3) more detailed provisions covering a number of specific areas, including:

(a) pricing *liquidity risk*;

(b) intra-day management of liquidity;

(c) management of collateral;

(d) management of liquidity across legal entities, business lines and currencies; and

(e) funding diversification and market access.

12.3.1A G

12.3.2 G ■ BIPRU 12.4 contains further *rules* and *guidance* on stress testing and *contingency funding plans*. These are both extensions of the overarching systems and controls provisions in ■ BIPRU 12.3. In formulating the *rules* and *guidance* in these two sections, the *appropriate regulator* has taken account of the Principles for Sound Liquidity Management and Supervision dated September 2008 issued by the Basel Committee on Banking Supervision. It is intended that the content of ■ BIPRU 12.3 and ■ BIPRU 12.4 be consistent with those Principles.

12.3.3 G ■ BIPRU 12.5.4R provides that, in relation to a *standard ILAS BIPRU firm*, it must include in its *ILAA* an assessment of its compliance with the standards set out in ■ BIPRU 12.3and ■ BIPRU 12.4, including the results of the stress tests required by the *rules* in ■ BIPRU 12.4. A *simplified ILAS BIPRU firm* is not subject to ■ BIPRU 12.5 and consequently it is not required to prepare an *ILAA*. Instead, the *rules* in ■ BIPRU 12.6 provide that such a *firm* is to carry out an *ILSA*, being alone an assessment of that *firm's* compliance with the standards set out in ■ BIPRU 12.3 and ■ BIPRU 12.4.

Overarching liquidity systems and controls requirements

12.3.4 R A *firm* must have in place robust strategies, policies, processes and systems that enable it to identify, measure, manage and monitor *liquidity risk* over an appropriate set of time horizons, including intra-day, so as to ensure that it maintains adequate levels of liquidity buffers. These strategies, policies, processes and systems must be tailored to business lines, currencies, *branches* and legal entities and must include adequate allocation mechanisms of liquidity costs, benefits and risks.

[**Note:** article 86(1) of the *CRD*]

12.3.4A G The strategies, policies, processes and systems referred to in ■ BIPRU 12.3.4 R should include those which enable it to assess and maintain on an ongoing basis the amounts, types and distribution of liquidity resources that it considers adequate to cover:

(1) the nature and level of the *liquidity risk* to which it is or might be exposed;

(2) the risk that the *firm* cannot meet its liabilities as they fall due; and

(3) in the case of an *ILAS BIPRU firm*, the risk that its liquidity resources might in the future fall below the level, or differ from the quality and funding profile, of those resources advised as appropriate by the *appropriate regulator* in that *firm's individual liquidity guidance* or, as the case may, its *simplified buffer requirement*.

12.3.5 R The strategies, policies, processes and systems referred to in ■ BIPRU 12.3.4 R must be proportionate to the complexity, risk profile and scope of operation of the *firm*, and the liquidity risk tolerance set by the *firm's governing body* in accordance with ■ BIPRU 12.3.8 R.

[**Note:** article 86(2) (part) of the *CRD*]

12.3.5A R

12.3.6 E

(1) [deleted]

(2) [deleted]

(3) A *firm* should ensure that its strategies, policies, processes and systems in relation to *liquidity risk* enable it to identify, measure, manage and monitor its *liquidity risk* positions for:

(a) all sources of contingent liquidity demand (including those arising from off-balance sheet activities);

(b) all currencies in which that *firm* is active; and

(c) correspondent, custody and settlement activities.

(4) [deleted]

(5) A *firm* should ensure that it has in place early warning indicators to identify immediately the emergence of increased *liquidity risk* or vulnerabilities, including indicators that signal whether embedded

triggers in funding or security arrangements such as warranties, covenants, events of default, conditions precedent or terms having similar effect are likely to, or will, be breached, occur or fail to be satisfied, or contingent risks will or are likely to crystallise, in either case with the result that access to liquidity resources may be impaired.

(6) A *firm* should ensure that it has in place reliable management information systems to provide its *governing body*, *senior managers* and other appropriate personnel with timely and forward-looking information on the liquidity position of the *firm*.

(7) Contravention of any of (3), (5) and (6) may be relied upon as tending to establish contravention of ■ BIPRU 12.3.4R.

12.3.7 G As well as the *rules* in ■ BIPRU 12.3 requiring a *firm* to have robust systems to enable it to identify, measure, manage and monitor *liquidity risk*, an *ILAS BIPRU firm* is also subject to obligations in ■ SUP 16 (Reporting requirements) requiring it to report quantitative data about its liquidity position to the *appropriate regulator*. That chapter of *SUP* sets out the applicable *data items* and the *rules* governing the frequency of their submission to the *appropriate regulator*. Absent a *firm-specific liquidity stress* or a *market liquidity stress*, the *rules* in ■ SUP 16 do not require daily (weekly for a *low frequency liquidity reporting firm* and a *simplified ILAS BIPRU firm*) reporting of *data items*. An *ILAS BIPRU firm* should, however, note that those *rules* do require that it has systems in place to ensure that it is able at all times to meet the requirements for daily (or weekly as applicable) reporting of applicable *data items* even if there is no *firm-specific liquidity stress* or *market liquidity stress* and none is expected.

12.3.7A R A *firm* must, taking into account the nature, scale and complexity of its activities, have liquidity risk profiles that are consistent with and not in excess of those required for a well-functioning and robust system.

[**Note:** article 86(3) of the *CRD*]

Governing body and senior management oversight: liquidity risk tolerance

12.3.8 R A *firm* must ensure that:

(1) its *governing body* establishes that *firm's liquidity risk* tolerance and that this is appropriately documented;

(2) its *liquidity risk* tolerance is appropriate for its business strategy and reflects its financial condition and funding capacity; and

(3) its *liquidity risk* tolerance is communicated to all relevant business lines.

[**Note:** article 86(2) of the *CRD*]

12.3.8A R

12.3.9 G As part of the *SLRP*, the *appropriate regulator* will assess the appropriateness of the *liquidity risk* tolerance adopted by an *ILAS BIPRU firm* to ensure that this risk tolerance is consistent with maintenance by the *firm* of adequate liquidity resources for the purpose of the *overall liquidity adequacy rule*. The *appropriate regulator* will expect a *firm* to provide it with an adequately reasoned explanation for the level of *liquidity risk* which that *firm's governing body* has decided it should assume. In assessing the appropriateness of the *liquidity risk* tolerance adopted by a *firm*, the *appropriate regulator* will consider whether the tolerance adopted is consistent with the *firm's* satisfaction of threshold condition 2E, 3D, 4E or 5E as applicable. Consistent with the *appropriate regulator's* statutory objectives under the *Act*, in assessing the appropriateness of a *firm's* adopted *liquidity risk* tolerance the *appropriate regulator* will also have regard to the role and importance of a *firm* in the *UK financial system*.

Governing body and senior management oversight: approval and review of arrangements

12.3.10 R A *firm* must ensure that its *governing body* approves the *firm's* strategies, policies, processes and systems relating to the management of *liquidity risk*, including those described in ■ BIPRU 12.3.4R.

12.3.11 R A *firm* must ensure that its *governing body* reviews regularly (and not less frequently than annually):

(1) the continued adequacy of any strategies, policies, processes and systems approved in accordance with ■ BIPRU 12.3.10R; and

(2) the *firm's liquidity risk* tolerance.

12.3.12 R A *firm* must ensure that its *senior managers*:

(1) continuously review that *firm's* liquidity position, including its compliance with the *overall liquidity adequacy rule*; and

(2) report to its *governing body* on a regular basis adequate information as to that *firm's* liquidity position and its compliance with the *overall liquidity adequacy rule* and with ■ BIPRU 12.3.4R.

12.3.12A R

12.3.13 G Although a *firm's senior managers* are likely to develop strategies, policies and practices for the management of that *firm's liquidity risk*, it is the responsibility of a *firm's governing body* to approve those strategies, policies and practices as adequate. In determining the adequacy of those strategies, policies and practices, a *firm's governing body* should have regard to that *firm's liquidity risk* tolerance established in accordance with ■ BIPRU 12.3.8R.

12.3.14 G The *appropriate regulator* will assess the adequacy of an *ILAS BIPRU firm's liquidity risk* management framework as part of the *SLRP*.

Pricing liquidity risk

12.3.15 E

(1) In relation to all significant business activities, a *firm* should ensure that it accurately quantifies liquidity costs, benefits and risks and fully incorporates them into:

(a) product pricing;

(b) performance measurement and incentives; and

(c) the approval process for new products.

(2) For the purposes of (1), a *firm* should ensure that it:

(a) includes significant business activities whether or not they are accounted for on-balance sheet; and

(b) carries out the exercise of quantification and incorporation both in normal financial conditions and under the stresses required by ■ BIPRU 12.4.1R.

(3) A *firm* should ensure that the liquidity costs, benefits and risks are clearly and transparently attributed to business lines and are understood by business line management.

(4) Contravention of any of (1), (2) or (3) may be relied upon as tending to establish contravention of ■ BIPRU 12.3.4R.

12.3.15A R

12.3.16 G

The incorporation of liquidity pricing into a *firm's* processes assists in aligning the risk-taking incentives of individual business lines within that *firm* with the *liquidity risk* to which the *firm* as a whole is exposed as a result of their activities. It is important that all significant business activities are addressed, including activities which involve the creation of contingent exposures which may not have an immediate balance sheet impact.

12

Intra-day management of liquidity

12.3.17 R

A *firm* must actively manage its intra-day liquidity positions and any related risks so that it is able to meet its payment and settlement obligations on a timely basis.

12.3.18 G

In complying with ■ BIPRU 12.3.17R, a *firm* should take into account all obligations arising from its acting as a custodian, a correspondent bank or a settlement agent.

12.3.19 R

For the purposes of ■ BIPRU 12.3.17R, a *firm* must ensure that:

(1) it is able to meet its payment and settlement obligations on a timely basis under both normal financial conditions and under the stresses required by ■ BIPRU 12.4.1R; and

(2) its arrangements for the management of intra-day liquidity enable it to identify and prioritise the most time-critical payment and settlement obligations.

12.3.19A R

12.3.20 G The *appropriate regulator* considers that a *firm's* ability to meet its payment and settlement obligations on an intra-day basis is important not just for that *firm*, but also for the liquidity position of that *firm's* counterparties and for the smooth functioning of payment and settlement systems as a whole.

12.3.21 E

(1) A *firm* should ensure that its intra-day liquidity management arrangements enable it, in relation to the markets in which it is active and the currencies in which it has significant positions, to:

(a) measure expected daily gross liquidity inflows and outflows, anticipate the intra-day timing of these flows where possible, and forecast the range of potential net funding shortfalls that might arise at different points during the day;

(b) monitor its intra-day liquidity positions against expected activities and available resources;

(c) identify gross liquidity inflows and outflows attributable to any correspondent, custodian or settlement agency services provided by that *firm*;

(d) manage the timing of its liquidity outflows such that priority is given to that *firm's* most time-critical obligations;

(e) deal with unexpected disruptions to its intra-day liquidity flows;

(f) acquire sufficient intra-day funding such that it is able to meet its most time-critical obligations when expected and other less time-critical obligations as soon as possible thereafter; and

(g) manage and mobilise collateral as necessary for the purposes of achieving the aim in (f).

(2) Contravention of any of (1)(a) to (g) may be relied upon as tending to establish contravention of ■ BIPRU 12.3.4R.

Management of collateral

12.3.22 R A *firm* must actively manage its collateral positions.

12.3.22A R A *firm* must distinguish between pledged and unencumbered assets that are available at all times, in particular during emergency situations. A *firm* must also take into account the legal entity in which assets reside, the country where assets are legally recorded either in a register or in an account as well as their eligibility and must monitor how assets can be mobilised in a timely manner.

[**Note:** article 86(5) of the *CRD*]

12.3.22B R A *firm* must also have regard to existing legal, regulatory and operational limitations to potential transfers of liquidity and unencumbered assets amongst entities, both within and outside the *UK*.

[**Note:** article 86(6) of the *CRD*]

12.3.23 R For the purposes of ■ BIPRU 12.3.22R, a *firm* must, in relation to all currencies in which it has significant positions and all jurisdictions in which it carries on significant business activities, ensure that it:

(1) can calculate all of its collateral positions, including assets currently provided as collateral, relative to the total amount of security required;

(2) can calculate the amount of unencumbered assets available to it to be provided as collateral;

(3) can mobilise collateral in a timely manner;

(4) monitors the location of available collateral;

(5) takes into account the extent to which counterparties with which it has deposited collateral may have re-hypothecated that collateral;

(6) has access to adequately diversified sources of collateral;

(7) assesses the eligibility of each major asset class that it holds for use as collateral with central banks;

(8) assesses on an ongoing basis the acceptability of its assets to major counterparties and providers of funds in secured funding markets; and

(9) monitors and manages the impact that the terms of existing funding or security arrangements, such as warranties, covenants, events of default, negative pledges and cross default clauses could have on its ability to mobilise collateral including for use in borrowing under any central bank facility (in particular, emergency liquidity assistance on a secured basis).

12.3.24 G For the purposes of ■ BIPRU 12.3.23R (8) and ■ (9), a *firm* should take into account the impact of the stresses that it conducts under ■ BIPRU 12.4.1R on the requirements which may be imposed on the provision of its assets as collateral (for example, haircuts) and also the availability of funds from private counterparties during such periods of stress.

12.3.24A G

12.3.25 E (1) A *firm* should ensure that its arrangements for the management of *liquidity risk*:

(a) enable it to monitor shifts between intra-day and overnight or term collateral usage;

(b) enable it to appropriately adjust its calculation of available collateral to account for assets that are part of a tied hedge;

(c) include adequate consideration of the potential for uncertainty around, or disruption to, intra-day asset flows; and

(d) take into account the potential for additional collateral requirements under the terms of contracts governing existing

collateral positions (for example, as a result of a deterioration in its own credit rating).

(2) Contravention of any of (1)(a) to (d) may be relied upon as tending to establish contravention of ■ BIPRU 12.3.4 R.

12.3.25A E

Managing liquidity across legal entities, business lines and currencies

12.3.26 R In complying with ■ BIPRU 12.3.4 R, a *firm* must ensure that:

(1) it actively manages its *liquidity risk* exposures and related funding needs; and

(2) it takes into account:

(a) the impact on its own liquidity position of its forming part of a *group*;

(b) the need to manage the liquidity position of individual business lines in addition to that of the *firm* as a whole; and

(c) the *liquidity risk* arising from its taking positions in foreign currencies; and

(3) where it forms part of a *group*, it understands and has regard to any legal, regulatory, operational or other constraints on the transferability to it of funds and collateral by other entities in that *group*.

12.3.27 R A *firm* must develop methodologies for the identification, measurement, management and monitoring of funding positions. Those methodologies must include the current and projected material cash-flows in and arising from assets, liabilities, off-balance-sheet items, including contingent liabilities and the possible impact of reputational risk.

[**Note**: article 86(4) of the *CRD*]

12.3.28 G In its *liquidity risk* management plans, a *firm* should identify clearly its assumptions regarding the transferability of funds and collateral. A *firm* should expect that the *appropriate regulator* will scrutinise those assumptions.

Funding diversification and market access

12.3.29 R In complying with ■ BIPRU 12.3.4 R, a *firm* must ensure that it has access to funding which is adequately diversified, both as to source and tenor.

12.3.30 R A *firm* must ensure that its *governing body*:

(1) is aware of the composition, characteristics and degree of diversification of its assets and funding sources; and

(2) regularly reviews its funding strategy in the light of any changes in the environment in which it operates.

12.3.31 G Funding diversification should not be considered an end in its own right. Rather, the purpose of diversification is to ensure that a *firm* has in place alternative sources of funding that strengthen its capacity to withstand a variety of severe yet plausible institution-specific and market-wide liquidity shocks.

12.3.32 E

(1) A *firm* should ensure that funding diversification is taken into account in that *firm's* business planning process.

(2) A *firm* should ensure that its funding arrangements take into account correlations between market conditions and the ability to access funds from different sources.

(3) A *firm* should ensure that in establishing adequate diversification it sets limits on its funding according to the following variables:

(a) maturity;

(b) nature of depositor or counterparty;

(c) levels of secured and unsecured funding;

(d) instrument type;

(e) securitisation vehicle;

(f) currency; and

(g) geographic market.

(4) A *firm* should ensure that it maintains an ongoing presence in its chosen funding markets and strong relationships with its chosen providers of funds.

(5) A *firm* should regularly test its capacity to raise funds quickly from its chosen funding sources to provide short, medium and long-term liquidity.

(6) A *firm* should ensure that its *senior managers* identify the main factors that affect its ability to raise funds and should monitor those factors closely to ensure that their estimates of fund raising capacity remain valid.

(7) Contravention of any of (1) to (6) may be relied upon as tending to establish contravention of ■ BIPRU 12.3.4 R.

Asset encumbrance

12.3.33 R

12.3.34 R

12.3.35 G

12.4 Stress testing and contingency funding

12.4.-2 R A *firm* must consider different liquidity risk mitigation tools, including a system of limits and liquidity buffers in order to be able to withstand a range of different stress events and an adequately diversified funding structure and access to funding sources. Those arrangements must be reviewed regularly.

[**Note:** article 86(7) of the *CRD*]

Stress testing

12.4.-1 R A *firm* must consider alternative scenarios on liquidity positions and on risk mitigants and must review the assumptions underlying decisions concerning the funding position at least annually. For these purposes, alternative scenarios must address, in particular, off-balance sheet items and other contingent liabilities, including those of *securitisation special purpose entities (SSPEs)* or other special purpose entities, as referred to in the *UK CRR* in relation to which the *firm* acts as *sponsor* or provides material liquidity support.

[**Note:** article 86(8) of the *CRD*]

12.4.1 R In order to ensure compliance with the *overall liquidity adequacy rule* and with ■ BIPRU 12.3.4R and ■ BIPRU 12.4.-1 R, a *firm* must:

(1) conduct on a regular basis appropriate stress tests so as to:

(a) identify sources of potential liquidity strain;

(b) ensure that current liquidity exposures continue to conform to the *liquidity risk* tolerance established by that *firm's governing body*; and

(c) identify the effects on that *firm's* assumptions about pricing; and

(2) analyse the separate and combined impact of possible future liquidity stresses on its:

(a) cash flows;

(b) liquidity position;

(c) profitability; and

(d) solvency.

12.4.1A R

12.4.1B G

12.4.2 R In accordance with ■ BIPRU 12.3.11R, ■ BIPRU 12.4.-2 R and ■ BIPRU 12.4.-1 R, a *firm* must ensure that its *governing body* reviews regularly the stresses and scenarios tested to ensure that their nature and severity remain appropriate and relevant to that *firm*.

12.4.3 G Consistent with ■ BIPRU 12.3.5R, the expects that the extent and frequency of such testing, as well as the degree of regularity of *governing body* review under ■ BIPRU 12.4.2R, should be proportionate to the nature scale and complexity of a *firm's* activities, as well as to the size of its liquidity risk exposures. Consistent with the *appropriate regulator's* statutory objectives under the *Act*, in assessing the adequacy of a *firm's* stress testing arrangements (including their frequency and the regularity of *governing body* review) the *appropriate regulator* will also have regard to the role and importance of that *firm* in the *UK financial system*. The *appropriate regulator* will, however, expect stress testing and *governing body* review to be carried out no less frequently than annually. The *appropriate regulator* expects that a *firm* will build into its stress testing arrangements the capability to increase the frequency of those tests in special circumstances, such as in volatile market conditions or where requested by the *appropriate regulator*.

12.4.4 G For the purposes of ■ BIPRU 12.4.2R, a review should take into account:

(1) changes in market conditions;

(2) changes in the nature, scale or complexity of the *firm's* business model and activities; and

(3) the *firm's* practical experience in periods of stress.

12

12.4.5 E

(1) [deleted]

(2) [deleted]

12.4.5A R A *firm* must consider the potential impact of institution-specific, market-wide and combined alternative scenarios. Different time periodsand varying degrees of stressed conditions must be considered.

[**Note:** article 86(9) of the *CRD*]

12.4.6 G The *appropriate regulator* expects every *firm*, including a *firm* with an apparently strong liquidity profile, to consider the potential impact of severe stress scenarios.

12.4.7 G In conducting its stress testing, a *firm* should also, where relevant, consider the impact of its chosen stresses on the appropriateness of its assumptions relating to:

(1) correlations between funding markets;

(2) the effectiveness of diversification across its chosen sources of funding;

(3) additional margin calls and collateral requirements;

(4) contingent claims, including potential draws on committed lines extended to third parties or to other entities in that *firm's group*;

(5) liquidity absorbed by off-balance sheet vehicles and activities (including conduit financing);

(6) the transferability of liquidity resources;

(7) access to central bank market operations and liquidity facilities;

(8) estimates of future balance sheet growth;

(9) the continued availability of market liquidity in a number of currently highly liquid markets;

(10) ability to access secured and unsecured funding (including retail *deposits*);

(11) currency convertibility; and

(12) access to payment or settlement systems on which the *firm* relies.

12.4.8 E

(1) A *firm* should ensure that the results of its stress tests are:

(a) reviewed by its *senior managers*;

(b) reported to that *firm's governing body*, specifically highlighting any vulnerabilities identified and proposing appropriate remedial action;

(c) reflected in the processes, strategies and systems established in accordance with ■ BIPRU 12.3.4R;

(d) used to develop effective *contingency funding plans*;

(e) integrated into that *firm's* business planning process and day-to-day risk management; and

(f) taken into account when setting internal limits for the management of that *firm's liquidity risk* exposure.

(2) Contravention of any of (1)(a) to (f) may be relied upon as tending to establish contravention of ■ BIPRU 12.3.4 R.

12.4.9 R

A *firm* must ensure that the results of its stress tests are reported to the *appropriate regulator* in a timely manner.

Contingency funding plans

12.4.10 R

A *firm* must adjust its strategies, internal policies and limits on *liquidity risk* and develop an effective *contingency funding plan*, taking into account the outcome of the alternative scenarios referred to in ■ BIPRU 12.4.-1 R.

[**Note**: article 86(10) of the *CRD*]

12.4.11 R A *firm* must have in place liquidity recoveryplans setting out adequate strategies and proper implementation measures in order to address possible liquidity shortfalls. Those plans must be tested at least annually, updated on the basis of the outcome of the alternative scenarios set out in ■ BIPRU 12.4.-1 R, and be reported to and approved by the *firm's governing body*, so that internal policies and processes can be adjusted accordingly. A *firm* must take the necessary operational steps in advance to ensure that liquidity recovery plans can be implemented immediately.

[**Note:** article 86(11) (part) of the *CRD*]

12.4.11A R [**Note:** article 86(11) (part) of the *CRD*]

12.4.12 G A *contingency funding plan* sets out a *firm's* strategies for addressing liquidity shortfalls in emergency situations. Its aim should be to ensure that, in each of the stresses required by ■ BIPRU 12.4.1R, it would still have sufficient liquidity resources to ensure that it can meet its liabilities as they fall due.

12.4.12A G

12.4.13 R A *firm* must ensure that its *contingency funding plan*:

(1) outlines strategies, policies and plans to manage a range of stresses;

(2) establishes a clear allocation of roles and clear lines of management responsibility;

(3) is formally documented;

(4) includes clear invocation and escalation procedures;

(5) is regularly tested and updated to ensure that it remains operationally robust;

(6) outlines how that *firm* will meet time-critical payments on an intra-day basis in circumstances where intra-day liquidity resources become scarce;

(7) outlines that *firm's* operational arrangements for managing a retail funding run;

(8) in relation to each of the sources of funding identified for use in emergency situations, is based on a sufficiently accurate assessment of:

(a) the amount of funding that can be raised from that source; and

(b) the time needed to raise funding from that source;

(9) is sufficiently robust to withstand simultaneous disruptions in a range of payment and settlement systems;

(10) outlines how that *firm* will manage both internal communications and those with its external stakeholders; and

(11) establishes mechanisms to ensure that the *firm's governing body* and *senior managers* receive management information that is both relevant and timely.

12.4.13A R

12.4.14 E

(1) In designing a *contingency funding plan* a *firm* should ensure that it takes into account:

(a) the impact of stressed market conditions on its ability to sell or securitise assets;

(b) the impact of extensive or complete loss of typically available market funding options;

(c) the financial, reputational and any other additional consequences for that *firm* arising from the execution of the *contingency funding plan* itself;

(d) its ability to transfer liquid assets having regard to any legal, regulatory or operational constraints; and

(e) its ability to raise additional funding from central bank market operations and liquidity facilities.

(2) Contravention of any of (1)(a) to (e) may be relied upon as tending to establish contravention of ■ BIPRU 12.3.4R.

12.4.14A E

12.4.15 G

A *firm* should ensure that its *contingency funding plan* takes into account the terms and conditions of any central bank liquidity facilities to which it has access, including both facilities that form part of normal liquidity management operations and emergency liquidity assistance on a secured basis. Where a *firm* includes in its *contingency funding plan* the use of central bank liquidity facilities it should consider the nature of those facilities, collateral eligibility, haircuts to which its collateral might be subject, terms in its existing or available funding arrangements which might impact its ability to access central bank facilities, operational arrangements for accessing those facilities and the potential reputational consequences for that *firm* in accessing them. In formulating its *contingency funding plan*, a *firm* should not rely on expectations it may have about future changes to central bank facilities, either in relation to their normal liquidity management operations or in relation to the availability of specific liquidity facilities in exceptional circumstances.

12.4.16 G

The *appropriate regulator* expects that a *firm's contingency funding plan* will encompass a range of actions that the *firm* might take in anticipation of or in response to changes in its funding position. These changes could result from either *firm*-specific or general developments. The *appropriate regulator* anticipates that different actions in a *contingency funding plan* would be taken at different stages of a developing situation.

12.4.16A G

12.5 Individual Liquidity Adequacy Standards

Individual Liquidity Adequacy Assessment

12.5.1 R This section applies to a *standard ILAS BIPRU firm*.

12.5.2 R A *firm* must carry out an individual liquidity adequacy assessment (*ILAA*) in accordance with this section.

12.5.3 G In conducting its *ILAA*, a *firm* is obliged to comply with the stress testing and related requirements which appear in this section. The *rules* in this section also provide that in its *ILAA* a *firm* must include an assessment of the *firm's* compliance with the standards set out in ■ BIPRU 12.3 and ■ BIPRU 12.4.

12.5.4 R A *firm* must ensure that:

(1) it regularly carries out an *ILAA*;

(2) it makes a written record of its *ILAA*;

(3) its *ILAA* is proportionate to the nature, scale and complexity of its activities;

(4) its *ILAA* takes into account whole-*firm* and *group*-wide liquidity resources only to the extent that reliance on these is permitted by the *appropriate regulator*;

(5) its *ILAA* includes an assessment of the results of the stress tests required by ■ BIPRU 12.5.6 R; and

(6) its *ILAA* includes an assessment of the *firm's* compliance with ■ BIPRU 12.3 and ■ BIPRU 12.4, including the results of the stress tests required by the rules in ■ BIPRU 12.4.

12.5.5 G A *firm* should carry out an *ILAA* at least annually, or more frequently if changes in its business or strategy or the nature, scale or complexity of its activities or the operational environment suggest that the current level of liquidity resources is no longer adequate. A *firm* should expect that its usual supervisory contact at the *appropriate regulator* will ask for the *ILAA* to be submitted as part of the ongoing supervisory process.

12.5.6 R A *firm* must ensure that in carrying out its *ILAA* it considers how that *firm's* liquidity resources change as a result of:

(1) the stress in ■ BIPRU 12.5.8 R (the first liquidity stress);

(2) the stress in ■ BIPRU 12.5.11 R (the second liquidity stress); and

(3) the first and second liquidity stresses occurring simultaneously.

ILAA stresses

12.5.7 G The *appropriate regulator* will review the results of a *firm's ILAA*, including the results of the stress tests required by ■ BIPRU 12.5.6R, as part of its *Supervisory Liquidity Review Process* (*SLRP*). The *appropriate regulator's* review of the stress test results will assist it assessing the adequacy of a *firm's* liquidity resources relative to other *ILAS BIPRU firms* and, consequently, in calibrating the *individual liquidity guidance* that it gives to that *firm*. ■ BIPRU 12.9.2G sets out the *appropriate regulator's* approach to assessing the adequacy of a *firm's* liquidity resources and indicates that, among other factors, it will have regard to the firms *ILAA*. It is not, therefore, the case that the amount of liquidity resources advised to the *firm* as being adequate in its *individual liquidity guidance* will necessarily equate to the amount needed to meet its liabilities as they fall due in the stresses required by ■ BIPRU 12.5.6R. The *appropriate regulator* will assess the adequacy of a *firm's* liquidity resources on a case-by-case basis and, accordingly, the amount of liquidity resources judged as adequate in the *firm's individual liquidity guidance* might be either above or below the amount needed to survive the stresses required by ■ BIPRU 12.5.6R.

First liquidity stress

12.5.8 R The first liquidity stress to which ■ BIPRU 12.5.6R refers is an unforeseen, name-specific, liquidity stress in which:

(1) financial market participants and retail depositors consider that in the short-term the *firm* will be or is likely to be unable to meet its liabilities as they fall due;

(2) the *firm's* counterparties reduce the amount of intra-day credit which they are willing to extend to it;

(3) the *firm* ceases to have access to foreign currency spot and *swap* markets; and

(4) over the longer-term the *firm's* obligations linked to its credit rating crystallise as a result of a reduction in that credit rating.

12.5.9 R For the purpose of ■ BIPRU 12.5.8R (1) to ■ (3), a *firm* must assume that the initial, short-term, period of stress lasts for at least two weeks.

12.5.10 G For the purpose of ■ BIPRU 12.5.8R (4), a *firm* should consider the effect of credit rating downgrades of varying degrees of severity. In doing so, it should also consider the cumulative effect of successive credit rating downgrades to its long-term credit rating.

Second liquidity stress

12.5.11 R The second liquidity stress to which ■ BIPRU 12.5.6R refers is an unforeseen, market-wide liquidity stress of three *months* duration.

12.5.12 R For the purpose of ■ BIPRU 12.5.11R, a *firm* must assume that the second liquidity stress is characterised by:

(1) uncertainty as to the accuracy of the valuation attributed to that *firm's* assets and those of its counterparties;

(2) inability to realise, or ability to realise only at excessive cost, particular classes of assets, including those which represent claims on other participants in the financial markets or which were originated by them;

(3) uncertainty as to the ability of a significant number of *firms* to ensure that they can meet their liabilities as they fall due; and

(4) risk aversion among participants in the markets on which the *firm* relies for funding.

ILAA methodology

12.5.13 R In carrying out the liquidity stresses required by ■ BIPRU 12.5.6R, a *firm* must:

(1) analyse each of the sources of risk identified in ■ BIPRU 12.5.14R;

(2) record the evidence which supports any behavioural assumptions that it makes in carrying out those stress tests;

(3) record the evidence which supports its assessment of the adequacy of its liquid assets buffer; and

(4) identify those of the measures set out in its *contingency funding plan* that it would implement.

12.5.14 R The sources of risk referred to in ■ BIPRU 12.5.13R are:

(1) wholesale secured and unsecured funding risk;

(2) retail funding risk;

(3) intra-day *liquidity risk*;

(4) intra-*group liquidity risk*;

(5) cross-currency *liquidity risk*;

(6) off-balance sheet *liquidity risk*;

(7) franchise-viability risk;

(8) marketable assets risk;

(9) non-marketable assets risk; and

(10) funding concentration risk.

Wholesale secured and unsecured funding risk

12.5.15 R For the purpose of assessing its wholesale funding risk, a *firm* must estimate the gross wholesale outflows that could occur under the liquidity stresses required by ■ BIPRU 12.5.6R.

12.5.16 R In assessing its wholesale funding risk, a *firm* must:

(1) identify its wholesale liabilities;

(2) determine how those liabilities behave under normal financial conditions;

(3) assess how they will behave under the stresses required by ■ BIPRU 12.5.6R; and

(4) divide its wholesale liabilities into funding which the *firm* assesses as having a higher than average likelihood of withdrawal in response to actual or perceived changes in the *firm's* credit-worthiness (Type A wholesale funding) and other funding (Type B wholesale funding).

12.5.17 G In assessing how its liabilities behave under stress, the *firm* should categorise its liabilities according to value, maturity and estimated speed of outflow. The *firm* should bear in mind that wholesale funding risk may crystallise as an acute loss of funds in the short term, or as a longer-term gradual leakage of funds, or as both.

12.5.18 G In the *appropriate regulator's* view, Type A wholesale funding is likely to include at least funding which:

(1) is accepted from a *credit institution*, local authority, *insurance undertaking*, pension fund, money market fund, asset manager (including a hedge fund manager), government-sponsored agency, sovereign government, or sophisticated non-financial corporation; or

(2) is accepted through the treasury function of a sophisticated non-financial corporation which may be assumed to respond swiftly to negative news about a *firm's* credit-worthiness; or

(3) is accepted on wholesale market terms as a part of a *firm's* money market operations; or

(4) is accepted from a depositor with whom a *firm* does not have a long-established relationship or to whom a *firm* does not supply a range of services; or

(5) is accepted from overseas counterparties (other than those in the country or territory of incorporation of a *firm's parent undertaking*); or

(6) is obtained through unsecured debt instruments (such as certificates of deposit, medium-term notes and commercial paper); or

(7) is not obtained through *repo* against assets of the type described in ■ BIPRU 12.7.2R (1) or ■ BIPRU 12.7.2R (2); or

(8) is obtained from counterparties with a relatively low creditor seniority on the liquidation of the *firm*.

12.5.19 R For the purpose of ■ BIPRU 12.5.15R, a *firm* must assume that it is unable to roll any of its Type A wholesale funding in the first two weeks of the stresses.

Retail funding risk

12.5.20 R In this part of ■ BIPRU 12.5, retail funding is funding that is accepted from a *consumer*.

12.5.21 R For the purpose of assessing its retail funding risk, a *firm* must:

(1) estimate the gross retail outflows that could occur under the liquidity stresses required by ■ BIPRU 12.5.6R;

(2) identify the stress, or combination of stresses, to which it considers its retail funding to be most vulnerable and estimate the gross retail outflows that could occur under that stress or combination of stresses; and

(3) divide its retail funding into funding which the *firm* assesses as having a higher than average likelihood of withdrawal in response to actual or perceived changes in the *firm's* credit-worthiness (Type A retail funding) and other funding (Type B retail funding).

12.5.22 G In general, the *appropriate regulator* expects a *firm's* retail funding to be less responsive than its wholesale funding to actual or perceived changes in the *firm's* credit-worthiness. However, a *firm* should nevertheless make its own assessment of the relative responsiveness of its wholesale and retail funding.

12.5.23 G For the purposes of assessing behaviour under stress, a *firm* should categorise its retail liabilities according to: value, maturity, estimated speed of outflow, product type, interest rate applied and any other factor that it considers relevant to its retail *deposit* structure.

12.5.24 G A *firm* should also be mindful that its retail funding profile is unlikely to be constant. In carrying out its *ILAA*, a *firm* should have regard to any changes to its retail funding profile since the previous *ILAA* and also to the possible impact of any future changes on its ability to maintain retail funding during periods of stress. In its *ILAA* submission to the *appropriate regulator*, a firm should include an analysis of:

(1) its retail funding profile as at the date of its *ILAA*;

(2) its retail funding profile over the twelve *months* preceding its *ILAA*;

(3) its projected retail funding profile over the twelve *months* following the date of its *ILAA*; and

(4) its approach to assessing which of its retail funding it has classed as Type A retail funding and which as Type B retail funding.

12.5.25 G In the *appropriate regulator's* view Type A retail funding is likely to include at least funding which:

(1) has been accepted through the internet; or

(2) is considered to have a more than average sensitivity to interest rate changes (such as a *deposit* whose acceptance can reasonably be attributed to the use of price-focused advertising by the *firm* accepting the *deposit*); or

(3) in relation to any individual depositor exceeds to a significant extent the amount of that individuals *deposits* with the accepting *firm* that are covered by a national deposit guarantee scheme; or

(4) is not accepted from a depositor with whom the *firm* has had a long relationship; or

(5) is accepted from retail depositors who can access their *deposits* before their residual contractual maturity subject to a loss of interest or payment of another form of early access charge (as a general proposition, the behaviour of liabilities to retail depositors is likely to depend in part on the contractual terms and conditions which give rise to those liabilities); or

(6) is not held in an account which is maintained for transactional purposes.

Intra-day liquidity risk

12.5.26 R For the purpose of assessing its intra-day *liquidity risk* arising from its direct participation in a payment or settlement system, a *firm* must in relation to each such system in which it participates:

(1) calculate on an intra-day basis the net amounts of collateral and cash required by that *firm* to fund participation in that system; and

(2) estimate how the amounts in (1) could change under the liquidity stresses required by BIPRU 12.5.6 R.

12.5.27 G For the purpose of calculating the net amounts of collateral and cash under BIPRU 12.5.26R, a *firm* should separately analyse:

(1) the amounts of collateral and cash needed in relation to both its own payments and those of its customers; and

(2) the intra-day timing of the payment of cash and the posting of the collateral, including the time at which the demand for its collateral and cash is greatest.

12.5.28 G For the purpose of ■ BIPRU 12.5.26R, a *firm* should ensure that it takes into account, in both normal financial conditions and in periods of stress, the effect of:

(1) other participants in a payment system withholding some or all of the payments expected from them; and

(2) its customers increasing either or both the volume and value of their payments.

12.5.29 R At the same time as it carries out the calculation and estimation in ■ BIPRU 12.5.26 R, a *firm* which participates directly in one or more payment or settlement systems must also estimate the impact on its liquidity position of the customer to which it has the largest intra-day credit exposure defaulting on its payment obligations to the *firm*:

(1) under normal financial conditions; and

(2) under the stresses required by ■ BIPRU 12.5.6 R.

12.5.30 G For the purpose of ■ BIPRU 12.5.29R, a *firm* should assume that the effect of that default is that the exposure is rolled overnight.

12.5.31 R A *firm* must, as part of its *ILAA* submission to the *appropriate regulator*:

(1) identify those payment and settlement systems in which it is a direct participant; and

(2) provide details of the intra-day credit policies that it applies, including the criteria against which it sets credit limits, when extending credit to a customer which is not a direct participant in the payment or settlement system in question.

12.5.32 G For the purpose of ■ BIPRU 12.5.31R, the *appropriate regulator* would expect a *firm*, in relation to each payment or settlement system in which it participates directly, to provide details of:

(1) that *firm's* charges for providing intra-day credit;

(2) any collateral requirements which it applies to its customers;

(3) the credit limits that it imposes (and the circumstances, if any, in which credit may be provided notwithstanding a limit breach);

(4) the extent to which the customers of that *firm* make use of the credit extended to them; and

(5) where relevant, the points during the day at which a customer is required to settle, or provide assets as collateral to cover, that *firm's* credit exposure to it.

12.5.33 R ■ BIPRU 12.5.34R applies to a *firm* which:

(1) is not a direct participant in a given payment or settlement system;

(2) is a customer of a *firm* that is a direct participant in such a system for the purposes of gaining access to that system; and

(3) receives intra-day credit from that participant *firm* or prefunds its account with such a *firm*.

12.5.34 R For the purpose of assessing its intra-day *liquidity risk* a *firm* to which ■ BIPRU 12.5.33R applies must assess the effect on its own position of a participant *firm* from which it receives intra-day credit or with which it has a prefunded account being unable to perform its obligations to that *firm*:

(1) under normal financial conditions; and

(2) under the stresses required by ■ BIPRU 12.5.6 R.

12.5.35 G As part of its *ILAA* submission to the *appropriate regulator*, a *firm* to which ■ BIPRU 12.5.33R applies should include:

(1) details of any alternative arrangements that it has in place to ensure that it continues to be able to meet its liabilities as they fall due in the circumstances set out in ■ BIPRU 12.5.34R; and

(2) details of the policies governing the use of intra-day credit provided to it by a *firm* which is a direct participant in a given payment or settlement system, including details of the criteria against which that participant will decide whether to reduce or cease the provision of intra-day credit.

Intra-group liquidity risk

12.5.36 R Where a *firm* has an *intra-group liquidity modification* permitting it to rely on liquidity from other members of its *group* in order to satisfy the *overall liquidity adequacy rule*, or may be exposed to calls on its own liquidity resources from others in its *group*, then in assessing its intra-*group liquidity risk* it must:

(1) take into account:

(a) the extent to which it and other entities in its *group* have access to central bank funding;

(b) in relation to any *group* entity on which a *firm* relies for liquidity support, the legal and regulatory regime to which that entity is subject, in particular that covering liquidity regulation; and

(c) the contractual arrangements governing any agreed forms of intra-*group* liquidity support (including committed funding lines); and

(2) assume that in periods of stress, *group* entities will not repay loans or *deposits* made by the *firm* to them, but that the *firm* will meet its liabilities that fall due to other *group* entities during the period of the relevant stress.

12.5.37 G For the purpose of ■ BIPRU 12.5.36R, a *firm* should consider the full range of legal and regulatory restrictions on the availability to it of liquidity support from other members of its *group*. A *firm* should ensure that it understands restrictions in force in other jurisdictions, as well as the potential for such restrictions to be imposed in the future, as to the allowable size of intra-*group* exposures. A *firm* should also consider the circumstances in which it may find itself obliged to transfer liquidity resources to other entities in its *group*.

12.5.38 R [deleted]

12.5.39 G [deleted]

Cross-currency liquidity risk

12.5.40 R For the purpose of assessing its cross-currency *liquidity risk*, a *firm* must:

(1) in relation to each currency in which it has significant positions, calculate its gross outflows and gross inflows having regard to their respective maturities;

(2) where it identifies a net outflow in (1), assess how it will fund that outflow; and

(3) estimate how the amounts in (1) and the assessment in (2) could change under the liquidity stresses required by ■ BIPRU 12.5.6R.

12.5.41 R A *firm* must, as part of its *ILAA* submission to the *appropriate regulator*, in relation to each currency in which it has significant positions:

(1) identify the type of financial instruments which that firm uses to raise funding in that currency;

(2) identify the main counterparties which provide funding to that *firm* in that currency; and

(3) describe the arrangements that it has in place to fund net outflows in that currency on a timely basis.

Off-balance sheet liquidity risk

12.5.42 R For the purpose of assessing its off-balance sheet *liquidity risk*, a *firm* must:

(1) identify all off-balance sheet activities that might affect its cash flows;

(2) calculate the effect on its cash flows of those activities in normal financial conditions; and

(3) estimate the effect on its cash flows of those activities under the liquidity stresses required by ■ BIPRU 12.5.6R.

12.5.43 R For the purpose of ■ BIPRU 12.5.42R, a *firm* must take into account the circumstances in which it may choose to provide liquidity support in respect of its off-balance sheet activities beyond its contractual obligations (if any) to do so.

12.5.44 R For the purpose of ■ BIPRU 12.5.42R, a *firm* must in particular consider the impact on its cash flows of:

(1) *derivatives* positions;

(2) contingent liabilities;

(3) commitments given; and

(4) liquidity facilities to support securitisation programmes.

12.5.45 G In relation to *derivatives* positions, a *firm* should:

(1) assess the effect on its cash flows arising from the maturity, exercise and repricing of *derivatives* in which it holds a position, including the impact of counterparties:

(a) who may require the posting of additional margin or collateral in the event of a decline in that *firm's* credit rating;

(b) who may require the posting of additional margin or collateral (or the return to them of margin or collateral) in the event of a change in the value of a *derivative* or of the posted collateral;

(c) who (in the case of those that are any of a *recognised investment exchange*, a *designated investment exchange* or a *recognised clearing house*) may require the posting of additional margin in volatile market conditions;

(d) who may choose to terminate an *OTC derivative* which they have entered into with the *firm* rather than post additional margin or collateral;

(e) who, in periods of name-specific liquidity stress experienced by the *firm*, may choose to terminate out of the money *derivatives* which they have entered into with that *firm*; and

(f) who, in periods of stress, may choose to post less liquid collateral than would likely be the case in normal financial conditions; and

(2) assume that under the stresses required by ■ BIPRU 12.5.6 R there may be uncertainty as to the accuracy of the valuation attributed to a *derivative* contract.

12.5.46 G In relation to its contingent liabilities, a *firm* should:

(1) calculate the impact on its cash flows of those of its contingent obligations that will be triggered in normal financial conditions; and

(2) estimate the impact on its cash flows of those of its contingent obligations that may be triggered under the liquidity stresses required by ■ BIPRU 12.5.6 R.

12.5.47 G For the purpose of ■ BIPRU 12.5.46G, a *firm* should therefore assess the impact on its cash flows of the triggering of contingent obligations contained in all contractual documentation to which it is party, including: acceptances, endorsements, guarantees, underwriting agreements, standby letters of credit, documentary credits, warrants, indemnities, undrawn note issuance facilities and other revolving credit facilities. A *firm* should also assess the degree of concentration in its total contingent liabilities as respects obligations arising from particular types of contract, counterparty and market sector.

12.5.48 G In relation to its commitments (other than liquidity facilities to support securitisation programmes)), a *firm* should:

(1) calculate its maximum contractual exposure arising from those commitments;

(2) calculate the effect on its cash flows of the drawing of those commitments in normal financial conditions; and

(3) estimate the effect on its cash flows of the drawing of those commitments under the liquidity stresses required by ■ BIPRU 12.5.6 R.

12.5.49 G For the purpose of ■ BIPRU 12.5.48G, a firm should:

(1) consider its contractual exposure to the following types of commitment: committed funding facilities, undrawn loans and advances to wholesale counterparties, mortgages that have been agreed but not yet been drawn down, credit cards, overdrafts (and other retail lending facilities);

(2) ensure that its analysis of each type of commitment is sufficiently granular to enable that *firm* to:

(a) assess the circumstances in which counterparties will draw down;

(b) identify the extent of any correlations as between counterparties in deciding whether or not to draw down;

(c) identify the extent to which decisions by the *firm's* counterparties to draw down may be correlated to a decline in the *firm's* own liquidity resources; and

(d) assess the proportion of its total commitments attributable to particular counterparties; and

(3) assess the extent to which draw down requires the counterparty in question to deliver to the *firm* collateral in the form of marketable assets, while also assessing the anticipated effect of such a requirement on:

(a) the likelihood that the counterparty in question will draw down; and

(b) the *firm's* liquidity position if the counterparty in question delivers collateral on draw down; and

(4) assess the impact on its cash flows of its commitment counterparties experiencing liquidity stress at the same time as that *firm* is subject to the stresses required by ■ BIPRU 12.5.6 R.

12.5.50 G In relation to liquidity facilities to support securitisation programmes, a *firm* should:

(1) assess the extent of its contractual obligations to provide liquidity support to sponsored and third-party structured vehicles;

(2) identify the circumstances in which support will, or is likely to, be called; and

(3) assess the impact on that *firm's* cash flows of such support being called:

(a) in normal financial conditions; and

(b) under the liquidity stresses required by ■ BIPRU 12.5.6R.

12.5.51 G For the purpose of ■ BIPRU 12.5.50G (2), a *firm* should consider the impact of the following events on the likelihood of a call for liquidity support: inability of a vehicle to roll over commercial paper (due either to disruption in the CP market or to concern as to the quality of the assets securitised) and, in relation to sponsored vehicles, concern as to the solvency of that *firm* as sponsor and, separately, the possibility of draw down of undrawn commitments entered into by the sponsored vehicle in its own right.

Franchise-viability risk

12.5.52 R For the purposes of assessing its franchise-viability risk, a *firm* must assess, under the liquidity stresses required by ■ BIPRU 12.5.6 R, the liquidity resources required to maintain its core business franchise and reputation.

12.5.53 G Franchise-viability risk is the risk that in the stresses required by ■ BIPRU 12.5.6R a *firm* may not have sufficient liquidity resources to maintain its core business franchise and reputation.

12.5.54 G In complying with ■ BIPRU 12.5.52R, a *firm* should assess the extent to which it can and realistically will:

(1) restrict new retail lines without significantly damaging customer relationships;

(2) restrict new wholesale lending without significantly damaging its ability to resume such lending following the period of stress in question;

(3) cease to provide liquidity support to its sponsored vehicles;

(4) decline to exercise call *options* whose effect if not exercised might be to cause market participants to question the *firm's* ability to continue to meet its liabilities as they fall due; and

(5) continue any regular programme of buying back its issued debt.

12.5.55 G For the purpose of ■ BIPRU 12.5.54G (5), a *firm* may wish to continue repurchasing its debt to help demonstrate that a two-way market continues to be made in its paper and, more generally, in order to maintain the long-term viability of its debt issuance programme. Equally, a *firm* may wish to continue repaying retail depositors before the contractual maturity of those *deposits* in order to maintain confidence in its ability to continue to meet its liabilities as they fall due.

Marketable assets risk

12.5.56 R For the purpose of assessing its exposure to marketable assets risk, a *firm* must assess how the marketable assets comprised in its liquidity resources will behave:

(1) under normal financial conditions; and

(2) under the liquidity stresses identified in ■ BIPRU 12.5.6R, including an assessment of the effect of these stresses on:

(a) its ability to derive funding from its marketable assets in a timely fashion;

(b) the potential for using those assets as collateral to raise secured funding and the size of the haircut likely to be required by a counterparty;

(c) the likelihood and extent of forced-sale loss; and

(d) the effect on its business activities of any changes in (a) to (c) identified as likely to result from those liquidity stresses.

12.5.57 G In complying with ■ BIPRU 12.5.56R, a *firm* should consider all marketable assets which count towards its liquidity resources for the purposes of meeting the *overall liquidity adequacy rule*. A firm should therefore include in this assessment any assets that it holds in its liquid assets buffer.

12.5.58 G The *appropriate regulator* regards as marketable those of a *firm's* assets that it is able to sell outright or *repo*. For liquidity management purposes, a *firm*

would ordinarily expect to hold a stock of assets of this kind in order to reduce the likelihood that it may need to borrow unsecured at short notice. To the extent that these assets may behave differently under stress conditions than under normal financial conditions, a *firm* is subject to marketable assets risk.

12.5.59 G As a general proposition, the speed with which a *firm* may be able to realise a marketable asset, and the price impact of doing so, will depend to a significant extent on the volume of those assets which that *firm* wishes to realise and the market conditions prevailing at the time.

12.5.60 G The behaviour of a *firm's* marketable assets under conditions of stress is likely to depend on a number of different factors, including:

(1) the depth and competitiveness of the market for the marketable asset in question, the size of the bid-offer spread, the presence of committed market-makers, the nature of the information available to potential counterparties, the degree of structural complexity of the assets in question and the assets eligibility in central bank market operations and liquidity facilities; and

(2) that *firm's* operational capability to generate funding from those assets in a timely manner.

12.5.61 G In considering its operational capability to generate funding from assets, a *firm* should be aware that its capability in this regard is likely to depend on:

(1) whether it has in place arrangements for *repo*;

(2) the extent to which that *firm* already holds a significant proportion of the market for the marketable asset in question;

(3) the extent to which that *firm* periodically realises some or all of its holdings of that asset; and

(4) that *firm's* accounting treatment and valuation of that asset.

12.5.62 R For the purpose of its *ILAA* submission to the *appropriate regulator*, a *firm* must provide the *appropriate regulator* with an analysis of the profile of its marketable assets as at the date of submission in a way that:

(1) separately identifies its marketable assets according to asset class, maturity, currency, their eligibility for use in central bank monetary operations and liquidity facilities and any other characteristic that it uses in its liquidity management; and

(2) assesses the degree of diversification achieved across its marketable assets.

Non-marketable assets risk

12.5.63 R For the purpose of assessing its exposure to non-marketable assets risk, a *firm* must assess how the non-marketable assets in its liquidity resources will behave:

(1) under normal financial conditions; and

(2) under the liquidity stresses required by ■ BIPRU 12.5.6 R, including an assessment of the effect of these stresses on:

(a) the *firm's* ability to derive funding from its non-marketable assets; and

(b) the impact on the *firm's* liquidity position of any consequences for its funding ability identified in (a).

12.5.64 G In complying with ■ BIPRU 12.5.63R, a *firm* should consider all non-marketable assets which count towards its liquidity resources for the purposes of meeting the *overall liquidity adequacy rule*.

12.5.65 G ■ BIPRU 12.2.5 G notes that a *firm* should include in its liquidity resources sufficient assets which are marketable or otherwise realisable. The *appropriate regulator* considers those assets which are capable of realisation, but other than through *repo* or outright sale, as non-marketable assets. To the extent that these assets may behave differently under stress conditions than under normal financial conditions, a *firm* is subject to non-marketable assets risk. Different forms of non-marketable assets risk arise, particularly in relation to:

(1) retail loans; and

(2) unsecured wholesale assets.

12.5.66 G In addition to realising a *firm's* marketable assets, a *firm* can meet its outflows in part by expected inflows from maturing non-marketable assets such as retail loans. Inflows from these assets (principal and interest) may in stressed conditions be affected by counterparty behaviour, exposing that *firm* to non-marketable assets risk.

12.5.67 R For the purpose of assessing its exposure to non-marketable assets risk a *firm* must assess the extent to which the behaviour of inflows from retail loans under the liquidity stresses required by ■ BIPRU 12.5.6R may differ from that suggested by their contractual terms.

12.5.68 G For the purpose of the assessment in ■ BIPRU 12.5.67R, a *firm* should ensure that it assesses repayment behaviour at a level of granularity sufficient to enable it to draw informed conclusions about its liquidity exposure. The *appropriate regulator* would expect a *firm's* assessment to analyse separately the non-marketable assets risk associated with each of its relevant products and with each type of counterparty from whom it is expecting repayments.

12.5.69 G For the purpose of the assessment in ■ BIPRU 12.5.67R, a *firm* should in particular have regard to the risk associated with:

(1) repayment defaults; and

(2) exercise by its counterparties of contractual rights to repay before the expected maturity date or to delay repayment beyond that date.

12.5.70 G A *firm* may also use its unsecured wholesale assets to generate liquidity, otherwise than by outright sale or *repo*. A *firm* may, for example, choose to generate funding from some of the assets included in its liquidity resources by using them in securitisation or covered bond programmes. Assets that are typically used to raise liquidity in this manner include residential mortgage loans; commercial mortgage and other loans; credit card and automobile receivables, which have been packaged for the wholesale markets. To the extent that the ability to fund from these non-marketable assets may be limited under stressed conditions, a *firm* may be exposed to non-marketable assets risk.

12.5.71 G The assessment required by ■ BIPRU 12.5.63R is particularly important for a firm which:

(1) ordinarily does not raise funding from its non-marketable assets in this way; or

(2) places proportionately greater reliance on securitisation programmes as compared to other funding strategies to generate liquidity.

12.5.72 R In complying with ■ BIPRU 12.5.63R, a *firm* must in particular assess the non-marketable assets risk associated with asset securitisations, having regard to:

(1) the existence of early amortisation triggers and the consequences of their operation; and

(2) its financing of assets which are warehoused prior to their securitisation.

12.5.73 G A *firm* which chooses to warehouse assets in the way described in ■ BIPRU 12.5.72R should consider the particular risks that arise from the method of financing that it uses to pre-fund those assets. For example, financing of warehoused assets by means of short-term (rather than long-term) funding is more likely to put that *firm* under liquidity pressure in the event that its proposed securitisation is not completed (either at all, or at the expected date).

Funding concentration risk

12.5.74 G A *firm* with a sufficiently flexible funding strategy should be able to reduce its *liquidity risk* by diversifying its liquidity resources.

12.5.75 R As part of its *ILAA*, a *firm* must assess the impact on the degree of diversification in its liquidity resources of the stresses required by ■ BIPRU 12.5.6R.

12.5.76 G For the purpose of ■ BIPRU 12.5.75R, a *firm* should take into account the extent to which its liquidity resources are diversified according to:

(1) type of instrument and product;

(2) currency;

(3) counterparty;

(4) liability term structure; and

(5) market for their realisation (provided that such market is open to the *firm* as counterparty).

12.5.77 G A *firm* should be aware that the degree of diversification in its liquidity resources can be compromised, particularly in periods of stress, by a number of factors, including:

(1) reduced or terminated funding provision from some counterparties as a result of that *firm's* credit-rating being downgraded or its financial condition deteriorating;

(2) disputes over the terms of legally binding commitments to lend which delay the provision of funding;

(3) markets previously used by the *firm* for raising funding ceasing to be open or operating but at reduced capacity;

(4) reliance on a small number of brokers to access funding sources; and

(5) positive correlations in the behaviour of different instruments and products.

12.6 Simplified ILAS

12.6.1 G The *appropriate regulator* recognises that it may not always be appropriate to apply ■ BIPRU 12.5 (Individual Liquidity Adequacy Standards) to every *ILAS BIPRU firm*. For a *firm* which operates a relatively simple business model, it may instead be appropriate to allow the *firm* to calculate the size and content of its liquid assets buffer according to a simplified approach prescribed in the *Handbook* in advance of any review of that *firm's liquidity risk* conducted by the *appropriate regulator*. This section sets out the *simplified ILAS* approach to maintaining a liquid assets buffer and a *firm* that operates that approach is a *simplified ILAS BIPRU firm*.

12.6.2 R An *ILAS BIPRU firm* that wishes to operate the *simplified ILAS* approach must:

(1) satisfy the conditions in ■ BIPRU 12.6.6R to ■ BIPRU 12.6.8R; and

(2) obtain a *simplified ILAS waiver* from the *appropriate regulator*.

12.6.3 G A *firm* will therefore lose the benefit of its *simplified ILAS waiver* if it ceases to satisfy the conditions in ■ BIPRU 12.6.6R to ■ BIPRU 12.6.8R. Consistent with *Principle* 11 (Relations with regulators), if a *firm* anticipates that it may breach those conditions, it should notify the *appropriate regulator* promptly.

12.6.4 R A *simplified ILAS BIPRU firm* must calculate the size of its *simplified buffer requirement* in accordance with ■ BIPRU 12.6.9Rto ■ BIPRU 12.6.18R.

12.6.5 G The *appropriate regulator* is likely to regard a *simplified ILAS BIPRU firm* whose liquid assets buffer accords with the *simplified buffer requirement* as having an adequate buffer of assets and a prudent funding profile for the purpose of ■ BIPRU 12.2.8R. However, the *simplified ILAS* approach does not relieve a *simplified ILAS BIPRU firm* from the obligation to hold liquidity resources which are adequate for the purpose of meeting the *overall liquidity adequacy rule* or from the obligation in ■ BIPRU 12.3.4Rto assess and maintain on an ongoing basis the adequacy of its liquidity resources. Consequently, where a *firm's* own assessment of the adequacy of its liquidity resources indicates that its liquid assets buffer should be larger in size than that produced by the application of the *simplified buffer requirement*, the *appropriate regulator* will expect that *firm* to maintain a liquid assets buffer which is consistent with the results of its own assessment. Equally, following any review by the *appropriate regulator* of the *liquidity risk* to which a *simplified ILAS BIPRU firm* is exposed, the *appropriate regulator* may give

that *firm individual liquidity guidance* advising it that its liquid assets buffer should be bigger than that which is produced by the application of the *simplified buffer requirement*.

Simplified ILAS conditions

12.6.6 R The first condition is that:

(1) no less than 75% of the *firm's* total liabilities are accounted for by retail *deposits* and:

(a) the *firm's* total assets do not exceed 250 million; or

(b) the *firms* total assets do not exceed 1 billion and no less than 70% of those assets are accounted for by:

(i) assets of the kind that fall into ■ BIPRU 12.7.2 R and which the *firm* counts towards its *simplified buffer requirement*; and

(ii) retail loans; or

(c) no less than 70% of the *firm's* total assets are accounted for by retail loans; or

(d) no less than 70% of the *firm's* total assets are accounted for by:

(i) *money-market instruments* with a residual contractual maturity of three *months* or less; or

(ii) sight *deposits* held with a *credit institution*; or

(iii) term *deposits* with a residual contractual maturity of three *months* or less held with a *credit institution*; or

(2) no less than 80% of the *firm's* total liabilities are accounted for by liabilities owed to its *parent undertaking* and the amount of the *firm's* total assets does not exceed 1 billion.

(a) [deleted]

(b) [deleted]

(c) [deleted]

(3) [deleted]

12.6.6A R For the purpose of ■ BIPRU 12.6.6 R, a *firm* must calculate:

(1) its total assets by reference to its most recent *FSA*001 *data item*; and

(2) its retail loans as the total of its lending to the retail sector recorded in cell 11A in its most recent *FSA*015 *data item*.

12.6.7 R In this section:

(1) a retail *deposit* is a *deposit* accepted from a *consumer*; and

(2) SME *deposits* are *deposits* accepted from, and account balances where the account holders are, *small and medium-sized enterprises* (or *partnerships* or *sole traders* or *charities* which would be *small and medium-sized enterprises* if they were companies).

12.6.8 R The second condition is that no less than 99.5% of the *firm's* total assets and no less than 99.5% of its total liabilities are denominated in sterling, euros or United States dollars.

Size of the simplified buffer requirement

12.6.9 R

(1) A *simplified ILAS BIPRU firm* must ensure that the size of its liquid assets buffer is at all times greater than or equal to 50% of the amount produced by adding:

(a) the wholesale net cash outflow component;

(b) the retail and SME *deposit* component; and

(c) the credit pipeline component.

(2) This is the *simplified buffer requirement*.

The wholesale net cash outflow component

12.6.10 R

(1) The wholesale net cash outflow component is a *firm's* peak cumulative wholesale net cash outflow over the next three *months* where the peak is established by:

(a) calculating the daily wholesale net cash flow by reference to a *firm's* wholesale assets maturing that day and its wholesale liabilities falling due on that day;

(b) for each of the *business days* in the next three *months*, calculating the cumulative total of such daily net cash flows as at the *business day* in question; and

(c) identifying the minimum cumulative total figure out of all of the cumulative total figures calculated in accordance with (b).

(2) The figure identified in (1)(c) is the peak cumulative wholesale net cash outflow.

(3) For the purpose of calculating the peak cumulative wholesale net cash outflow, a *firm* must:

(a) exclude from the calculation in (1)(a) cash flows attributable to *repo* and reverse *repo*, forward sales, forward purchases, redemptions and any other transactions entered into by the *firm* where the security leg of the transaction in question is in respect of securities of the type described in ■ BIPRU 12.7.2R (1) and ■ (2);

(b) include wholesale cash outflows in that calculation according to their earliest contractual maturity;

(c) exclude wholesale cash flows attributable to reserves in the form of sight deposits with a central bank and *designated money market funds* that it includes in its liquid assets buffer in accordance with the *rules* on asset eligibility in ■ BIPRU 12.7; and

(d) exclude any retail *deposits* or SME *deposits*.

The retail and SME deposit component

12.6.11 R

(1) The retail and SME *deposit* component is the sum represented by:

(a) 20% of a *firm's* Type A retail *deposits*;

(b) 10% of a *firm's* Type B retail *deposits*; and

(c) 20% of a *firm's* SME *deposits*.

(2) A *firm* must:

(a) assess the likelihood that retail *deposits* that it holds will be withdrawn in response to actual or perceived changes in the *firm's* credit-worthiness;

(b) calculate the amount of retail *deposits* that it assesses as having a higher than average likelihood of withdrawal in the circumstances described in (a) (Type A retail *deposits*); and

(c) class all other of its retail *deposits* as Type B retail *deposits*.

12.6.12 G In the *appropriate regulator's* view, a Type A retail *deposit* is likely to include one which:

(1) has been accepted through the internet; or

(2) is considered to have a more than average sensitivity to interest rate changes (such as a deposit whose acceptance can reasonably be attributed to the use of price-focused advertising by the *firm* accepting the *deposit*); or

(3) in relation to any individual depositor exceeds to a significant extent the amount of that individuals *deposits* with the accepting *firm* that are covered by a national deposit guarantee scheme; or

(4) is not accepted from a depositor with whom the *firm* has had a long relationship; or

(5) is accepted from retail depositors who can access their *deposits* before their residual contractual maturity subject to a loss of interest or payment of another form of early access charge (as a general proposition, the behaviour of liabilities to retail depositors is likely to depend in part on the contractual terms and conditions which give rise to those liabilities); or

(6) is not held in an account which is maintained for transactional purposes.

12.6.13 R Before applying for a *simplified ILAS waiver*, a *firm* must prepare a written policy statement recording its approach to assessing the likelihood of withdrawal of its retail *deposits* in the circumstances described in ■ BIPRU 12.6.11R (2)(a) and ensure that:

(1) the *firm's governing body* approves and conducts appropriate reviews of the policy statement; and

(2) the *firm* submits a copy of the policy statement to its usual supervisory contact at the *appropriate regulator*.

12.6.14 G In considering a *firm's* application for a *simplified ILAS waiver*, the *appropriate regulator* will take into account the *firm's* policy statement submitted to it under ■ BIPRU 12.6.13R and form a view about the

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appropriateness of the assumptions on which the policy statement is based. Where a policy statement submitted after the grant of a *simplified ILAS waiver* reflects a materially different assessment to that set out in the policy statement considered as part of a *firm's waiver* application, a *firm* should expect that the *appropriate regulator* will wish to review the continued appropriateness of the *firm's simplified ILAS waiver* and in so doing will re-examine afresh all matters to which it had regard when the *waiver* in question was granted. The *appropriate regulator* expects a *firm* to review the appropriateness of its policy statement as often as is necessary and in any event no less frequently than annually. A *firm* should always review the continued appropriateness of its policy statement following a material change to the nature of the *firm's* business. Where a *firm* updates or otherwise changes its policy statement it should submit promptly to the *appropriate regulator* the new document.

The credit pipeline component

12.6.15 R The credit pipeline component is the sum represented by 25% of a *firm's* credit facilities offered to its *customers* but which are yet to be drawn down, including:

(1) offers to make loans secured on residential property;

(2) overdraft facilities; and

(3) credit card facilities.

Buffer securities restriction

12.6.16 R

(1) A *simplified ILAS BIPRU firm* may only include in its liquid assets buffer eligible government and *designated multilateral development bank* debt securities up to the value of the *buffer securities restriction*.

(2) For the purpose of calculating the *buffer securities restriction*, a *firm* must:

(a) calculate its daily net flow in government and *designated multilateral development bank* debt securities eligible as classes of assets for inclusion in the *firm's* liquid assets buffer;

(b) for each of the *business days* in the next three *months* calculate the cumulative total of such daily securities flows, including the opening balance, as at the *business day* in question; and

(c) identify the minimum cumulative total figure out of all of the cumulative total figures calculated in accordance with (b).

(3) For the purpose of (2)(a), a *firm* must include:

(a) all contractual inflows and outflows of eligible debt securities arising from *repo*, reverse *repo*, forward sales, forward purchases, redemptions and any other transactions involving those securities; and

(b) those cash flows excluded under ■ BIPRU 12.6.10 R (3)(a).

12.6.17 G In mathematical terms the calculation in ■ BIPRU 12.6.9R and ■ BIPRU 12.6.16R may be represented as follows:

Liquidity Buffer ≥(Wholesale net cash outflow component + Retail and SME deposit component + Credit pipeline component) × 0.5

Liquidity buffer	$FSA048_{18,1} + FSA048_{19,1} + FSA048_{6,1} + FSA048_{6,2} + FSA048_{25,2} + FSA048_{34,2} + \inf\{f(x): x = 1,2,3..y\}$ *where*: $f(x) = \sum_{m=1}^{x} FSA047_{6,m} + \sum_{m=1}^{x} FSA047_{25,m} + \sum_{m=1}^{x} FSA047_{34,m}$
Retail and SME *deposit* component	$\left(0.2 \times \sum_{n=53}^{54} \sum_{m=1}^{10} FSA048_{n,m}\right) + \left(0.1 \times \sum_{m=1}^{10} FSA048_{55,m}\right)$
Credit pipeline component	$0.25 \times \left(\sum_{n=59}^{69} FSA048_{n,1}\right)$
Wholesale net cash outflow component	$\left\lvert \min\left(0, \left(\sum_{n=20}^{22} FSA048_{n,1}\right) + \left(\sum_{n=26}^{30} FSA048_{n,2}\right) + \left(\sum_{n=35}^{39} FSA048_{n,2}\right) + \left(\sum_{n=44}^{51} FSA048_{n,1}\right) + \left(\sum_{m=1}^{5} FSA048_{52,m}\right) + FSA048_{56,1} + \inf\{g(x): x = 1,2,3...y\}\right)\right\rvert$ *where*: $g(x) = \sum_{m=1}^{y}\left[\left(\sum_{n=20}^{23} FSA047_{n,m}\right) + \left(\sum_{n=26}^{30} FSA047_{n,m}\right) + \left(\sum_{n=35}^{51} FSA047_{n,m}\right) + FSA047_{57,m}\right]$

Where:

y = number of business days in three months

$FSAxxx_{m,n}$ = The entry in FSAXXX row m column n

$\inf\{f(x): x = 1,2,3\}$ represents the greatest lower bound of the function f(x) over the range x = 1,2,3

Foreign currency positions

12.6.18 R

(1) Subject to (3), a *simplified ILAS BIPRU firm* that has assets or liabilities denominated in either or both euros and United States dollars must carry out separate calculations under ■ BIPRU 12.6.9Rin relation to its positions in each of those currencies, in addition to that which it carries out in relation to its sterling positions (if any).

(2) A *firm* to which (1) applies must ensure that, for the purpose of meeting the *simplified buffer requirement*, it holds in its liquid assets buffer assets denominated in either or both euros and United States dollars (as relevant) greater than or equal to the amount produced by the calculation in the corresponding currency required under (1), in addition to any sterling liquid assets that it is required to hold in its buffer in respect of its sterling positions.

(3) Paragraph (1) does not apply to a *simplified ILAS BIPRU firm* that hedges fully its positions in either or both euros and United States dollars such that the *firm* is not exposed to any cross-currency *liquidity risk* in respect of those positions.

Content of the simplified ILAS liquid assets buffer

12.6.19 G The *rules* in ■ BIPRU 12.7 set out the sorts of assets that are eligible for the liquid assets buffer of an *ILAS BIPRU firm*. Every *ILAS BIPRU firm* may include in its buffer reserves in the form of sight deposits at a central bank and high quality debt securities issued by governments and *designated multilateral development banks* subject to the eligibility rules in ■ BIPRU 12.7. ■ BIPRU 12.7 provides that a *simplified ILAS BIPRU firm* may also include in its buffer investments in a *designated money market fund*.

12.6.20 G A *simplified ILAS BIPRU firm* may include in the liquid assets buffer any combination of the eligible assets permitted by the *rules* in ■ BIPRU 12.7.

ILSA

12.6.21 R

(1) A *simplified ILAS BIPRU firm* must regularly carry out an *ILSA* which contains an assessment of the *firm's* compliance with the standards set out in ■ BIPRU 12.3 and ■ BIPRU 12.4, including the results of the stress tests required by the rules in ■ BIPRU 12.4.

(2) The *firm* must make a written record of its *ILSA*.

(3) The *ILSA* must be proportionate to the nature, scale and complexity of that *firm's* activities.

(4) The *ILSA* must take into account *group*-wide liquidity resources only to the extent that reliance on these is permitted by the *appropriate regulator*.

12.6.22 G For the purpose of ■ BIPRU 12.6.21R, a *firm* should carry out an *ILSA* at least annually, or more frequently if changes in its business or strategy or the nature, scale or complexity of its activities or the operational environment suggest that the current level of liquidity resources is no longer adequate. A *firm* should expect that the *firm's* usual supervisory contact at the *appropriate regulator* will ask for the *ILSA* to be submitted as part of the ongoing supervisory process.

12.7 Liquid assets buffer

12.7.1 G ■ BIPRU 12.2 provides that an *ILAS BIPRU firm* must ensure that its liquidity resources contain an adequate buffer of high quality, unencumbered assets. ■ BIPRU 12.7 describes in more detail the nature of the assets that are eligible for inclusion in that buffer. The *rules* in this section provide that some types of assets are eligible for use only by a *simplified ILAS BIPRU firm*.

12.7.2 R For the purpose of satisfying ■ BIPRU 12.2.8R, a *firm* to which this section applies may include in its liquid assets buffer only:

(1) high quality debt securities issued by a government or central bank;

(2) securities issued by a *designated multilateral development bank*;

(3) reserves in the form of sight deposits with a central bank of the kind specified in ■ BIPRU 12.7.5R and ■ BIPRU 12.7.6R; and

(4) in the case of a *simplified ILAS BIPRU firm* only, investments in a *designated money market fund*.

12.7.2A R

12.7.3 R Subject to ■ BIPRU 12.7.4R, for the purpose of ■ BIPRU 12.7.2R (1), a *firm* may include only a debt security which is:

(1) issued by the central government or central bank of an *EEA State*; or

(2) issued by the central government or central bank of Canada, the Commonwealth of Australia, Japan, Switzerland or the United States of America.

12.7.4 R For the purpose of ■ BIPRU 12.7.3R, a *firm* may not include a debt security unless:

(1) the central government or central bank in question has been assessed by at least two *eligible ECAIs* as having a credit rating associated with credit quality step 1 in the table set out in ■ BIPRU 12 Annex 1R (Mapping of credit assessments of *ECAIs* to credit quality steps); and

(2) that debt security is either:

(a) denominated in the domestic currency of the country in question; or

(b) denominated in a currency other than the domestic currency, provided it is denominated in any of Canadian dollars, euros, Japanese yen, sterling, Swiss francs or United States dollars.

12.7.5 R Subject to ■ BIPRU 12.7.6R, for the purpose of ■ BIPRU 12.7.2R (3) a *firm* may include only reserves in the form of sight deposits held by the *firm* with the central bank of a third country.

12.7.6 R For the purpose of ■ BIPRU 12.7.5R, a *firm* may not include reserves held at a central bank unless:

(1) the central bank in question has been assessed by at least two *eligible ECAIs* as having a credit rating associated with credit quality step 1 in the table set out in ■ BIPRU 12 Annex 1R (Mapping of credit assessments of *ECAIs* to credit quality steps);

(2) those reserves are denominated in the domestic currency of the central bank in question; and

(3) there are no legal or practical impediments to the *firm* using or withdrawing those reserves.

12.7.6A R For the purpose of ■ BIPRU 12.7.2R (2), a *firm* may not include securities issued by a *designated multilateral development bank* unless:

(1) the *designated multilateral development bank* in question has been assessed by at least two *eligible ECAIs* as having a credit rating associated with credit quality step 1 in the table set out in ■ BIPRU 12 Annex 1R (Mapping of credit assessments of *ECAIs* to credit quality steps); and

(2) those securities are denominated in any of Canadian dollars, euros, Japanese yen, sterling, Swiss francs or United States dollars.

12.7.7 G It is important that a *firm* identifies and understands the range of central bank facilities in which it is eligible to participate. A *firm* may be eligible to participate in some facilities of this kind by virtue of its having a *branch* in a particular country. In addition to identifying the central bank facilities to which it has access, a *firm* should ensure that it has in place appropriate legal and administrative arrangements to enable it to draw on those facilities in a timely manner.

12.7.8 G In deciding on the precise composition of its liquid assets buffer, a *firm* should ensure that it tailors the contents of the buffer to the needs of its business and the *liquidity risk* that it faces. In particular, a *firm* should ensure that it holds assets in its buffer which can be realised with the speed necessary to meet its liabilities as they fall due. In doing so, a *firm* should have regard to the currencies in which its liabilities are denominated and

should take into account the potential effect of stressed conditions on its ability to access spot and *swap* foreign exchange markets in a manner consistent with the settlement cycles of foreign exchange settlement systems. A *firm* should have regard to the results of its *ILAA* or, as the case may be, its *ILSA*, in assessing the speed with which its liabilities fall due in stressed and non-stressed conditions.

12.7.8A R

12.7.8B R

12.7.9 R For the purposes of ■ BIPRU 12.7.2R (1) and ■ (2), a *firm* must only count securities:

(1) which are unencumbered;

(2) (a) to which it has legal title; or

(b) to which a *central bank* has legal title but which meet the requirements of ■ BIPRU 12.7.9AR (1), subject to ■ BIPRU 12.7.9AR (2); and

(3) which that *firm* realises on a regular basis.

12.7.9A R (1) For the purposes of ■ BIPRU 12.7.9R (2)(b) the requirements are that:

(a) the securities are in excess of the amount of collateral required to be held by that *central bank*; and

(b) the *firm* is entitled to regain legal title to such securities without any encumbrance.

(2) The *firm* may only count securities that meet the requirements of ■ BIPRU 12.7.9 R and ■ BIPRU 12.7.9AR (1) from the point in time when the *firm* would regain legal title to the securities from the *central bank*, subsequent to any required notice period.

(3) For the purposes of ■ BIPRU 12.7.9AR (2) any required notice period is deemed to commence on the first *business day* that the *central bank* could receive notice from the *firm*.

12.7.10 G The *appropriate regulator* regards as encumbered any asset which the *firm* in question has provided as collateral. Therefore, where assets have been used as collateral in this way (for example, in a *repo*), they should not be included in the *firm*s liquid assets buffer. However, any assets provided by the *firm* to a *central bank* as collateral which meet the requirements in ■ BIPRU 12.7.9A R will be recognised as unencumbered by the for the purposes of ■ BIPRU 12.7.9R (1). For the avoidance of doubt, there is no need for notice to have actually been served to meet the requirements in ■ BIPRU 12.7.9AR (2).

12.7.11 R (1) For the purpose of ■ BIPRU 12.7.9R (3), a *firm* must periodically realise a proportion of the assets in its liquid assets buffer through *repo* or outright sale to the market.

(2) [deleted]

(3) A *firm* must ensure that in carrying out such periodic realisation:

(a) it does so without reference to the *firm's* day-to-day liquidity needs;

(b) it realises in varying amounts the assets in its liquid assets buffer;

(c) the cumulative effect of its periodic realisation over any twelve *month* period is that a significant proportion of the assets in its liquid assets buffer is realised; and

(d) in *repo* to the market it enters into transactions of varying durations.

(4) A *firm* must establish and maintain a written policy setting out its approach to periodic realisation of its assets.

(5) A *firm* must also ensure that it periodically tests its operational ability to raise funds, through the use of central bank liquidity facilities to which it has access, using a proportion of those of its assets not in its liquid assets buffer.

12.7.12 G The *appropriate regulator* will, as part of its review of a *firm's ILAA* or, as the case may be, its *ILSA*, assess the adequacy of a *firm's* periodic realisation policy and its implementation in practice.

12.7.12A R

12.8 Cross-border and intra-group management of liquidity

12.8.1 G Every *firm* subject to ■ BIPRU 12 is subject to the *overall liquidity adequacy rule*. The effect of that rule is that every *firm* is required to be self-sufficient in terms of liquidity adequacy and to be able to satisfy that rule relying on its own liquidity resources.

12.8.2 G However, the *appropriate regulator* recognises that there may be circumstances in which it would be appropriate for a *firm* to rely on liquidity resources which can be made available to it by other members of its *group*. Where the *appropriate regulator* is satisfied that the statutory tests in section 138A (Modification or waiver of rules) of the *Act* are met, the *appropriate regulator* will consider modifying the *overall liquidity adequacy rule* to permit reliance on liquidity support of this kind.

12.8.3 G ■ BIPRU 12.8 provides *guidance* on a type of modification to the *overall liquidity adequacy rule* and to other *rules* in ■ BIPRU 12 for which the *appropriate regulator* considers a *firm* may wish to apply, namely:

(1) an *intra-group liquidity modification*.

(2) [deleted]

12.8.4 G In considering whether the statutory tests in section 138A of the *Act* have been met, the *appropriate regulator* will, amongst others, have regard to the factors detailed below in relation to an *intra-group liquidity modification* (of the kind permitting the inclusion in a *firm's* liquidity resources of *parent undertaking* liquidity support). In practice it is likely that the *appropriate regulator* will view these as preconditions to the grant of an *intra-group liquidity modification* of that type and will therefore ordinarily need to be satisfied fully that each has been adequately addressed. They include matters on which the *appropriate regulator* will need to reach agreement with another relevant supervisor, and also matters which it will need to agree directly with a *firm* or the *parent undertaking* of a *firm*. It is likely that a number of these matters will be reflected as requirements or conditions in the modification.

12.8.5 G This section represents merely an indication of the matters to which the *appropriate regulator* will have regard in considering an application for an *intra-group liquidity modification*. In considering such an application, the *appropriate regulator* will always take into account anything that it reasonably considers to be relevant for the purposes of assessing whether

the statutory tests in section 138A of the *Act* are met. In doing so, it will have regard to the role and importance of a *firm* in the *UK financial system*.

12.8.6 G The *appropriate regulator* anticipates that an application to modify the *overall liquidity adequacy rule* may be accompanied by an application to waive or modify other rules in ■ BIPRU 12 (for example, the stress testing and *contingency funding plan rules* in ■ BIPRU 12.4). The *appropriate regulator* offers some *guidance* in this section on applications of this type.

Intra-group liquidity modification: general

12.8.7 G The *appropriate regulator* recognises that a *firm* may be part of a wider *group* which manages its liquidity on a *group*-wide basis. A *firm* which considers that the statutory tests in section 138A of the *Act* are met may apply for an *intra-group liquidity modification* permitting it to rely on liquidity support from elsewhere in its *group*. Until a *firm* has such a modification it will need to meet the *overall liquidity adequacy rule* from its own liquidity resources. The effect of an *intra-group liquidity modification* is to modify the *overall liquidity adequacy rule* to recognise the extent to which the *appropriate regulator* is prepared to accept liquidity resources from other entities in a *firm's* group for the purposes of the *firm's* own compliance with the *overall liquidity adequacy rule*. ■ BIPRU 12.8.11G offers additional *guidance* on the likely extent of this recognition.

12.8.8 G ■ BIPRU 12.8.14 G to ■ BIPRU 12.8.20 G set out the *appropriate regulator's* likely approach in considering an application for an *intra-group liquidity modification* in which a *firm* seeks to rely on support from a *parent undertaking* which is constituted under the law of a country or territory outside the *United Kingdom*.

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12.8.9 G The *appropriate regulator* may also consider an application for an *intra-group liquidity modification* where a *firm* wishes to rely on liquidity resources from an entity in its *group* other than an *overseas parent undertaking*. The *appropriate regulator* recognises that a *firm* incorporated in the *United Kingdom* and to which ■ BIPRU 12 applies may wish to rely on liquidity support from another such *firm*. In practice, the *appropriate regulator* anticipates that a *firm* applying for an *intra-group liquidity modification* in these circumstances will be asking for permission to rely on support from its *parent undertaking* in the *United Kingdom*. In any event, the *appropriate regulator* will consider such applications on a case-by-case basis and will apply the approach outlined in ■ BIPRU 12.8.14 G to ■ BIPRU 12.8.20 G where relevant and by analogy.

12.8.10 G The *appropriate regulator* also recognises that a *firm* incorporated in the *United Kingdom* and to which ■ BIPRU 12 applies may wish to rely on liquidity support from a *subsidiary undertaking* of that *firm* which is incorporated in a country or territory outside the *United Kingdom*. The *appropriate regulator*

is, however, likely to consider that an application for an *intra-group liquidity modification* that contemplates reliance for liquidity support on only, or mostly, an applicant *firm's* overseas *subsidiary undertakings* is unlikely to satisfy the tests in section 138A of the *Act*. As a general principle, and unless persuaded otherwise by an applicant *firm's* arguments in support of its application for an *intra-group liquidity modification*, the *appropriate regulator* is likely to take the view that a *firm's* overseas *subsidiary undertakings* are likely to be constrained in their ability to provide meaningful levels of liquidity support to their *parent undertaking*.

12.8.11 G In each application for an *intra-group liquidity modification*, the *appropriate regulator* will consider the extent to which it is appropriate to modify the *overall liquidity adequacy rule* to allow reliance by an applicant *firm* on liquidity resources elsewhere in a *firm's group*. However, it is unlikely that the *appropriate regulator* would consider the conditions in section 138A of the *Act* to be met in circumstances in which the *overall liquidity adequacy rule* was modified to allow unlimited reliance on liquidity resources that are not the applicant *firm's* own. As a general principle, the *appropriate regulator* is likely to wish to ensure that, having regard to the results of an applicant *firm's ILAA*:

(1) once modified, the *overall liquidity adequacy rule* still requires the *firm* to have adequate liquidity resources to enable it to wind down its business in an orderly and controlled manner in circumstances in which its business ceases to be viable; and

(2) the amount of liquidity support permitted in the modification is a reasonable one having regard to the total liquidity resources of the *group* entity on which it is proposed that reliance should be placed.

12.8.12 G In determining the appropriate duration of an *intra-group liquidity modification*, the *appropriate regulator* will have regard to the role and importance of the *firm* in question in the *UK financial system*. In some cases, the *appropriate regulator* may take the view that an *intra-group liquidity modification* covering a *firm* whose role and importance in the *UK financial system* are significant ought to be reviewed more regularly than one granted in respect of a less systemically significant *firm*. The *appropriate regulator* will consider this issue in determining the appropriate duration of such a modification.

12.8.13 G In modifying the *overall liquidity adequacy rule* by means of an *intra-group liquidity modification*, the *appropriate regulator* may also modify the stress testing and *contingency funding plan rules* in ■ BIPRU 12.4 such that an applicant *firm* may achieve compliance with those *rules* by its *parent undertaking* conducting *group*-wide stress testing and preparing a *group*-wide *contingency funding plan* which gives adequate recognition to the position of the applicant *firm*.

Consideration of an application for an intra-group liquidity modification

12.8.14 G ■ BIPRU 12.8.15 G to ■ BIPRU 12.8.20 G set out some of the matters on which the *appropriate regulator* will expect to be satisfied before granting an *intra-group liquidity modification* where permission is sought to rely on support

from an *overseas parent undertaking* which is itself subject to a regime of liquidity regulation.

12.8.15 G In relation to the regime of liquidity regulation imposed by the authority that regulates for liquidity purposes an applicant *firm's parent undertaking* which is constituted under the law of a country or territory outside the *United Kingdom*, the *appropriate regulator* will ordinarily expect to be satisfied that:

(1) the regime of liquidity regulation to which that *undertaking* is subject delivers outcomes as regards the regulation of that *undertaking's liquidity risk* that are broadly equivalent to those intended by ■ BIPRU 12; and

(2) there is clarity as to any legal constraints imposed by the authority which regulates that *undertaking* for liquidity purposes on the provision of liquidity from that *undertaking* to the applicant *firm*.

12.8.16 G It will not always be the case that an applicant *firm* wishes to rely on a *parent undertaking*, or other *group* entity, that is itself subject to a regime of liquidity regulation, whether or not equivalent to the *appropriate regulator's*. In assessing a *firm's* application for an *intra-group liquidity modification*, the *appropriate regulator* will always have regard to the regulatory framework to which the entity on which it is proposed to rely for liquidity support is subject. Other things being equal, however, the *appropriate regulator* is more likely to be persuaded that the tests in section 138A of the *Act* are met in circumstances in which the entity on which it is proposed to rely for liquidity support is itself subject to an appropriate degree of regulation. Even where the *parent undertaking*, or other *group* entity, in question is subject to a regime of liquidity regulation, the *appropriate regulator* will in principle be more likely to grant an *intra-group liquidity modification* in circumstances in which the applicant *firm* does not accept a significant amount of retail *deposits*.

12.8.17 G In relation to an applicant *firm* wishing to rely on liquidity support from a *parent undertaking* constituted under the law of a country or territory outside the *United Kingdom*, the *appropriate regulator* will ordinarily expect to reach agreement with the authority that regulates that *undertaking* for liquidity purposes in a number of areas, including agreement that:

(1) it will notify the *appropriate regulator* of any material or persistent breaches by that *undertaking* of that authority's liquidity rules, or of risks that such breaches are imminent;

(2) it is satisfied with the adequacy of the *parent undertaking's* arrangements for *liquidity risk* management;

(3) it is satisfied as to the adequacy of the *parent undertaking's* liquidity resources including:

(a) the size and quality of its liquid assets buffer; and

(b) the size and quality of any liquidity resources that are held in the *United Kingdom* for the purpose of meeting the liabilities of an applicant *firm* as they fall due;

(4) it does not object to any undertakings given by that *parent undertaking* in respect of an applicant *firm* to ensure that the *firm* has adequate liquidity resources; and

(5) it will have due regard to the views of the *appropriate regulator* in its supervision of the liquidity position of that *parent undertaking*.

12.8.18 G In relation to an applicant *firm* wishing to rely on liquidity support from a *parent undertaking* constituted under the law of a country or territory outside the *United Kingdom*, the *appropriate regulator* will, before granting an *intra-group liquidity modification*, ordinarily expect to have reached agreement with that *parent undertaking* that:

(1) it will make available liquidity resources at all times to that applicant *firm* if needed;

(2) it will enter into an undertaking in a suitable form with an applicant *firm* committing it to provide liquidity support to that *firm* on the occurrence of certain defined events;

(3) it will ensure that the applicant *firm* maintains liquidity resources of appropriate size and quality in the *United Kingdom* for the purposes of meeting the liquidity needs of that *firm*;

(4) it will maintain arrangements, including having adequate liquidity resources, to ensure that it, the applicant *firm* and any other entities in its *group* to which it provides liquidity support are able to wind down their businesses in an orderly and controlled manner in circumstances where its, or their, businesses cease to be viable;

(5) it will make available to the *appropriate regulator* information in an appropriate format on *group* liquidity; and

(6) it will participate in the *appropriate regulator's* thematic supervisory work in relation to liquidity when requested to do so by the *appropriate regulator*.

12.8.19 G The *appropriate regulator* will wish to ensure that it has adequate data at the time of consideration of the *intra-group liquidity modification* application and, if the application is granted, on a continuing basis thereafter, about the liquidity position of any *group* entity on which the applicant *firm* proposes to rely for liquidity purposes. It is therefore likely that an applicant *firm* will be asked to provide as part of its application relevant liquidity *data items* populated by the entities on which the applicant *firm* proposes to rely. It is also likely that an applicant *firm* will be asked to ensure as a condition of the modification, if granted, that the entities on which it is given permission to rely for the purpose of meeting the *overall liquidity adequacy rule* provide completed relevant *data items* to the *appropriate regulator* on a continuing basis. The frequency of *data item* submission will be determined as part of the *appropriate regulator's* consideration of the applicant *firm's* case but is in any event likely to be reflective of the *appropriate regulator's* assessment of the *liquidity risk* profile of the entities on which liquidity support is permitted.

12.8.20 G In addition, the *appropriate regulator* will also wish to understand in relation to any *group* entity on which an applicant *firm* proposes to rely for liquidity support the legal structure of the *group* and the extent to which that structure, or any relevant legal principles, may restrict the provision of timely liquidity support in appropriate amounts to the applicant *firm* when required.

Ongoing requirements

12.8.21 G The *appropriate regulator* also anticipates that an *intra-group liquidity modification* would be made subject to a number of ongoing conditions and requirements. These are likely to include:

(1) the *appropriate regulator* receiving annual confirmation from the authority that regulates an applicant *firm's parent undertaking* for liquidity purposes that it remains satisfied with the arrangements in respect of that *undertaking* for liquidity supervision and their operation; and

(2) an annual meeting with the same authority to discuss liquidity supervision of that *undertaking*.

12.8.23 G [deleted]

12.8.24 G [deleted]

12.8.25 G [deleted]

12.8.26 G [deleted]

12.8.27 G [deleted]

12.8.28 G [deleted]

12.8.29 G [deleted]

12.8.30 G [deleted]

12.9 Individual liquidity guidance and regulatory intervention points

Appropriate regulator assessment process

12.9.1 G The *appropriate regulator* will give *individual liquidity guidance* to a *standard ILAS BIPRU firm*. Ordinarily, the *appropriate regulator* will give *individual liquidity guidance* after a review of a *standard ILAS BIPRU firm's ILAA*. The *appropriate regulator* will, however, issue *individual liquidity guidance* to such a *firm* whenever it is considered appropriate.

12.9.2 G In assessing the adequacy of an *ILAS BIPRU firm's* liquidity resources, the *appropriate regulator* draws on more than just a review of the submitted *ILAA*, or in the case of a *simplified ILAS BIPRU firm*, the submitted *ILSA*. Use is made of wider supervisory knowledge of a *firm* and of wider market developments and practices. When forming a view of the *individual liquidity guidance* to be given to an *ILAS BIPRU firm*, the *appropriate regulator* will also consider the regulator's firm risk assessment and any other issues arising from day-to-day supervision.

12.9.3 G The *appropriate regulator* will take a risk-based and proportionate approach to the review of a *firm's ILAA* or *ILSA*, focusing where appropriate on that *firm's* approach to dealing with the risks it faces.

12.9.4 G As part of the *SLRP*, the *appropriate regulator* will give a *standard ILAS BIPRU firm individual liquidity guidance* advising it of the amount and quality of liquidity resources which the *appropriate regulator* considers are appropriate, having regard to the *liquidity risk* profile of that *firm*. In giving *individual liquidity guidance*, the *appropriate regulator* will also advise the *firm* of what it considers to be a prudent funding profile for the *firm*. In giving the *firm individual liquidity guidance* as to its funding profile, the *appropriate regulator* will consider the extent to which the *firm's* liabilities are adequately matched by assets of appropriate maturities. In both cases, the *appropriate regulator* will have regard to the adequacy of a *firm's* systems and controls in relation to *liquidity risk* when judged against the standard described in the *rules* and *guidance* in ■ BIPRU 12.3 and ■ BIPRU 12.4. *Individual liquidity guidance* will therefore have two components:

(1) *guidance* about the *firm's* liquid assets buffer; and

(2) *guidance* about the *firm's* funding profile.

12.9.5 G The *appropriate regulator* will ordinarily not expect to give *individual liquidity guidance* to a *simplified ILAS BIPRU firm*. However, if after review of such a *firm's ILSA*, the *appropriate regulator* is not satisfied that the *simplified buffer requirement* delivers an adequate amount and quality of liquidity resources for that *firm*, having regard to its *liquidity risk* profile, the *appropriate regulator* will issue the *firm* with *individual liquidity guidance* and may also consider revoking the *firm's simplified ILAS waiver*.

12.9.6 G In giving *individual liquidity guidance*, the *appropriate regulator* seeks a balance between delivering consistent outcomes across the *individual liquidity guidance* that it gives to every *ILAS BIPRU firm* and recognising that such *guidance* should reflect the individual features of a *firm*. Comparison with the assumptions used by other *firms* will be used to trigger further enquiry.

12.9.7 G Following an internal validation process, the *appropriate regulator* will write to the *standard ILAS BIPRU firm* whose *ILAA* it has reviewed, providing both quantitative and qualitative feedback on the results of the *appropriate regulator's* assessment. This letter will notify that *firm* of the *individual liquidity guidance* that the *appropriate regulator* considers appropriate together with its reasons for concluding that such *guidance* is appropriate. The *appropriate regulator* will adopt the same process where it chooses to give *individual liquidity guidance* to a *simplified ILAS BIPRU* following a review of that *firm's ILSA*.

12.9.8 G Where the amount and quality of liquidity resources which the *appropriate regulator* considers a *firm* needs having regard to its *liquidity risk* profile are not the same as the *firm's* own assessment of those resources under its *ILAA*, the *appropriate regulator* expects to discuss any such difference with the *firm*.

12.9.9 G Consistent with *Principle* 11 (Relations with regulators), the *appropriate regulator* will expect a *firm* to notify it if the *firm* does not propose to follow its *individual liquidity guidance*. The *appropriate regulator* will expect any such notification to be accompanied by a clear account of the *firm's* reasons for considering the *individual liquidity guidance* to be inappropriate. The *appropriate regulator* will expect to receive any such notification within one *month* from the date on which it gives *individual liquidity guidance* to the *firm*. If agreement through further analysis and discussion cannot be reached (including through use of the *appropriate regulator's* powers under section 166 (Reports by skilled persons) of the *Act*), then the *appropriate regulator* will consider using its powers under the *Act* (for example, its power under section 55J to vary, on its own initiative, a *firm's Part IV permission* or its *power of intervention* under section 196) so as to require a *firm* to hold such liquidity resources as the *appropriate regulator* considers are adequate having regard to the *liquidity risk* profile of the *firm*.

Additional guidance for branches

12.9.10 G [deleted]

Regulatory intervention points for ILAS BIPRU firms

12.9.11 G ■ BIPRU 12.2.9 G records the *appropriate regulator's* recognition that in periods of stress a *firm's* liquid assets buffer may be eroded. It may also be the case that in such periods a *firm's* funding profile deteriorates such that it no longer conforms to the prudent liquidity profile described in the *individual liquidity guidance* given to the *firm*. Deviation by a *firm* from the terms of the *individual liquidity guidance* given to it by the *appropriate regulator* or, as the case may be, from the *simplified buffer requirement*, does not automatically mean that the *appropriate regulator* will consider that the *firm* is in breach of, or likely to breach, *threshold conditions*.

12.9.12 G The *appropriate regulator* will examine any deviation on its own facts and will always want to understand clearly the reasons for that deviation and the *firm's* plans for remedying it. Deviation is, however, likely to prompt a re-examination by the *appropriate regulator* of the *firm's* compliance, and likely future compliance, with *threshold conditions*. The *appropriate regulator* will have regard to the information provided by the *firm* and to any other relevant factors in assessing the *firm's* continuing ability to satisfy *threshold conditions*. ■ BIPRU 12.9.13 R to ■ BIPRU 12.9.18 R set out a number of requirements which apply to an *ILAS BIPRU firm* that deviates from its *individual liquidity guidance*, or as the case may be, from the *simplified buffer requirement*.

12.9.12A G The *appropriate regulator* expects that a *firm* will respond dynamically to any deterioration in its liquidity position and will take contingent action as set out in its *contingency funding plan* well in advance of a potential event.

12.9.13 R As soon as a *firm* becomes aware of the occurrence or expected occurrence of the events identified in ■ BIPRU 12.9.14 R, it must immediately provide to the *appropriate regulator*:

(1) notification in writing of the event;

(2) an adequately reasoned explanation for the event; and

(3) an indication of the management actions the *firm* has taken to date to address the event, including actions from its *contingency funding plan*.

12.9.14 R For the purpose of ■ BIPRU 12.9.13 R, the events in question are:

(1) in the case of a *simplified ILAS BIPRU firm* only, breach of the *simplified buffer requirement* unless this has been superseded by *individual liquidity guidance* that it has accepted;

(2) in the case of a *standard ILAS BIPRU firm* or a *simplified ILAS BIPRU firm*, being a *firm* which in either case has accepted *individual liquidity guidance* given to it by the *appropriate regulator*:

(a) its liquid assets buffer falling below the level advised in the *guidance*; or

(b) its funding profile ceasing to conform to that advised in the *guidance*.

12.9.15 G As part of the *appropriate regulator's* enquiry into the reasons for a *firm's* deviation, or expected deviation, from its *individual liquidity guidance* or, as the case may be, its *simplified buffer requirement*, the *appropriate regulator* may ask for further assessments and analyses of a *firm's* liquidity resources and the risks faced by the *firm*. The *appropriate regulator* may consider the use of its powers under section 166 of the *Act* to assist in such circumstances.

12.9.16 G Consistent with *Principle* 11 of the *appropriate regulator's Principles* for Businesses (Relations with regulators), if a *firm* has not accepted *individual liquidity guidance* given by the *appropriate regulator* it should, nevertheless, notify the *appropriate regulator* as soon as it becomes aware of either of the events identified in ■ BIPRU 12.9.14R (2)(a) or ■ (b).

12.9.17 R No later than two *days* after the *day* on which a *firm* notifies the *appropriate regulator* under ■ BIPRU 12.9.13R (1), the *firm* must submit a liquidity remediation plan to the *appropriate regulator*.

12.9.18 R For the purposes of ■ BIPRU 12.9.17 R, a *firm's* liquidity remediation plan must:

(1) be communicated in writing;

(2) detail the *firm's* forward estimates of the evolution of the size of the *firm's* liquid assets buffer and of its funding profile;

(3) in relation to any of the events identified in ■ BIPRU 12.9.14 R that has occurred, or is expected to occur, detail the actions that the *firm* intends to take to remedy the event, or avoid the expected event, as the case may be, including information about:

(a) the amount of funding that it is intended to raise;

(b) the intended funding providers; and

(c) the maturity profile of the intended funding;

(4) identify clear timescales for achieving each of the actions that it details in accordance with ■ BIPRU 12.9.18R (3); and

(5) include an adequately reasoned assessment of the likelihood of the timely achievement of the actions that it details in accordance with ■ BIPRU 12.9.18R (3).

12.9.19 G The *appropriate regulator* will assess the adequacy of the liquidity remediation plan submitted by a *firm*, including the likelihood of its success. A *firm* should expect that the *appropriate regulator* will want to discuss the terms of the liquidity remediation plan submitted to it under ■ BIPRU 12.9.18 R. In its re-examination of the *firm's* compliance, and likely future compliance, with *threshold conditions* taken as a whole, the *appropriate regulator* will have regard to the adequacy of the *firm's* liquidity remediation plan.

12.9.20 G Other things being equal, the *appropriate regulator* will expect a *firm* which is not experiencing a period of stress to restore its liquidity resources more rapidly than one which is under stress at the time that it deviates from its

individual liquidity guidance or, as the case may be, from its *simplified buffer requirement*.

12.9.21 G If agreement through discussion with the *appropriate regulator* cannot be reached as to the necessary actions and timescales to remedy deviation from that *guidance*, the *appropriate regulator* will consider using its powers under the *Act* (for example, its power under section 55J to vary, on its own initiative, a *firm's Part 4A permission* or its *power of intervention* under section 196) so as to require the *firm* to take such actions as the *appropriate regulator* considers are necessary to return the *firm* to conformity with the terms of its *individual liquidity guidance* or, as the case may be, with its *simplified buffer requirement*.

12.9.22 G Although ■ BIPRU 12.9.17 R to ■ BIPRU 12.9.21 G set out the *appropriate regulator's* likely approach, the *appropriate regulator* will take whatever action it considers appropriate in the particular circumstances of a given case.

12.9.23 G A *firm* that deviates from current *individual liquidity guidance* that it has accepted or, as the case may be, from its *simplified buffer requirement*, will be experiencing a *firm-specific liquidity stress* for the purpose of the reporting *rules* in ■ SUP 16 (Reporting requirements). Those *rules* require the *firm* to report specified *data items* more frequently than would otherwise be the case. Additionally, a *firm* that is implementing a liquidity remediation plan should expect that the *appropriate regulator* will wish to monitor its implementation of that plan. The *firm's* progress in achieving the remedial actions identified in its plan is a matter to which the *appropriate regulator* will have regard in considering the *firm's* compliance, and likely future compliance, with *threshold conditions*.

Monitoring requirement

12.9.24 R An *ILAS BIPRU firm* must monitor on each *business day* whether it is in conformity with *individual liquidity guidance* that it has accepted or, as the case may be, with the *simplified buffer requirement*.

Mode of notification

12.9.25 R Notification to the *appropriate regulator* under ■ BIPRU 12.9.13R (1) and submission to the *appropriate regulator* under ■ BIPRU 12.9.17 R must be made to the following *appropriate regulator* email address: data_collection@fca.org.uk .

12.9.26 G Although ■ BIPRU 12.9.25 R requires notification and submission in the way prescribed in that *rule*, the *appropriate regulator* expects that a *firm* would also bring to the attention of its usual supervisory contact at the *appropriate regulator* the fact that it had made such a notification or submission.

12.9.27 G For the purpose of the notification expected under ■ BIPRU 12.9.26 G, the *appropriate regulator* would expect any such notification to be made in the way envisaged in ■ BIPRU 12.9.25 R.

Mapping of credit assessments of ECAIs to credit quality steps

Credit Quality Step	Fitch's assessment	Moody's assessments	S&P's assessments	DBRS' assessments
1	AAA to AA-	Aaa to Aa3	AAA to AA-	AAA to AAL
2	A+ to A-	A1 to A3	A+ to A-	AH to AL
3	BBB+ to BBB-	Baa1 to Baa3	BBB+ to BBB-	BBBH to BBBL
4	BB+ to BB-	Ba1 to Ba3	BB+ to BB-	BBH to BBL
5	B+ to B-	B1 to B3	B+ to B-	BH to BL
6	CCC+ and below	Caa1 and below	CCC+ and below	CCCH and below

Chapter 13

The calculation of counterparty risk exposure values for financial derivatives, securities financing transactions and long settlement transactions

13.1 Application and Purpose

Application

13.1.1 R ■ BIPRU 13 applies to a *BIPRU firm*.

13.1.2 R

(1) ■ BIPRU 13 applies to items in the *non-trading book*.

(2) ■ BIPRU 13 applies to *trading book* items for the purposes of ■ BIPRU 14.

13.1.3 G The requirement to calculate the *counterparty credit risk* capital charge for *trading book* items is set out in ■ BIPRU 14.

Purpose

13.1.4 G Pursuant to the third paragraph of article 95(2) of the *UK CRR*, ■ BIPRU 13 applies requirements that correspond to:

(1) Article 78(2) and (4);

(2) point 3 of Part 1, and Parts 2, 3, 5, 6 and 7 of Annex III; and

(3) Annex IV;

of the *Banking Consolidation Directive*.

13.1.5 G ■ BIPRU 13.3 sets out the calculations of *exposure* values for *financial derivative instrument*, *long settlement transactions* and certain other transactions under the *standardised approach* and, subject to ■ BIPRU 4, under the *IRB approach*. ■ BIPRU 13.4, ■ 13.5 and ■ 13.6 set out the provisions relating to the *CCR mark to market method*, the *CCR standardised method* and the *CCR internal model method* in turn.

13.1.6 G ■ BIPRU 13.8 sets out a summary of the treatment of *securities financing transactions*.

13.2 Unusual Transactions

13.2.1 R If the calculation of the amount of an *exposure* or of a combination of *exposures* under ■ BIPRU 13 would materially understate the amount of the *counterparty credit risk* the *firm* must increase the amount of the *credit risk capital requirement* by an amount sufficient to compensate for that understatement.

13.2.2 R If a *firm* in relation to an *exposure* covered by ■ BIPRU 13:

(1) has an *exposure* of a non-standard type; or

(2) an *exposure* that is part of a non-standard arrangement; or

(3) has an *exposure* that, taken together with other *exposures* (whether or not they are subject to ■ BIPRU 13), gives rise to a non-standard *counterparty credit risk*; or

(4) is subject to the *rule* in ■ BIPRU 13.2.1 R;

it must notify the *appropriate regulator* as soon as practicable of that fact, the counterparty involved, the nature of the *exposure* or arrangement and the treatment of those *exposures* it has adopted for the purpose of the calculation of the *credit risk capital requirement*.

13.2.3 R ■ BIPRU 13.2.2 R does not apply to *exposures* which are within the scope of a *firm's CCR internal model method permission*.

13.2.4 R A *firm* must judge the question of what is non-standard for the purposes of ■ BIPRU 13.2.2 R by reference to the standards:

(1) prevailing at the time the *rule* is being applied; and

(2) of *firms* generally who carry on business which might give rise to *exposures* covered by ■ BIPRU 13 rather than merely by reference to the *firm's* own business.

13.2.5 G The methodologies which have been developed assume instruments with standard characteristics. There are many examples, however, of instruments which, although based on a standard contract, contain structural features which make the *rules*, as stated, inappropriate. In such circumstances a *firm* should consult the *appropriate regulator*.

13.3 Calculation of exposure values for financial derivatives and long settlement transactions: General provisions

Financial derivative instruments

13.3.1 R A *firm* must determine the *exposure* value of a *financial derivative instrument* in accordance with ■ BIPRU 13, with the effects of contracts of novation and other netting agreements taken into account for the purposes of those methods in accordance with ■ BIPRU 13.

[**Note**: *BCD* Article 78(2) first sentence]

13.3.2 R Subject to ■ BIPRU 13.3, a *firm* must determine the *exposure* value for *financial derivative instruments* with the *CCR mark to market method*, the *CCR standardised method* or the *CCR internal model method*.

[**Note**: *BCD* Annex III, Part 2 point 1]

Definition of financial derivative instrument

13.3.3 R Each of the following is a *financial derivative instrument*:

(1) an interest-rate contract, being:

(a) a single-currency interest rate swap;

(b) a basis-swap;

(c) a forward rate agreement;

(d) an interest-rate future;

(e) a purchased interest-rate *option*; and

(f) other contracts of similar nature.

(2) a *foreign currency* contract or contract concerning gold, being:

(a) a cross-currency interest-rate swap;

(b) a forward *foreign currency* contract;

(c) a currency future;

(d) a currency *option* purchased;

(e) other contracts of a similar nature; and

(f) a contract concerning gold of a nature similar to (2)(a) to (e).

(3) a contract of a nature similar to those in 1(a) to (e) and 2(a) to (d) concerning other reference items or indices, including as a minimum all instruments specified in paragraphs 4 to 7, 9 and 10 of Part 1 of Schedule 2 to the *Regulated Activities Order* not otherwise included in (1) or (2).

[**Note**: *BCD* Annex IV]

Long settlement transactions

13.3.4 R *Long settlement transaction* means a transaction where a counterparty undertakes to deliver a *security*, a *commodity*, or a *foreign currency* amount against cash, other *financial instruments*, or *commodities*, or vice versa, at a settlement or delivery date that is contractually specified as more than the lower of the market standard for this particular transaction and five business days after the date on which the *firm* enters into the transaction.

[**Note**: *BCD* Annex III Part 1 point 3]

13.3.5 R A *firm* must calculate the *exposure* value of a *long settlement transaction* in accordance with either:

(1) ■ BIPRU 13; or

(2) the *master netting agreement internal models approach*, if it has a *master netting agreement internal models approach waiver* which permits it to apply that approach.

[**Note**: *BCD* Article 78(2) second sentence, in respect of *long settlement transaction*]

13.3.6 R A *firm* may determine *exposures* arising from *long settlement transactions* using any of the *CCR mark to market method*, the *CCR standardised method* and the *CCR internal model method*, regardless of the methods chosen for treating *financial derivatives instruments* and *repurchase transactions*, *securities or commodities lending or borrowing transactions*, and *margin lending transactions*. In calculating capital requirements for *long settlement transactions*, a *firm* that uses the *IRB approach* may apply the *risk weights* under the *standardised approach* on a permanent basis and irrespective of the materiality of such positions.

[**Note**: *BCD* Annex III Part 2 point 7]

13.3.7 G A *firm* is not required to calculate the *exposure* value of a transaction as a *long settlement transaction* for the purposes of BIPRU 13 if the transaction is a *financial derivative instrument* or a *securities financing transaction* and the *firm* chooses to calculate the capital requirement for the transaction according to the methods applicable to those *exposures*.

General netting

13.3.8 R Under the *CCR mark to market method*, the *CCR standardised method* and the *CCR internal model method*, a *firm* must determine the *exposure* value for a given counterparty as equal to the sum of the *exposure* values calculated for each *netting set* with that counterparty.

[**Note**: *BCD* Annex III Part 2 point 5]

13.3.9 R A *firm* may only recognise netting for the purposes of ■ BIPRU 13.4, ■ BIPRU 13.5 and ■ BIPRU 13.6 if the requirements in ■ BIPRU 13.7 are met.

Combined use

13.3.10 R The combined use of the *CCR mark to market method*, the *CCR standardised method* and the *CCR internal model method* is not permitted. The combined use of the *CCR mark to market method* and the *CCR standardised method* is permitted where one of the methods is used for the cases set out in ■ BIPRU 13.5.9 R to ■ BIPRU 13.5.10 R.

[**Note**: *BCD* Annex III Part 2 point 1(part)]

13.3.11 G The combined use of different approaches may be used across a group as described in ■ BIPRU 8.7.8 G and ■ BIPRU 8.7.9 G.

Exposure to a central counterparty

13.3.12 R Notwithstanding ■ BIPRU 13.3.1 R and ■ BIPRU 13.3.5 R, a *firm* may determine the *exposure* value of a credit risk *exposure* outstanding with a *central counterparty* in accordance with ■ BIPRU 13.3.13 R, provided that the *central counterparty's counterparty credit risk exposure* with all participants in its arrangements are fully collateralised on a daily basis.

[**Note**: *BCD* Article 78(4) in respect of *financial derivatives* and *long settlement transactions*]

13.3.13 R A *firm* may attribute an *exposure* value of zero for *CCR* to derivative contracts and *long settlement transactions*, or to other *exposures* arising in respect of those contracts or transactions (but excluding an *exposure* arising from collateral held to mitigate losses in the event of the default of other participants in the *central counterparty's* arrangements) where they are outstanding with a *central counterparty* and have not been rejected by the *central counterparty*.

[**Note**: *BCD* Annex III Part 2 point 6 in respect of *financial derivatives* and *long settlement transactions*]

Exceptions

13.3.14 R When a *firm* purchases credit derivative protection against a *non-trading book* ,*exposure* or against a *CCR exposure*, it must compute its capital requirement for the hedged asset in accordance with:

(1) ■ BIPRU 5.7.16 R to ■ BIPRU 5.7.25 R and ■ BIPRU 4.10.49 R (4) to ■ (6) (Unfunded credit protection: Valuation and calculation of risk-weighted exposure amounts and expected loss amounts); or

(2) where a *firm* calculates *risk weighted exposure amounts* in accordance with the *IRB approach*:

(a) ■ BIPRU 4.4.79 R (Double default); or

(b) ■ BIPRU 4.10.40 R to ■ BIPRU 4.10.48 R. (Unfunded credit protection: Minimum requirements for assessing the effect of guarantees and credit derivatives).

(3) [deleted]

[**Note**: *BCD* Annex III Part 2 point 3 (part)]

13.3.15 R

(1) In the cases in ■ BIPRU 13.3.14R, and where the option in the second sentence of ■ BIPRU 14.2.10 R is not applied, the *exposure* value for *CCR* for these *credit derivatives* is set to zero.

(2) However, a *firm* may choose consistently to include for the purposes of calculating capital requirements for *counterparty credit risk* all credit derivatives not included in the *trading book* and purchased as protection against a non-trading *exposure* or against a *CCR exposure* where the credit protection is recognised under the *BCD*.

[**Note:** *BCD* Annex III Part 2 point 3 (part)]

13.3.16 R

A *firm* must set the *exposure* value for *CCR* from sold credit default swaps in the *non-trading book*, where they are treated as credit protection provided by the *firm* and subject to a capital requirement for credit risk for the full notional amount, to zero.

[**Note**: *BCD* Annex III Part 2 point 4]

13.4 CCR mark to market method

General

13.4.1 R The *rules* in ■ BIPRU 13.4 set out the *CCR mark to market method*.

13.4.2 R A *firm* must obtain the current replacement cost of all contracts with positive values by attaching current market values to contracts (marking to market).

[**Note**: *BCD* Annex III Part 3, Step (a)]

13.4.3 R A *firm* must obtain a figure for potential future credit *exposure* by multiplying the notional principal amounts or underlying values by the percentages in the table in ■ BIPRU 13.4.5 R.

[**Note**: *BCD* Annex III Part 3, Step (b) (part)]

13.4.4 R ■ BIPRU 13.4.3 R does not apply in the case of single-currency "floating/floating" interest rate swaps.

[**Note**: *BCD* Annex III Part 3, Step (b) (part)]

Table: multiples to be applied to notional principal amounts or underlying values

13.4.5 R This table belongs to ■ BIPRU 13.4.5 R

Residual maturity	Interest-rate contracts	Contracts concerning *foreign currency* rates and gold	Contracts concerning equities	Contracts concerning precious metals except gold	Contracts concerning *commodities* other than precious metals
One year or less	0%	1%	6%	7%	10%
Over one year, not exceeding five years	0,5%	5%	8%	7%	12%
Over five years	1.5%	7.5%	10%	8%	15%

[**Note**: *BCD* Annex III Part 3, Table 1]

13.4.6 R A *firm* must treat a contract which does not fall within one of the five categories indicated in the table in ■ BIPRU 13.4.5 R as a contract concerning *commodities* other than precious metals.

[**Note**: *BCD* Annex III Part 3, Table 1 footnote 25]

13.4.7 R For contracts with multiple exchanges of principal, a *firm* must multiply the percentages in the table in ■ BIPRU 13.4.5 R by the number of remaining payments still to be made according to the contract.

[**Note**: *BCD* Annex III Part 3, Table 1 footnote 26]

13.4.8 R For contracts that are structured to settle outstanding *exposure* following specified payment dates and where the terms are reset such that the market value of the contract is zero on these specified dates, a *firm* must treat the residual maturity as equal to the time until the next reset date.

[**Note**: *BCD* Annex III Part 3, Table 1 footnote 27 (part)]

13.4.9 R In the case of interest-rate contracts that meet the criteria in ■ BIPRU 13.4.8 R and have a remaining maturity of over one year, a *firm* must apply a percentage no lower than 0.5%.

[**Note**: *BCD* Annex III Part 3, Table 1 footnote 27 (part)]

13.4.10 R For the purpose of calculating the potential future credit *exposure* in accordance with ■ BIPRU 13.4.3 R a *firm* may apply the percentages in the table in ■ BIPRU 13.4.11 R instead of those prescribed in the table in ■ BIPRU 13.4.5 R provided that it makes use of the *commodity extended maturity ladder approach* for contracts relating to commodities other than gold.

Table: alternative multiples to be applied to notional principal amounts or underlying values

13.4.11 R This table belongs to ■ BIPRU 13.4.10 R

Residual maturity	Precious metals (except gold)	Base metals	Agricultural products (softs)	Other, including energy products
One year or less	2%	2,5%	3%	4%
Over one year, not exceeding five years	5%	4%	5%	6%
Over five years	7.5%	8%	9%	10%

[**Note**: *BCD* Annex III Part 3, Table 2]

13.4.12 R A *firm* must calculate the *exposure* value as the sum of:

(1) the current replacement cost calculated under ■ BIPRU 13.4.2 R; and

(2) the potential future credit *exposure* calculated under ■ BIPRU 13.4.3 R.

[**Note**: *BCD* Annex III Part 3, Step (c)]

13.4.13 G Contracts with a negative replacement cost should still be subject to an add-on if there is a possibility of the replacement costs becoming positive before maturity. Written options should therefore be exempt from add-ons.

13.4.14 G For the purposes of calculating the replacement cost, where an *exposure* relates to collateral posted to cover a negative mark to market position on a derivative contract, the negative mark to market *exposure* may be offset against the collateral *exposure* if the requirements in ■ BIPRU 5 are met.

Alternative approach

13.4.15 R A *firm* must ensure that the notional amount to be taken into account is an appropriate yardstick for the risk inherent in the contract. Where, for instance, the contract provides for a multiplication of cash flows, a *firm* must adjust the notional amount in order to take into account the effects of the multiplication on the risk structure of that contract.

[**Note**: *BCD* Annex III Part 2 point 8]

Netting: Contracts for novation

13.4.16 R The single net amounts fixed by contracts for novation, rather than the gross amounts involved, may be weighted. For the purposes of the *CCR mark to market method*, a *firm* may obtain:

(1) in ■ BIPRU 13.4.2 R, the current replacement cost; and

(2) in ■ BIPRU 13.4.3 R, the notional principal amounts or underlying values;

by taking account of the contract for novation.

[**Note**: *BCD* Annex III Part 7 point c(i)]

Netting: Other netting agreements

13.4.17 R In application of the *CCR mark to market method*:

(1) in ■ BIPRU 13.4.2 R a *firm* may obtain the current replacement cost for the contracts included in a netting agreement by taking account of the actual hypothetical net replacement cost which results from the agreement; in the case where netting leads to a net obligation for the *firm* calculating the net replacement cost, the current replacement cost is calculated as "0"; and

(2) in ■ BIPRU 13.4.3 R a *firm* may reduce the figure for potential future credit *exposure* for all contracts included in a netting agreement according to the following formula:

$PCE_{red} = 0.4 * PCE_{gross} + 0.6 * NGR * PCE_{gross}$,

where:

(a) PCE_{red} = the reduced figure for potential future credit *exposure* for all contracts with a given counterparty included in a legally valid bilateral netting agreement;

(b) PCE_{gross} =the sum of the figures for potential future credit *exposure* for all contracts with a given counterparty which are included in a legally valid bilateral netting agreement and are calculated by multiplying their notional principal amounts by the percentages set out in the table in ■ BIPRU 13.4.5 R; and

(c) NGR = "net-to-gross ratio": the quotient of the net replacement cost for all contracts included in a legally valid bilateral netting agreement with a given counterparty (numerator) and the gross replacement cost for all contracts included in a legally valid bilateral netting agreement with that counterparty (denominator).

[**Note**: *BCD* Annex III Part 7 point c(ii) (part)]

13.4.18 R For the calculation of the potential future credit exposure according to the formula in ■ BIPRU 13.4.17 R perfectly matching contracts included in the netting agreement may be taken into account as a single contract with a notional principal equivalent to the net receipts.

[**Note**: *BCD* Annex III Part 7 point c(ii) (part)]

13.4.19 R For the purposes of ■ BIPRU 13.4.18 R a perfectly matching contract is a forward *foreign currency* contract or similar contract in which a notional principal is equivalent to cash flows if the cash flows fall due on the same value date and fully or partly in the same currency.

[**Note**: *BCD* Annex III Part 7 point c(ii) (part)]

13.5 CCR standardised method

Scope

13.5.1 R A *firm* may use the *CCR standardised method* only for *financial derivative instruments* and *long settlement transactions*.

[**Note**: *BCD* Annex III Part 5 point 1 (part)]

Derivation of risk position: payment legs

13.5.2 R

(1) When a *financial derivative instrument* transaction with a linear risk profile stipulates the exchange of a *financial instrument* for a payment, the payment Part is referred to as the *payment leg*.

(2) Transactions that stipulate the exchange of payment against payment consist of two *payment legs*.

(3) The *payment legs* consist of the contractually agreed gross payments, including the notional amount of the transaction.

(4) A *firm* may disregard the interest rate risk from *payment legs* with a remaining maturity of less than one year for the purposes of the calculations in ■ BIPRU 13.5.

(5) A *firm* may treat transactions that consist of two *payment legs* that are denominated in the same currency, such as interest rate swaps, as a single aggregate transaction. The treatment for *payment legs* applies to the aggregate transaction.

[**Note**: *BCD* Annex III Part 5 point 2]

Derivation of risk position: mapping

13.5.3 R

(1) Transactions with a linear risk profile with equities (including equity indices), gold, other precious metals or other *commodities* as the underlying financial instruments must be mapped to a *risk position* in the respective equity (or equity index) or *commodity* (including gold and other precious metals) and an interest rate *risk position* for the *payment leg*.

(2) If the *payment leg* is denominated in a *foreign currency*, it must be additionally mapped to a *risk position* in the respective currency.

[**Note**: *BCD* Annex III Part 5 point 3]

13.5.4 R

(1) Transactions with a linear risk profile with a debt instrument as the underlying instrument must be mapped to an interest rate *risk position* for the debt instrument and another interest rate *risk position* for the *payment leg*.

(2) Transactions with a linear risk profile that stipulate the exchange of payment against payment, including foreign exchange forwards, must be mapped to an interest rate *risk position* for each of the *payment legs*.

(3) If the underlying debt instrument is denominated in a *foreign currency*, the debt instrument must be mapped to a *risk position* in that *foreign currency*.

(4) If a *payment leg* is denominated in *foreign currency*, the *payment leg* must be again mapped to a *risk position* in that *foreign currency*.

(5) The *exposure* value to be assigned to a foreign exchange basis swap transaction is zero.

[**Note**: *BCD* Annex III Part 5 point 4]

Derivation of risk position: calculating the size of the risk position

13.5.5 R

A *firm* must calculate the *risk position* of the transaction or instrument in column 1 of the table in ■ BIPRU 13.5.6 R in accordance with column 2 of that table.

13.5.6 R

This table belongs to ■ BIPRU 13.5.5 R.

Transaction or instrument	Calculation of size of *risk position*
Transaction with linear risk profile except for debt instruments.	The effective notional value (market price multiplied by quantity) of the underlying *financial instruments* (including *commodities*) converted to the *firm's* domestic currency.
Debt instruments and *payment legs*.	The effective notional value of the outstanding gross payments (including the notional amount) converted to the *firm's base currency*, multiplied by the modified duration of the debt instrument, or *payment leg*, respectively.
Credit default swap	The notional value of the reference debt instrument multiplied by the remaining maturity of the credit default swap.
Nth to default credit default swap	The effective notional value of the reference debt instrument, multiplied by the modified duration of the nth to default derivative with respect to a change in the credit spread of the reference debt instrument.
Subject to BIPRU 13.5.9 R to BIPRU 13.5.10 R, *financial derivative instru-*	Equal to the delta equivalent effective notional value of the *financial in-*

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Transaction or instrument	Calculation of size of *risk position*
ment with a non-linear risk profile, including *options* and swaptions except in the case of an underlying debt instrument.	*strument* that underlies the transaction.
Subject to BIPRU 13.5.9 R to BIPRU 13.5.10 R, *financial derivative instrument* with a non-linear risk profile, including *options* and swaptions, of which the underlying is a debt instrument or a *payment leg*.	Equal to the delta equivalent effective notional value of the *financial instrument* or *payment leg* multiplied by the modified duration of the debt instrument, or *payment leg*, respectively.

[**Note**: *BCD* Annex III Part 5 points 5 to 9 and 15 (part)]

Derivation of risk position: effective notional value

13.5.7 **R** A *firm* may use the following formulae to determine the size and sign of a *risk position*:

(1) for all instruments other than debt instruments:

effective notional value, or delta equivalent

notional value = $p_{ref}((V)/(p))$

where:

(a) P_{ref} = price of the underlying instrument, expressed in the reference currency;

(b) V = value of the financial instrument (in the case of an option this is the option price; in the case of a transaction with a linear risk profile this is the value of the underlying instrument itself);

(c) p = price of the underlying instrument, expressed in the same currency as V;

(2) for debt instruments and the *payment legs* of all transactions:

effective notional value multiplied by the modified duration, or delta equivalent in notional value multiplied by the modified duration

(V)/(r)

where:

(a) V = value of the financial instrument (in the case of an option this is the option price; in the case of a transaction with a linear risk profile this is the value of the underlying instrument itself or of the *payment leg*, respectively);

(b) r = interest rate level.

(3) If V is denominated in a currency other than the reference currency, the derivative must be converted into the reference currency by multiplication with the relevant exchange rate.

[**Note**: *BCD* Annex III Part 5 point 11]

Derivation of risk position: treatment of collateral

13.5.8 **R** For the determination of *risk positions*, a *firm* must treat collateral received from a counterparty like a claim on the counterparty under a derivative

contract (long position) that is due today, while collateral posted must be treated as an obligation to the counterparty (short position) that is due today.

[**Note**: *BCD* Annex III Part 5 point 10]

Derivation of risk position: non-linear risks

13.5.9 R A *firm* must apply the *CCR mark to market method* to transactions with a non-linear risk profile or for *payment legs* and transactions with debt instruments as underlying if:

(1) the *firm* does not have a CAD 1 model permission or a *VaR model permission*; or

(2) where the *firm* does have a CAD 1 model permission or a *VaR model permission* but cannot determine the delta or the modified duration, respectively, with its CAD 1 model permission or *VaR model permission*.

[**Note**: *BCD* Annex III Part 5 point 19 (part)]

13.5.10 R A *firm* must not recognise netting for the purpose of applying the *CCR mark to market method* to an *exposure* treated under ■ BIPRU 13.5.9 R (that is, the *exposure* value must be determined as if there were a *netting set* that comprises just the individual transaction).

[**Note**: *BCD* Annex III Part 5 point 19 (part)]

Hedging sets: assignment

13.5.11 R A *firm* must group the *risk positions* into *hedging sets* and, for each *hedging set*, compute the absolute value amount of the sum of the resulting *risk positions*. This sum is termed the net *risk position* and is represented by:

$((_i)(RPT_{ij}) - (_l)(RPC_{lj}))$

in the formulae set out in ■ BIPRU 13.5.24 R.

[**Note**: *BCD* Annex III Part 5 point 12]

Hedging sets: description

13.5.12 R For interest rate *risk positions* from money deposits received from the counterparty as collateral, from *payment leg* and from underlying debt instruments, to which according to the table in BIPRU 7.2.44R a capital charge of 1.60% or less applies, there are six *hedging sets* for each currency, as set out in the table in ■ BIPRU 13.5.13 R. *Hedging sets* are defined by a combination of the criteria maturity and referenced interest rates.

[**Note**: *BCD* Annex III Part 5 point 13]

Table: Hedging sets

13.5.13 R This table belongs to ■ BIPRU 13.5.12 R:

	Government referenced interest rates	Non-government referenced interest rates
Maturity	<= 1 year	<= 1 year
Maturity	>1 <= 5 years	>1 <= 5 years
Maturity	> 5 years	> 5 years

[**Note**: *BCD* Annex III Part 5 Table 4]

13.5.14 R For interest rate *risk positions* from underlying debt instruments or *payment legs* for which the interest rate is linked to a reference interest rate that represents a general market interest level, the remaining maturity is the length of the time interval up to the next re-adjustment of the interest rate. In all other cases, it is the remaining life of the underlying debt instrument, or in the case of a *payment leg* the remaining life of the transaction.

[**Note**: *BCD* Annex III Part 5 point 14]

13.5.15 R There is one *hedging set* for each issuer of a reference debt instrument that underlies a credit default swap.Nth to default basket credit default swaps must be treated as follows:

(1) the size of a *risk position* in a reference debt instrument in a basket underlying an nth to default credit default swap is the effective notional value of the reference debt instrument, multiplied by the modified duration of the nth to default derivative, with respect to a change in the credit spread of the reference debt instrument;

(2) there is one *hedging set* for each reference debt instrument in a basket underlying a given nth to default credit default swap; *risk positions* from different nth to default credit default swaps must not be included in the same *hedging set*; and

(3) the *CCR* multiplier applicable to each *hedging set* created for one of the reference debt instruments of an nth to default derivative is 0.3% for reference debt instruments that have a credit assessment from a recognised *ECAI* equivalent to *credit quality step* 1 to 3, and 0.6% for other debt instruments.

[**Note**: *BCD* Annex III Part 5 point 15]

13.5.16 R Underlying financial instruments other than debt instruments must be assigned by a *firm* to the same respective *hedging sets* only if they are identical or similar instruments. In all other cases a *firm* must assign them to separate *hedging sets*.

[**Note**: *BCD* Annex III Part 5 point 17 (part)]

13.5.17 R

(1) The similarity of instruments for the purposes of ■ BIPRU 13.5.16 R is established in accordance with (2) to (5).

(2) For equities, similar instruments are those of the same issuer. An equity index is treated as a separate issuer.

(3) For precious metals, similar instruments are those of the same metal. A precious metal index is treated as a separate precious metal.

(4) For electric power, similar instruments are those delivery rights and obligations that refer to the same peak or off-peak load time interval within any 24 hour interval.

(5) For *commodities*, similar instruments are those of the same *commodity*. A *commodity* index is treated as a separate *commodity*.

[**Note**: *BCD* Annex III Part 5 point 17 (part)]

Hedging sets: collateral

13.5.18 R

(1) For interest rate *risk positions* from money deposits that are posted with a counterparty as collateral when that counterparty does not have debt obligations of low *specific risk* outstanding and from underlying debt instruments, to which according to the table in ■ BIPRU 7.2.44 R a capital charge of more than 1.60% applies, there is one *hedging set* for each issuer.

(2) When a *payment leg* emulates such a debt instrument, there is also one *hedging set* for each issuer of the reference debt instrument.

(3) A *firm* may assign *risk positions* that arise from debt instruments of a certain issuer, or from reference debt instruments of the same issuer that are emulated by *payment legs*, or that underlie a credit default swap, to the same *hedging set*.

[**Note**: *BCD* Annex III Part 5 point 16]

13.5.19 R

A *firm* that makes use of collateral to mitigate its *CCR* must have internal procedures to verify that, prior to recognising the effect of collateral in its calculations, the collateral meets the legal certainty standards set out in ■ BIPRU 5 modified, where relevant, by ■ BIPRU 4.10.

[**Note**: *BCD* Annex III Part 5 point 21]

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Hedging sets: netting

13.5.20 R

A *firm* must have internal procedures to verify that, prior to including a transaction in a *hedging set*, the transaction is covered by a legally enforceable netting contract that meets the requirements set out in ■ BIPRU 13.7.

[**Note**: *BCD* Annex III Part 5 point 20]

Credit conversion factors : Table

13.5.21 R

A *firm* must apply the *CCR* multipliers for the different *hedging set* categories according to the Table in ■ BIPRU 13.5.22 R.

[**Note**: *BCD* Annex III Part 5 point 18]

13.5.22 R

This table belongs to ■ BIPRU 13.5.21 R.

Hedging set categories	*CCR* Multiplier (*CCRM*)	
(1)	Interest Rates	0.2%
(2)	Interest Rates for *risk positions* from a reference debt instrument that underlies a credit default swap and to which a capital charge of 1.60%, or less, applies under BIPRU 7.2.44 R.	0.3%
(3)	Interest Rates for *risk positions* from a debt instrument or reference debt instrument to which a capital charge of more than 1.60% applies under BIPRU 7.2.44 R.	0.6%
(4)	Exchange Rates	2.5%
(5)	Electric power	4.0%
(6)	Gold	5.0%
(7)	Equity	7.0%
(8)	Precious Metals (except gold)	8.5%
(9)	Other *commodities* (excluding precious metals and electricity power)	10.0%
(10)	Reference debt instruments of an nth to default derivative that have a credit assessment from a recognised *ECAI* equivalent to *credit quality step* 1 to 3	0.3%
(11)	Reference debt instruments of an nth to default derivative that do not have a credit assessment from a recognised *ECAI* equivalent to *credit quality step* 1 to 3	0.6%
(12)	Underlying instruments of *financial derivative instrument* that are not in any of the above categories.	10.0%

[**Note**: *BCD* Annex III Part 5 Table 5 and Part 5 point 15 (c)]

13.5.23 **R** A *firm* must assign underlying instruments of *financial derivatives instruments* (in line 10 of the Table in ■ BIPRU 13.5.22 R) to separate individual *hedging sets* for each category of underlying instrument.

Exposure value

13.5.24 R A *firm* must calculate the *exposure* value separately for each *netting set*.

[**Note**: *BCD* Annex III Part 5 point 1, second sentence]

13.5.25 R A *firm* must determine the *exposure* value net of collateral, as follows:

exposure value = *max(CMV-CMC;$(_j)((_i)(RPT_{ij})-(_l)(RPC_{lj}))*CCRM_j)$

where:

CMV = *current market value* of the portfolio of transactions within the *netting set* with a counterparty gross of collateral.

That is, where:

CMV = $(_i)(CMV_i)$

where:

CMVi = the *current market value* of transaction i;

CMC = the *current market value* of the collateral assigned to the *netting set*.

That is, where:CMC = $(_l)(CMC_l)$

where

CMCl = the *current market value* of collateral l;

i = index designating transaction;

l = index designating collateral;

j = index designating *hedging set* category. These *hedging sets* correspond to risk factors for which *risk positions* of opposite sign can be offset to yield a net *risk position* on which the *exposure* measure is then based;

RPTij = *risk position* from transaction i with respect to *hedging set* j;

RPClj = *risk position* from collateral l with respect to *hedging set* j;

CCRMj = *CCR* Multiplier set out in the Table in BIPRU 13.5.22R with respect to the *hedging set* j;

= 1.4.

[**Note**: *BCD* Annex III Part 5 point 1 (part)]

13.5.26 R Collateral received from a counterparty has a positive sign; collateral posted to a counterparty has a negative sign.

[**Note**: *BCD* Annex III Part 5 point 1 (part)]

13.5.27 R A *firm* may only recognise collateral for this method if it is collateral that is eligible under ■ BIPRU 5.4.8 R and ■ BIPRU 14.2.12 G to ■ BIPRU 14.2.13 R.

[**Note**: *BCD* Annex III Part 5 point 1 (part)]

13.5.28 G A worked example showing a US Dollar (USD)-based *firm*, single counterparty, single netting set, Risk-positions RPij by hedging sets j is set out in ■ BIPRU 13 Annex 1 G

13.6 CCR internal model method

Introduction

13.6.1 R ■ BIPRU 13.6 sets out the *rules* relating to the *CCR internal model method*.

13.6.2 R A *firm* may only use the *CCR internal model method* if it has a *CCR internal model method permission*.

13.6.3 G ■ BIPRU 1.3 sets out the process for applying for a *CCR internal model method permission*.

13.6.4 G A *firm's CCR internal model method permission* will modify ■ BIPRU 13.6.2 R and will require the *firm* to use only the *CCR internal model method*, except to the extent that ■ BIPRU 13 permits the *firm* to combine the use of the *CCR internal model method* with one or more other methods.

13.6.5 R

(1) A reference in the *Handbook* to a provision of the *CCR internal model method*, in relation to a *firm*:

(a) excludes any provision of the *CCR internal model method* set out in the *Handbook* which is not applied to that *firm* by its *CCR internal model method permission*;

(b) includes any additional provision contained in the *CCR internal model method permission*; and

(c) takes into account any other amendments made to the provisions in the *Handbook* relating to the *CCR internal model method* made by the *CCR internal model method permission*.

(2) To the extent that a *firm's CCR internal model method permission* does not allow it to use a particular approach in the *Handbook* relating to the *CCR internal model method*, the *Handbook* provision does not apply to the *firm*.

Scope

13.6.6 R A *firm* may determine the *exposure* value for:

(1) financial derivative instruments;

(2) repurchase transactions;

(3) *securities or commodities lending or borrowing transactions*;

(4) *margin lending transactions*; and

(5) *long settlement transactions*

using the *CCR internal model method*.

[**Note**: *BCD* Annex III Part 2 point 2]

13.6.7 R A *firm* may use the *CCR internal model method* to calculate the *exposure* value for:

(1) the transactions in ■ BIPRU 13.6.6 R (1); or

(2) the transactions in ■ BIPRU 13.6.6 R (2), ■ (3) and ■ (4); or

(3) the transactions in ■ BIPRU 13.6.6 R (1) to ■ (4).

[**Note**: *BCD* Annex III Part 6 point 1 (part)]

13.6.8 R In each of ■ BIPRU 13.6.7 R (1), ■ (2) and ■ (3), a *firm* may include *long settlement transactions* as well.

[**Note**: *BCD* Annex III Part 6 point 1 (part)]

Use of other models

13.6.9 G A *firm* using the *CCR internal model method* may use a type of model other than the type set out in ■ BIPRU 13.6. If the *appropriate regulator* agrees to this the details of the model and the necessary calculations will be set out in the *CCR internal model method permission*, which will modify ■ BIPRU 13.6 to the extent necessary. The *appropriate regulator* would not expect to agree to such a request unless the *firm* was able to satisfy the *appropriate regulator* that the method was at least as conservative as the method set out in BIPRU 13.6 and in particular that, for every *counterparty*, any method was more conservative than alpha multiplied by *effective EPE* calculated according to the equation in ■ BIPRU 13.6.27 R.

[**Note**: *BCD* Annex III Part 6 point 2 (second sentence) and point 11]

Partial use

13.6.10 R For all *financial derivative instruments* and for *long settlement transactions* which are outside the scope of a *firm's CCR internal model method permission*, a *firm* must use the *CCR mark to market method* or the *CCR standardised method*.

[**Note**: *BCD* Annex III Part 6 point 3 first sentence]

13.6.11 R Under ■ BIPRU 13.6.10 R, combined use of the *CCR mark to market method* and the *CCR standardised method* is only permitted where one of the methods is used for the cases set out in ■ BIPRU 13.5.9 R to ■ BIPRU 13.5.10 R.

[**Note**: *BCD* Annex III Part 6 point 3 second sentence]

13.6.12 R Notwithstanding ■ BIPRU 13.3.10 R (Combined use), a *firm* may choose not to apply the *CCR internal model method* to *exposures* that are immaterial in size and risk.

[**Note**: *BCD* Annex III Part 6 point 1 third sentence]

13.6.13 R If permitted by its *CCR internal model method permission*, and subject to its terms, a *firm* may carry out the implementation of the *CCR internal model method* sequentially across different transaction types; and during this period the *firm* may use the *CCR mark to market method* or the *CCR standardised method*.

[**Note**: *BCD* Annex III Part 6 point 2]

13.6.14 G After the initial period following the granting of its *CCR internal model method permission*, as referred to in ■ BIPRU 13.6.13 R, a *firm* should extend the use of the *CCR internal model method* to cover any new business within a product category covered by its *CCR internal model method permission*. Subject to ■ BIPRU 13.6.10 R to ■ BIPRU 13.6.13 R, the *firm* should do so within a reasonable period of time. If the *firm* decides to exclude any business on, for example, the basis of materiality, it should document its reasons clearly.

13.6.15 G In principle, the use of different measures of *exposure* within the *CCR internal model method* is possible within the same product category, including on a permanent basis. The *appropriate regulator* may allow a *firm*, through the *CCR internal model method permission*, to use a more conservative measure of *exposure* that is less risk sensitive (for instance a measure based on conservative haircuts) for certain parts of the business if justified on a cost-benefit basis. However, a *firm* would still need to meet the use test for these more conservative measures and would need to demonstrate that the aggregation of *CCR exposures* that come from different approaches and have different degrees of conservatism makes sense and is used for its *CCR* management purposes.

13.6.16 G The *appropriate regulator* may, through the *CCR internal model method permission*, require a *firm* to apply a multiplier to the measures of *exposures* coming out of a less risk-sensitive approach to calculating *exposures* as referred to in ■ BIPRU 13.6.15 G where the *appropriate regulator* considers this to be appropriate due to the complexity of the business or the nature of the risks involved.

Use of CCR internal model method

13.6.17 R Subject to ■ BIPRU 13.6.10 R to ■ BIPRU 13.6.16 G, a *firm* that has a *CCR internal model method permission* must not use the *CCR mark to market method* or the *CCR standardised method* for transactions within the scope of the *firm's CCR internal model method permission*.

[**Note**: *BCD* Annex III Part 6 point 4 (part)]

13.6.18 G A *firm* which wishes to revert to the *CCR mark to market method* or the *CCR standardised method* will need to request the *appropriate regulator* to revoke or vary its *CCR internal model method permission*.

[**Note**: *BCD* Annex III Part 6 point 4 (part)]

13.6.19 G The *appropriate regulator* will not agree to a *firm's* request to revoke or vary its *CCR internal model method permission* except for demonstrated good cause.

[**Note**: *BCD* Annex III Part 6 point 4 (part)]

13.6.20 R If a *firm* ceases to comply with the requirements set out in ■ BIPRU 13.6, it must either present to the *appropriate regulator* a plan for a timely return to compliance or demonstrate that the effect of non-compliance is immaterial.

[**Note**: *BCD* Annex III Part 6 point 4 (part)]

13.6.21 G If a *firm* ceases to comply with the requirements set out in ■ BIPRU 13.6, the *appropriate regulator* may revoke the *CCR internal model method permission* or take other appropriate supervisory action.

[**Note**: *BCD* Annex III Part 6 point 4 (part)]

Exposure value

13.6.22 R

(1) A *firm* must measure the *exposure* value at the level of the *netting set*.

(2) The model must specify the forecasting distribution for changes in the market value of the *netting set* attributable to changes in market variables, such as interest rates, foreign exchange rates.

(3) The model must then compute the *exposure* value for the *netting set* at each future date given the changes in the market variables.

(4) For margined counterparties, the model may also capture future collateral movements.

[**Note**: *BCD* Annex III Part 6 point 5]

13.6.23 R A *firm* may include eligible financial collateral as defined in ■ BIPRU 5.4.8 R (Eligible collateral under financial collateral comprehensive method) and ■ BIPRU 14.2.15 R to ■ BIPRU 14.2.17 R in its forecasting distributions for changes in the market value of the *netting set*, if the quantitative, qualitative and data requirements for the *CCR internal model method* are met for the collateral.

[**Note**: *BCD* Annex III Part 6 point 6]

13.6.24 R A *firm* must calculate the *exposure* value as the product of alpha (), as set out in ■ BIPRU 13.6.31 R, times *effective EPE*:

Exposure value = *effective EPE*

[**Note**: *BCD* Annex III Part 6 point 7 first part]

Effective EPE

13.6.25 R A *firm* must compute *effective EPE* by estimating *expected exposure* (*EE*t) as the average *exposure* at future date t, where the average is taken across possible future values of relevant *market risk* factors. The model estimates *EE* at a series of future dates t1, t2, t3, etc.

[**Note**: *BCD* Annex III Part 6 point 7 third part]

13.6.26 R A *firm* must compute *effective EE* recursively as:

*Effective EE*tk = max(*effective EE*tk-1; *EE*tk)

where:

the current date is denoted as t0 and *Effective EE*t0 equals *current exposure*.

[**Note**: *BCD* Annex III Part 6 point 8]

13.6.27 R For the purposes of ■ BIPRU 13.6.25 R :

(1) *effective EPE* is the average *effective EE* during the first year of future *exposure*;

(2) if all contracts in the *netting set* mature within less than one year, *effective EPE* is the average of *effective EE* until all contracts in the *netting set* mature.

[**Note**: *BCD* Annex III Part 6 point 9, first part]

13.6.28 R A *firm* must compute *effective EPE* as a weighted average of *effective EE*:

Effective EPE = $({}_{k=1}^{\min(1\text{ year};\text{maturity})})((\textit{Effective EE}_{tk})*(t_k))$

where:

the weights ?tk = tk tk-1 allow for the case when future *exposure* is calculated at dates that are not equally spaced over time.

[**Note**: *BCD* Annex III Part 6 point 9, second part]

13.6.29 R A *firm* must calculate *EE* or *peak exposure* measures based on a *distribution of exposures* that accounts for the possible non-normality of the *distribution of exposures*.

[**Note**: *BCD* Annex III Part 6 point 10]

13.6.30 R [deleted]

Alpha

13.6.31 R For the purposes of ■ BIPRU 13.6.24 R, alpha () is 1.4 or any higher amount specified in the *firm's CCR internal model method permission*.

[**Note**: *BCD* Annex III Part 6 point 7 second part]

13.6.32 G If the *appropriate regulator* does specify an alpha greater than 1.4, the reasons will be set out in the *firm's CCR internal model method permission*.

13.6.33 R If a *firm's CCR internal model method permission* permits it, the *firm* may use its own estimates of , subject to a floor of 1.2, where must equal the ratio of internal capital from a full simulation of *CCR exposure* across counterparties (numerator) and internal capital based on *EPE* (denominator).

[**Note**: *BCD* Annex III Part 6 point 12 (part)]

13.6.34 R For the purposes of ■ BIPRU 13.6.33 R:

(1) in the denominator, *EPE* must be used as if it were a fixed outstanding amount;

(2) a *firm* must be able to demonstrate that its internal estimates of capture in the numerator material sources of stochastic dependency of *distribution of market values* of transactions or of portfolios of transactions across counterparties;

(3) internal estimates of must take account of the granularity of portfolios.

[**Note**: *BCD* Annex III Part 6 point 12 (part)]

13.6.35 R A *firm* must ensure that the numerator and denominator of are computed in a consistent fashion with respect to the modelling methodology, parameter specifications and portfolio composition. The approach used must be based on the *firm's* internal capital approach, be well-documented and be subject to independent validation. In addition, a *firm* must review their estimates on at least a quarterly basis, and more frequently when the composition of the portfolio varies over time. A *firm* must also assess the model risk.

[**Note**: *BCD* Annex III Part 6 point 13]

13.6.35A R Where appropriate, volatilities and correlations of *market risk* factors used in the joint simulation of *market risk* and credit risk must be conditioned on the credit risk factor to reflect potential increases in volatility or correlation in an economic downturn.

[**Note**: *BCD* Annex III Part 6 point 14]

13.6.36 G In reviewing its estimate of , a *firm* may not need to perform a full recalculation each quarter if it can demonstrate by other means that the estimate would not be materially different. A full recalculation should however be performed at least annually. If there is a structural change in the *firm's* portfolio that is likely to have the effect that the existing estimate of

will be inappropriate, the *firm* should also recalculate it. A *firm* should have procedures in place to identify any such structural changes.

Maturity adjustment

13.6.37 G A *firm* using the *IRB approach* for *risk weighting* of *exposures* arising from a *CCR internal model method* should also apply a different maturity adjustment as set out in ■ BIPRU 4.4.67 R ■ BIPRU 4.4.70 R.

Margin agreement

13.6.38 R If the *netting set* is subject to a *margin agreement*, a *firm* must use one of the following *EPE* measures:

(1) *effective EPE* without taking into account the *margin agreement*;

(2) the *margin threshold*, if positive, under the *margin agreement* plus an add-on that reflects the potential increase in *exposure* over the *margin period of risk*:

(a) the add-on is computed as the expected increase in the *netting set's exposure* beginning from a *current exposure* of zero over the *margin period of risk*;

(b) a floor of five business days for *netting sets* consisting only of repo-style transactions subject to daily remargining and daily mark-to-market, and ten business days for all other *netting sets* is imposed on the *margin period of risk* used for this purpose.

(3) if the model captures the effects of margining when estimating *EE*, the model's *EE* measure may be used directly in the equation in ■ BIPRU 13.6.28 R (Computation of effective EE), unless the *firm's CCR internal model method permission* does not apply this provision or does not permit that use.

[**Note**: *BCD* Annex III Part 6 point 15]

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13.6.39 G Where the effects of margining are captured by the model itself, the *appropriate regulator* does not prescribe any floors for the *margin period of risk* but will challenge a *firm* that looks to use periods shorter than 5 days for *repurchase agreements* or *reverse repurchase agreements* or 10 days for *financial derivative instruments*.

Operational requirements: General

13.6.40 R A *firm's EPE* model must meet the operational requirements set out in ■ BIPRU 13.6.41 R to ■ BIPRU 13.6.66 R.

[**Note**: *BCD* Annex III Part 6 point 16]

Operational requirements: CCR control

13.6.41 R (1) The *firm* must have a control unit that is responsible for the design and implementation of its *CCR* management system, including the initial and on-going validation of the model.

(2) This unit must control input data integrity and produce and analyse reports on the output of the *firm's* risk measurement model, including an evaluation of the relationship between measures of risk *exposure* and credit and trading limits.

(3) This unit must be:

(a) independent from units responsible for originating, renewing or trading *exposures* and free from undue influence;

(b) it must be adequately staffed; and

(c) it must report directly to the senior management of the *firm*.

(4) The work of this unit must be closely integrated into the day-to-day credit risk management process of the *firm*; its output must, accordingly, be an integral part of the process of planning, monitoring and controlling the *firm's* credit and overall risk profile.

[**Note**: *BCD* Annex III Part 6 point 17]

13.6.42 R

(1) A *firm* must have *CCR* management policies, processes and systems that are conceptually sound and implemented with integrity.

(2) A sound *CCR* management framework must include the identification, measurement, management, approval and internal reporting of *CCR*.

[**Note**: *BCD* Annex III Part 6 point 18]

13.6.43 R

(1) A *firm's* risk management policies must take account of *market risk*, *liquidity risk*, and legal and *operational risk* that can be associated with *CCR*.

(2) The *firm* must not undertake business with a counterparty without assessing its creditworthiness and must take due account of settlement and pre-settlement credit risk.

(3) These risks must be managed as comprehensively as practicable at the counterparty level (aggregating *CCR exposures* with other credit *exposures*) and at the *firm*-wide level.

[**Note**: *BCD* Annex III Part 6 point 19]

13.6.44 R

A *firm's governing body* and senior management must be actively involved in the *CCR* control process and must regard this as an essential aspect of the business to which significant resources need to be devoted. Senior management must be aware of the limitations and assumptions of the model used and the impact these can have on the reliability of the output. Senior management must also consider the uncertainties of the market environment and operational issues and be aware of how these are reflected in the model.

[**Note**: *BCD* Annex III Part 6 point 20]

13.6.45 R

A *firm* must ensure that the daily reports prepared on its *exposures* to *CCR* are reviewed by a level of management with sufficient seniority and

authority to enforce both reductions of positions taken by individual credit managers or traders and reductions in the *firm's* overall *CCR exposure*.

[**Note**: *BCD* Annex III Part 6 point 21]

13.6.46 R

(1) A *firm's CCR* management system must be used in conjunction with internal credit and trading limits.

(2) A *firm* must ensure that its credit and trading limits are related to its risk measurement model in a manner that is:

(a) consistent over time; and

(b) well understood by credit managers, traders and senior management.

[**Note**: *BCD* Annex III Part 6 point 22]

13.6.47 R

(1) A *firm's* measurement of *CCR* must include measuring daily and intra-day usage of credit lines.

(2) The *firm* must measure *current exposure* gross and net of collateral.

(3) At portfolio and counterparty level, the *firm* must calculate and monitor *peak exposure* or potential future *exposure* (PFE) at the confidence interval chosen by the *firm*.

(4) The *firm* must take account of large or concentrated positions, including by groups of related counterparties, by industry, by market, etc.

[**Note**: *BCD* Annex III Part 6 point 23]

13.6.48 R

(1) A *firm* must have a routine and rigorous program of stress testing in place as a supplement to the *CCR* analysis based on the day-to-day output of the *firm's* risk measurement model.

(2) The results of this stress testing must be reviewed periodically by senior management and must be reflected in the *CCR* policies and limits set by management and the *governing body*.

(3) Where stress tests reveal particular vulnerability to a given set of circumstances, prompt steps must be taken to manage those risks appropriately.

[**Note**: *BCD* Annex III Part 6 point 24]

13.6.49 R

(1) A *firm* must have a routine in place for ensuring compliance with a documented set of internal policies, controls and procedures concerning the operation of the *CCR* management system.

(2) The *firm's CCR* management system must be well documented and must provide an explanation of the empirical techniques used to measure *CCR*.

[**Note**: *BCD* Annex III Part 6 point 25]

13.6.50 R A *firm* must conduct an independent review of the *CCR* management system regularly through its own internal auditing process. This review must include both the activities of the business units referred to in ■ BIPRU 13.6.41 R and of the independent *CCR* control unit. A review of the overall *CCR* management process must take place at regular intervals and must specifically address, at a minimum:

(1) the adequacy of the documentation of the *CCR* management system and process;

(2) the organisation of the *CCR* control unit;

(3) the integration of *CCR* measures into daily risk management;

(4) the approval process for risk pricing models and valuation systems used by front and back-office personnel;

(5) the validation of any significant change in the *CCR* measurement process;

(6) the scope of *CCR* captured by the risk measurement model;

(7) the integrity of the management information system;

(8) the accuracy and completeness of *CCR* data;

(9) the verification of the consistency, timeliness and reliability of data sources used to run models, including the independence of such data sources;

(10) the accuracy and appropriateness of volatility and correlation assumptions;

(11) the accuracy of valuation and risk transformation calculations; and

(12) the verification of the model's accuracy through frequent back-testing.

[**Note**: *BCD* Annex III Part 6 point 26]

Operational requirements: Use test

13.6.51 R The *distribution of exposures* generated by the model used to calculate *effective EPE* must be closely integrated into the day-to-day *CCR* management process of the *firm*. The model's output must accordingly play an essential role in the credit approval, *CCR* management, internal capital allocation, and corporate governance of the *firm*.

[**Note**: *BCD* Annex III Part 6 point 27]

13.6.52 R A *firm* must have a track record in the use of models that generate a *distribution of exposures* to *CCR*. Thus, the *firm* must be able to demonstrate that it has been using a model to calculate the *distribution of exposures* upon which the *EPE* calculation is based that meets, broadly, the minimum requirements set out in ■ BIPRU 13.6 for at least one year prior to the date of its *CCR internal model method permission*.

[**Note**: *BCD* Annex III Part 6 point 28]

13.6.53 R

(1) A *firm* must ensure that the model used to generate a *distribution of exposures* to *CCR* is part of a *CCR* management framework that includes the identification, measurement, management, approval and internal reporting of *CCR*. This framework must include the measurement of usage of credit lines (aggregating *CCR exposures* with other credit *exposures*) and internal capital allocation.

(2) In addition to *EPE*, a *firm* must measure and manage *current exposures*.

(3) Where appropriate, the *firm* must measure *current exposure* gross and net of collateral.

(4) The use test is satisfied if a *firm* uses other *CCR* measures, such as *peak exposure* or PFE (see ■ BIPRU 13.6.47 R), based on the *distribution of exposures* generated by the same model to compute *EPE*.

[**Note**: *BCD* Annex III Part 6 point 29]

13.6.54 R

A *firm* must have the systems capability to estimate *EE* daily if necessary, unless it is able to demonstrate to the *appropriate regulator* that its *exposures* to *CCR* warrant less frequent calculation. The *firm* must compute *EE* along a time profile of forecasting horizons that adequately reflects the time structure of future cash flows and maturity of the contracts and in a manner that is consistent with the materiality and composition of the *exposures*.

[**Note**: *BCD* Annex III Part 6 point 30]

13.6.55 R

(1) *Exposure* must be measured, monitored and controlled over the life of all contracts in the *netting set* (not just to the one year horizon).

(2) A *firm* must have procedures in place to identify and control the risks for counterparties where the *exposure* rises beyond the one-year horizon.

(3) A *firm* must input the forecast increase in *exposure* into the *firm's* internal capital model.

[**Note**: *BCD* Annex III Part 6 point 31]

Operational requirements: Stress testing

13.6.56 R

(1) A *firm* must have in place sound stress testing processes for use in the assessment of capital adequacy for *CCR*.

(2) These stress measures must be compared with the measure of *EPE* and considered by the *firm* as part of the process set out in ■ GENPRU 1.2.42 R.

(3) Stress testing must also involve identifying possible events or future changes in economic conditions that could have unfavourable effects on a *firm's* credit *exposures* and an assessment of the *firm's* ability to withstand such changes.

[**Note**: *BCD* Annex III Part 6 point 32]

13.6.57 R

(1) A *firm* must stress test its *CCR exposures*, including jointly stressing *market risk* and credit risk factors.

(2) In its stress tests of *CCR*, a *firm* must consider concentration risk (to a single counterparty or groups of counterparties), correlation risk across *market risk* and credit risk, and the risk that liquidating the counterparty's positions could move the market.

(3) In its stress tests a *firm* must also consider the impact on its own positions of such market moves and integrate that impact in its assessment of *CCR*.

[**Note**: *BCD* Annex III Part 6 point 33]

Operational requirements: Wrong-way risk

13.6.58 R

A *firm* must give due consideration to *exposures* that give rise to a significant degree of *general wrong-way risk*.

[**Note**: *BCD* Annex III Part 6 point 34]

13.6.59 R

A *firm* must have procedures in place to identify, monitor and control cases of *specific wrong-way risk*, beginning at the inception of a transaction and continuing through the life of the transaction.

[**Note**: *BCD* Annex III Part 6 point 35]

Operational requirements: Integrity of modelling process

13.6.60 R

A *firm* must ensure that:

(1) the model reflects transaction terms and specifications in a timely, complete, and conservative fashion;

(2) such terms include at least:

(a) contract notional amounts;

(b) maturity;

(c) reference assets;

(d) margining arrangements; and

(e) netting arrangements;

(3) the terms and specifications are maintained in a database that is subject to formal and periodic audit;

(4) the process for recognising netting arrangements requires:

(a) signoff by legal staff to verify the legal enforceability of netting and

(b) input into the database by an independent unit;

(5) the transmission of transaction terms and specifications data to the model is also subject to internal audit; and

(6) formal reconciliation processes are in place between the model and source data systems to verify on an ongoing basis that transaction

terms and specifications are being reflected in *EPE* correctly or at least conservatively.

[**Note**: *BCD* Annex III Part 6 point 36]

13.6.61 R A *firm* must ensure that:

(1) the model employs current market data to compute *current exposures*;

(2) when using historical data to estimate volatility and correlations, at least three years of historical data are used and updated quarterly or more frequently if market conditions warrant;

(3) the data covers a full range of economic conditions, such as a full business cycle;

(4) a unit independent from the business unit validates the price supplied by the business unit;

(5) the data is acquired independently of the lines of business, fed into the model in a timely and complete fashion, and maintained in a database subject to formal and periodic audit;

(6) it has a well-developed data integrity process to clean the data of erroneous and/or anomalous observations; and

(7) to the extent that the model relies on proxy market data, including for new products where three years of historical data may not be available, internal policies identify suitable proxies and the *firm* demonstrates empirically that the proxy provides a conservative representation of the underlying risk under adverse market conditions.

[**Note**: *BCD* Annex III Part 6 point 37]

13.6.62 R If the model includes the effect of collateral on changes in the market value of the *netting set*, a *firm* must have adequate historical data to model the volatility of the collateral.

13.6.63 R A *firm* must ensure that the model is subject to a validation process which:

(1) is clearly articulated in *firms*' policies and procedures;

(2) specifies the kind of testing needed to ensure model integrity

(3) identifies conditions under which assumptions are violated and may result in an understatement of *EPE*; and

(4) includes a review of the comprehensiveness of the model.

[**Note**: *BCD* Annex III Part 6 point 38]

13.6.64 R A *firm* must monitor the appropriate risks and have processes in place to adjust its estimation of *EPE* when those risks become significant. This includes the following:

(1) the *firm* must identify and manage its *exposures* to *specific wrong-way risk*;

(2) for *exposures* with a rising risk profile after one year, the *firm* must compare on a regular basis the estimate of *EPE* over one year with *EPE* over the life of the *exposure*; and

(3) for *exposures* with a residual maturity below one year, the *firm* must compare on a regular basis the replacement cost (*current exposure*) and the realised *exposure* profile, and/or store data that would allow such a comparison.

[**Note**: *BCD* Annex III Part 6 point 39]

13.6.65 R A *firm* must have internal procedures to verify that, prior to including a transaction in a *netting set*, the transaction is covered by a legally enforceable netting contract that meets the requirements set out in ■ BIPRU 13.7.

[**Note**: *BCD* Annex III Part 6 point 40]

13.6.66 R A *firm* that makes use of collateral to mitigate its *CCR* must have internal procedures to verify that, prior to recognising the effect of collateral in its calculations, the collateral meets the legal certainty standards set out in ■ BIPRU 5 as modified, where relevant, by ■ BIPRU 4.10.

[**Note**: *BCD* Annex III Part 6 point 41]

Validation requirements

13.6.67 R

(1) A *firm's CCR internal model method* model must meet the validation requirements in (2) to (8).

(2) The qualitative validation requirements set out in ■ BIPRU 7.10 must be met.

(3) Interest rates, *foreign currency* rates, equity prices, *commodities*, and other *market risk* factors must be forecast over long time horizons for measuring *CCR exposure*. The performance of the forecasting model for *market risk* factors must be validated over a long time horizon.

(4) The pricing models used to calculate *CCR exposure* for a given scenario of future shocks to *market risk* factors must be tested as part of the *CCR internal model method* model validation process. Pricing models for *options* must account for the nonlinearity of option value with respect to *market risk* factors.

(5) The *CCR internal model method* model must capture transaction-specific information in order to aggregate *exposures* at the level of the *netting set*. A *firm* must verify that transactions are assigned to the appropriate *netting set* within the model.

(6) The *CCR internal model method* model must also include transaction-specific information to capture the effects of margining. It must take into account both the current amount of margin and margin that would be passed between counterparties in the future. Such a model must account for the nature of *margin agreements* (unilateral or bilateral), the frequency of margin calls, the *margin period of risk*, the minimum threshold of unmargined *exposure* the *firm* is willing to accept, and the minimum transfer amount. Such a model must either model the mark-to-market change in the value of collateral posted or apply the *rules* set out in ■ BIPRU 5 as modified, where relevant, by ■ BIPRU 4.10.

(7) Static, historical backtesting on representative counterparty portfolios must be part of the *CCR internal model method* model validation process. At regular intervals, a *firm* must conduct such backtesting on a number of representative counterparty portfolios (actual or hypothetical). These representative portfolios must be chosen based on their sensitivity to the material risk factors and correlations to which the *firm* is exposed.

(8) If backtesting indicates that the *CCR internal model method* model is not sufficiently accurate, a *firm* must increase the *credit risk capital component* and, where ■ BIPRU 13 is applied for the purposes of ■ BIPRU 14, the *counterparty risk capital component* by an amount which is conservatively estimated to compensate for the inaccuracy of the model.

[**Note**: *BCD* Annex III Part 6 point 42 (part)]

13.6.68 G If backtesting indicates that the *CCR internal model method* model is not sufficiently accurate, the *appropriate regulator* may revoke a *firm's CCR internal model method permission* or take appropriate measures to ensure that the model is improved promptly. Measures taken by the *appropriate regulator* may include the use of its *own-initiative power* to require the *firm* to hold more *capital resources*.

[**Note**: *BCD* Annex III Part 6 point 42 (part)]

13.7 Contractual netting

Scope

13.7.1 R ■ BIPRU 13.7 applies for the purpose of:

(1) the *CCR mark to market method*;

(2) the *CCR standardised method*;

(3) if the *firm* has a *CCR internal model method permission*, the *CCR internal model method*.

Types of netting recognised

13.7.2 R For the purpose of ■ BIPRU 13.7:

(1) counterparty means any entity (including natural *persons*) that has the power to conclude a contractual netting agreement; and

(2) *contractual cross product netting agreement* means a written bilateral agreement between a *firm* and a counterparty which creates a single legal obligation covering all included bilateral master agreements and transactions belonging to different product categories.

[**Note**: *BCD* Annex III Part 7 point (a) (part)]

13.7.3 R *Contractual cross product netting agreements* do not cover netting other than on a bilateral basis.

[**Note**: *BCD* Annex III Part 7 point (a) (part)]

13.7.4 R For the purposes of *cross product netting*, the following are considered different product categories:

(1) *repurchase transactions*, reverse repurchase transactions, *securities or commodities lending or borrowing transactions*;

(2) *margin lending transactions*; and

(3) *financial derivative instruments*.

[**Note**: *BCD* Annex III Part 7 point (a) (part)]

13.7.5 R A *firm* may recognise as risk-reducing the following types of contractual netting:

(1) bilateral contracts for novation between a *firm* and its counterparty under which mutual claims and obligations are automatically amalgamated in such a way that this novation fixes one single net amount each time novation applies and thus creates a legally binding, single new contract extinguishing former contracts;

(2) other bilateral agreements between a *firm* and its counterparty; and

(3) a *firm* that has a *CCR internal model method permission* may recognise *Contractual cross product netting agreements* for transactions falling within the scope of its *CCR internal model method permission*; netting across transactions entered by members of a *group* is not recognised for the purposes of calculating capital requirements.

[**Note**: *BCD* Annex III Part 7 point (a) (part)]

Conditions for recognition

13.7.6 R A *firm* may treat contractual netting as risk-reducing only under the following conditions:

(1) the *firm* must have a contractual netting agreement with its counterparty which creates a single legal obligation, covering all included transactions, such that, in the event of a counterparty's failure to perform owing to default, bankruptcy, liquidation or any other similar circumstance, the *firm* would have a claim to receive or an obligation to pay only the net sum of the positive and negative mark-to-market values of included individual transactions;

(2) the *firm* must be in a position to provide to the *appropriate regulator*, if requested, written and reasoned legal opinions to the effect that, in the event of a legal challenge, the relevant courts and administrative authorities would, in the cases described under (1), find that the *firm's* claims and obligations would be limited to the net sum, as described in (1), under:

(a) the law of the jurisdiction in which the counterparty is incorporated and, if a foreign *branch* of an *undertaking* is involved, also under the law of the jurisdiction in which the *branch* is located;

(b) the law that governs the individual transactions included; and

(c) the law that governs any contract or agreement necessary to effect the contractual netting;

(3) the *firm* must have procedures in place to ensure that the legal validity of its contractual netting is kept under review in the light of possible changes in the relevant laws;

(4) the *firm* must maintain all required documentation in its files;

(5) the effects of netting must be factored into the *firm's* measurement of each counterparty's aggregate credit risk *exposure* and the *firm* must manage its *CCR* on such a basis; and

(6) the *firm* must aggregate credit risk to each counterparty to arrive at a single legal *exposure* across transactions; this aggregation must be factored into credit limit purposes and internal capital purposes.

[**Note**: *BCD* Annex III Part 7 point (b) (part)]

13.7.7 R If any of the *competent authorities* concerned is not satisfied that the contractual netting is legally valid under the law of each of the relevant jurisdictions, the *firm* must not treat the contractual netting agreement as risk-reducing.

[**Note**: *BCD* Annex III Part 7 point (b) (part)]

13.7.8 R A legal opinion required under ■ BIPRU 13.7.6 R (2) may be in the form of a reasoned legal opinion drawn up by type of contractual netting.

[**Note**: *BCD* Annex III Part 7 point (b) (part)]

13.7.9 R A *firm* must not recognise as risk-reducing any contract containing a provision which permits a non-defaulting counterparty to make limited payments only, or no payments at all, to the estate of the defaulter, even if the defaulter is a net creditor (a "walkaway" clause).

[**Note**: *BCD* Annex III Part 7 point (b) (part)]

13.7.10 R In addition to the requirements in ■ BIPRU 13.7.2 R to ■ BIPRU 13.7.9 R, for *contractual cross product netting agreements* the following criteria must be met:

(1) the net sum referred to in ■ BIPRU 13.7.6 R (1) must be the net sum of the positive and negative close out values of any included individual bilateral master agreement and of the positive and negative mark-to-market value of the individual transactions (the Cross-Product Net Amount);

(2) the written and reasoned legal opinions referred to in ■ BIPRU 13.7.6 R (2) must address the validity and enforceability of the entire *contractual cross product netting agreement* under its terms and the impact of the netting arrangement on the material provisions of any included individual bilateral master agreement; a legal opinion must be generally recognised as such by the legal community in the *United Kingdom* or a memorandum of law that addresses all relevant issues in a reasoned manner;

(3) the *firm* must have procedures in place under ■ BIPRU 13.7.6 R (3) to verify that any transaction which is to be included in a *netting set* is covered by a legal opinion; and

(4) taking into account the *contractual cross product netting agreement*, the *firm* must continue to comply with the requirements for the recognition of bilateral netting and the requirements of ■ BIPRU 4.10 and ■ BIPRU 5 for the recognition of *credit risk mitigation*, as applicable, with respect to each included individual bilateral master agreement and transaction.

[**Note**: *BCD* Annex III Part 7 point (b) (part)]

Effects of recognition

13.7.11 **R** For the purposes of the *CCR mark to market method*, the *CCR standardised method* and the *CCR internal model method* a *firm* must recognise netting as set out in ■ BIPRU 13.3 and ■ BIPRU 13.6.

[**Note**: *BCD* Annex III Part 7 point (b) (part)]

13.8 Securities financing transactions

Purpose

13.8.1 G ■ BIPRU 13.8 summarises the treatment for *securities financing transactions*.

Calculation of exposure value for SFTs

13.8.2 R Subject to ■ BIPRU 13.8.3 R, in respect of a *securities financing transaction*, if a *firm*:

(1) has a *CCR internal model method permission* which covers the transaction; or

(2) has a *master netting agreement internal models approach permission* which covers the transaction;

then the *firm* must use the *CCR internal model method approach* or the *master netting agreement internal models approach*, as applicable, to calculate the *exposure* value for that transaction unless an exception in ■ BIPRU 13 or ■ BIPRU 5 allows the *firm* to use another method.

[**Note**: *BCD* Article 78(2), second sentence, in respect of *SFTs*]

13.8.3 R If a *firm* has a *CCR internal model method permission* and a *master netting agreement internal models approach permission*, and both cover a *securities financing transaction*, then the *firm* may choose which of those approaches it wishes to use to calculate the *exposure* value for that transaction.

13.8.4 R Where ■ BIPRU 13.8.2 R does not apply, a *firm* must use one of the following approaches to determine the *exposure* value of a *securities financing transaction*, as appropriate:

(1) if the transaction is covered by a master netting agreement which satisfies the requirements for recognition set out in ■ BIPRU 5.6.1 R to ■ BIPRU 5.6.3 R, a *firm* may calculate the *exposure* value under the master netting agreement method set out in ■ BIPRU 5.6.5 R to ■ BIPRU 5.6.11 R (Calculation of the fully adjusted exposure value: the supervisory volatility adjustments approach and the own estimates of volatility adjustments approach);

(2) otherwise, a *firm* must calculate the *exposure* value of the transaction as its on-balance sheet value.

13.8.5 G A *firm* calculating *risk weighted exposure amounts* under the *standardised approach* to credit risk will not be eligible to use the approach in ■ BIPRU 13.8.4 R (1) if it is using the *financial collateral simple method* to determine the effects of *credit risk mitigation*, as set out in ■ BIPRU 5.4.16 R.

13.8.6 G If a *firm* calculates the *exposure* value of a *securities financing transaction* as its on-balance sheet value, in accordance with ■ BIPRU 13.8.4 R (2), it may recognise the effects of financial collateral in the same way as for its other exposures, for example by using either the *financial collateral simple method* or the *financial collateral comprehensive method*. However *firms* should note that the *financial collateral simple method* is not available:

(1) to a *firm* using the *IRB approach* (■ BIPRU 5.4.16 R); or

(2) for *securities financing transactions* in the *trading book* (■ BIPRU 14.2.11 R).

Exposure to a central counterparty

13.8.7 R Notwithstanding ■ BIPRU 13.8.2 R, a *firm* must determine the *exposure* value of a credit risk *exposure* outstanding with a *central counterparty* in accordance with ■ BIPRU 13.8.8 R, provided that the *central counterparty's counterparty credit risk exposures* with all participants in its arrangements are fully collateralised on a daily basis.

[**Note**: *BCD* Article 78(4) in respect of *SFTs*]

13.8.8 R A *firm* may attribute an *exposure* value of zero for *CCR* to a *securities financing transaction* or to any other *exposures* in respect of that transaction (but excluding an *exposure* arising from collateral held to mitigate losses in the event of the default of other participants in the *central counterparty's* arrangements) which is outstanding with a *central counterparty* and has not been rejected by the *central counterparty*.

[**Note**: *BCD* Annex III Part 2 point 6 in respect of *SFTs*]

							Interest rate risk hedging sets					FX risk hedging sets		Equit risk
i	Trans-ac-tion type			Ef-fect-ive notional	Modi-fied duration	CMV	USD non-gov M<1	USD non-gov M>5	EUR non-gov M<1	EUR non-gov M>5	JPY non-gov M>5	EUR/ USD	JPY/ USD	DAX
				$ million	years	$ million	ef-fect-ive no-tional x modified	ef-fect-ive no-tional x modi-fied duration	effect-ive no-tional x modi-fied duration	ef-fect-ive no-tional x modi-fied duration	ef-fect-ive no-tional x modi-fied duration	ef-fect-ive no-tional (+ = long, - = short)	ef-fect-ive no-tional (+ = long, - = short)	ef-fect-ive no-tional (+ = long, - = short)
1	USD	IR swap	re-ceiver leg	80	8	-6		640						
1	USD	IR swap	payer leg	80	-0.25		-20							
2	USD	IR swap	re-ceiver leg	300	0.125		37.5							
2	USD	IR swap	payer leg	300	-6	2		-1800						
3	EUR	FX swap	re-ceiver leg	100	15	0				1500		100		
3	USD	FX swap	payer leg	100	-0.125		-12.5							
4	EUR	cross ccy swap	re-ceiver leg	60	7	1				420		60		
4	JPY	cross ccy swap	payer leg	60	-7						-420		-60	
5	DAX	Total re-turn swap in EUR	re-ceiver leg	150	0.125	4			18.75			150		
5	DAX	Total re-turn swap	payer leg	150	not ap-plicable									-150

	Interest rate risk hedging sets					FX risk hedging sets		Equit risk
in EUR								
Sum of risk positions RPTij by hedging setj	5	-1160	18.75	1920	-420	310	-60	-150
Absolute amount |sum of RPTij| of risk positions by hedging setj	5	1160	18.75	1920	420	310	60	150
Credit conversion factors CCFj by hedging setj	0.20%	0.20%	0.20%	0.20%	0.20%	2.50%	2.50%	7%
CCFj x |sum of RPTij|: CCF-weighted absolute amounts of risk positions by hedging set	0.0100	2.3200	0.0375	3.8400	0.8400	7.7500	1.5000	105.000

Sum of (CCFj x |sum of RPTij|)	26.7975
CMV: sum of *current market values* CMVi of the transactions	1.000
Max(CMV, sum of (CCFj x |sum of RPTij))	26.7975
Beta:	1.4000
EAD	37.5165

Chapter 14

Capital requirements for settlement and counterparty risk

14.1 Application and purpose

Application

14.1.1 R ■ BIPRU 14 applies to a *BIPRU firm*.

14.1.2 G

(1) ■ BIPRU 14.2 deals with the calculation of the capital requirement for *CCR* for *trading book* positions arising from *financial derivative instruments*, *securities financing transactions* and *long settlement transactions*. The approaches used to calculate *exposure* values and *risk weighted exposure amounts* for these positions are largely based on the approaches applicable to *non-trading book* positions (■ BIPRU 3, ■ BIPRU 4, ■ BIPRU 5 and ■ BIPRU 13). However, there are some treatments that are specific to the *trading book*. These are set out in ■ BIPRU 14.2.

(2) The calculation of the capital requirement for *CCR* for *trading book* positions is the first element of the *counterparty risk capital component* in ■ BIPRU 14.2.1 R. The second element of the *counterparty risk capital component* is for unsettled transactions in both the *trading book* and the *non-trading book*. It is calculated under ■ BIPRU 14.3.

(3) ■ BIPRU 14.4 sets out the treatment for *free deliveries*.

Purpose

14.1.3 G Pursuant to the third paragraph of article 95(2) of the *UK CRR*, ■ BIPRU 14 applies requirements that correspond to:

(1) Article 3(1)(h), Article 17(1), and Article 40; and

(2) Annex II;

of the *Capital Adequacy Directive*.

14.2 Calculation of the capital requirement for CCR

Calculation of the counterparty risk capital component

14.2.1 R A *firm* must calculate the *counterparty risk capital component* as the sum of:

(1) the capital requirement calculated under ■ BIPRU 14.2.13 R; and

(2) the amount calculated under ■ BIPRU 14.3.

14.2.2 R A *firm* must hold capital calculated in accordance with ■ BIPRU 14.2.13 Ragainst the *CCR* arising from *exposures* arising in the *trading book* due to the following:

(1) *free deliveries* (where ■ BIPRU 14.4 requires it to be treated as an *exposure*);

(2) *financial derivative instruments* and credit derivatives;

(3) *repurchase agreements*, *reverse repurchase agreements*, *securities or commodities lending or borrowing transaction* based on *securities* or *commodities* included in the *trading book*;

(4) *margin lending transactions* based on *securities* or *commodities*; and

(5) *long settlement transactions*.

[**Note**: *CAD* Annex II point 5]

Credit derivatives

14.2.3 R For the purposes of the calculation of the *counterparty risk capital component*, a *financial derivative instrument* means:

(1) an item falling within ■ BIPRU 13.3.3 R other than an item to which an *exposure* value of zero is attributed under ■ BIPRU 13.3.13 R or ■ BIPRU 13.8.8 R (Exposure to a central counterparty); and

(2) a credit derivative.

[**Note**: *CAD* Article 3(1)(h) and Annex II point 7 first sentence]

14.2.4 R ■ BIPRU 14.2.5 R to ■ BIPRU 14.2.8 R apply for the purposes of ■ BIPRU 13.4 (CCR mark to market method).

14.2.5 R In the case of total return swap credit derivatives and credit default swap credit derivatives, a *firm* must obtain a figure for potential future credit *exposure* by multiplying the nominal amount of the instrument by the following percentages:

(1) 5% where the reference obligation is one that if it gave rise to a direct *exposure* of the *firm* would be a *qualifying debt security* for the purposes of ■ BIPRU 7.2;

(2) 10 % where the reference obligation is one that if it gave rise to a direct *exposure* of the *firm* would not be a *qualifying debt security* for the purposes of ■ BIPRU 7.2.

[**Note**: *CAD* Annex II point 7 (part)]

14.2.6 R In the case of a credit default swap, a *firm* the *exposure* of which arising from the swap represents a long position in the underlying may use a figure of 0% for potential future credit *exposure*, unless the credit default swap is subject to closeout upon the insolvency of the entity the *exposure* of which arising from the swap represents a short position in the underlying, even though the underlying has not defaulted, in which case the potential for future credit *exposure* of the *firm* must be limited to the amount of premia which are not yet paid by the entity to the *firm*.

[**Note:** *CAD* Annex II point 7]

14.2.7 G ■ BIPRU 14.2.6 R permits the seller of credit protection to determine potential future credit *exposure* as 0%, unless the protection is subject to close-out on the insolvency of the buyer.

14.2.8 R Where the credit derivative provides protection in relation to 'nth to default' amongst a number of underlying obligations, a *firm* must apply the percentage figure in ■ BIPRU 14.2.5 R applicable to the obligation with the nth lowest credit quality determined by whether it is one that if incurred by the *firm* would be a *qualifying debt security* for the purposes of ■ BIPRU 7.2.

14.2.9 G The operation of ■ BIPRU 14.2.8 R can be illustrated by an example as follows: where the credit derivative is a first to default transaction, the appropriate percentage for the potential future credit *exposure* will be determined by the lowest credit quality of the underlying obligations in the basket. If there are non-qualifying items in the basket, the percentage applicable to the non-qualifying reference obligation should be used. For second and subsequent to default transactions, underlying assets should continue to be allocated according to credit quality: i.e. for a second to default transaction, the applicable percentage figure is the percentage applicable to the second lowest credit quality.

14.2.10 R Where a credit derivative included in the *trading book* forms part of an internal hedge and the credit protection is recognised under the *BCD*, there is deemed to be no counterparty risk arising from the position in the credit derivative. Alternatively, a *firm* may consistently include for the purposes of calculating *capital requirements* for *counterparty credit risk* all credit derivatives included in the *trading book* forming part of internal hedges or

purchased as protection against *CCR exposure* where the credit protection is recognised under the *BCD*.

[**Note**: *CAD* Annex II point 11]

Calculation

14.2.11 R Subject to ■ BIPRU 14.2.3 R to ■ BIPRU 14.2.5 R and ■ BIPRU 14.2.14 R to ■ BIPRU 14.2.17 R, a *firm* must calculate *exposure* values and *risk weighted exposure amounts* for the *exposures* falling under ■ BIPRU 14.2.2 R (1) to ■ BIPRU 14.2.2R (5) in accordance with:

(1) the *standardised approach* to credit risk; or

(2) if the *firm* has an *IRB permission*, the *IRB approach* in accordance with the terms of the *firm's IRB permission*.

[**Note**: *CAD* Annex II point 6]

14.2.12 G For the purpose of calculating counterparty *exposure* values for *financial derivative instruments*, *securities financing transactions* and *long settlement transactions*, or for *credit risk mitigation*, the effect of ■ BIPRU 14.2.11 R is to direct a *firm* to ■ BIPRU 13 or ■ BIPRU 5 as appropriate.

14.2.13 R A *firm* must calculate the capital requirement for the purposes of ■ BIPRU 14.2.2 R as 8% of the total *risk weighted exposure amounts*.

[**Note**: *CAD* Annex II point 12]

Collateral

14.2.14 R For the purposes of ■ BIPRU 14.2.11 R, in calculating *risk weighted exposure amounts* a *firm* must not use the *financial collateral simple method* for the recognition of the effects of financial collateral.

[**Note**: *CAD* Annex II point 8]

14.2.15 R For the purposes of ■ BIPRU 14.2.11 R:

(1) in the case of *repurchase transactions* and *securities or commodities lending or borrowing transactions* booked in the *trading book*, all *CRD financial instruments* and *commodities* that are eligible to be included in the *trading book* may be recognised as eligible collateral;

(2) for *exposures* due to *financial derivative instruments* and *long settlement transactions* booked in the *trading book*, *commodities* that are eligible to be included in the *trading book* may also be recognised as eligible collateral;

(3) for the purposes of calculating volatility adjustments where such *CAD financial instruments* or *commodities* which are not eligible under ■ BIPRU 5 and ■ BIPRU 4.10 are lent, sold or provided, or borrowed, purchased or received by way of collateral or otherwise under such a transaction, and the *firm* is using the *supervisory volatility adjustments approach*, such instruments and *commodities* must be treated in the same way as non-main index equities listed on a

recognised investment exchange or a *designated investment exchange*.

[**Note**: *CAD* Annex II point 9 (part)]

14.2.16 R

(1) Where a *firm* is using the *own estimates of volatility adjustments approach* in respect of *CAD financial instruments* or *commodities* which are not eligible under ■ BIPRU 5 and ■ BIPRU 4.10 it must calculate volatility adjustments for each individual item.

(2) Where a *firm* is using the *master netting agreement internal models approach* set out in ■ BIPRU 5, it may also apply this approach in the *trading book*.

[**Note**: *CAD* Annex II point 9 (part)]

14.2.17 R

For the purposes of ■ BIPRU 14.2.11 R, in relation to the recognition of master netting agreements covering *repurchase transactions* and/or *securities or commodities lending or borrowing transactions* and/or other *capital market-driven transactions* netting across positions in the *trading book* and the *non-trading book* may only be recognised when the netted transactions fulfil the following conditions:

(1) all transactions are marked to market daily;

(2) any items borrowed, purchased or received under the transactions may be recognised as eligible financial collateral under ■ BIPRU 5 and ■ BIPRU 4.10 without the application of ■ BIPRU 14.2.14 R to ■ BIPRU 14.2.15 R.

[**Note**: *CAD* Annex II point 9 (part)]

Treatment of expected loss amounts under the IRB approach

14.2.18 R

Where a *firm* calculates *risk weighted exposure amounts* for the purposes of ■ BIPRU 14 in accordance with the *IRB approach*, then for the purposes of the calculation provided for in ■ BIPRU 4.3.8 R, the following will apply:

(1) value adjustments made to take account of the credit quality of the counterparty may be included in the sum of value adjustments and provisions made for the *exposures* indicated in ■ BIPRU 14; and

(2) unless the *firm's IRB permission* does not permit it, if the credit risk of the counterparty is adequately taken into account in the valuation of a position included in the *trading book* the *expected loss* amount for the counterparty risk *exposure* must be zero.

[**Note**: *CAD* Article 17(1)]

14.2.19 R

[deleted]

Exposures to recognised third-country investment firms, recognised clearing houses and designated investment exchanges

14.2.20 R For the purposes of the calculation of the *counterparty risk capital component*, without prejudice to ■ BIPRU 13.3.13 R and ■ BIPRU 13.8.8 R (Exposure to a central counterparty) *exposures* to *recognised third-country investment firms* and *exposures* incurred to *recognised clearing houses* and *designated investment exchanges* must be treated as exposures to *institutions*.

[**Note**: *CAD* Article 40]

Netting of trading book exposures against non-trading book exposures

14.2.21 R For the purposes of *counterparty credit risk*, a *firm* may net *exposures* arising from items in the *trading book* against *exposures* arising from items in the *non-trading book*.

14.2.22 R Where a *firm* carries out netting under ■ BIPRU 14.2.21 R, it must allocate the net *exposure* to:

(1) the *trading book* for the purposes of the calculation under ■ BIPRU 14.2.11 R, if the gross *trading book exposures* exceed gross *non-trading book exposures*; and

(2) the *non-trading book* for the purposes of ■ BIPRU 13, if the gross *non-trading book exposures* exceed gross *trading book exposures*.

14.2.23 R A *firm* may only net *exposures* under ■ BIPRU 14.2.21 R if it continues to meet other *GENPRU* and *BIPRU* requirements applicable to the *trading book* or *non-trading book* in respect of those *exposures*.

14.2.24 G For example, in relation to ■ BIPRU 14.2.23 R, collateral which is eligible only against *trading book exposures* will not be applicable against *non-trading book exposures*; and the large *exposures* limits on *non-trading book* positions will also remain applicable.

14.3 Unsettled transactions

Scope

14.3.1 R ■ BIPRU 14.3 applies in respect of items in the *trading book* and the *non-trading book*.

14.3.2 G The capital requirement for unsettled transactions is an element of the *counterparty risk capital component* set out in ■ BIPRU 14.2.1 R.

Calculation

14.3.3 R In the case of transactions in which debt instruments, equities, *foreign currencies* and *commodities* (excluding *repurchase agreements* and *reverse repurchase agreements* and *securities or commodities lending* and *securities or commodities borrowing*) are unsettled after their due delivery dates, a *firm* must calculate the price difference to which it is exposed, being the difference between the agreed settlement price for the debt instrument, equity, *foreign currency* or *commodity* in question and its *current market value*, where the difference could involve a loss for the *firm*.

[**Note**: *CAD* Annex II point 1 (part)]

14.3.4 R A *firm* must multiply the price difference calculated under ■ BIPRU 14.3.3 R by the appropriate factor in column A of the Table in ■ BIPRU 14.3.4 R in order to calculate its capital requirement for the purposes of ■ BIPRU 14.3.

[**Note**: *CAD* Annex II point 1 (part)]

14

Table: Factors for the multiplication of price differences

14.3.5 R This table belongs to ■ BIPRU 14.3.4 R

Number of working days after due settlement date	Column A (%)
5 - 15	8
16 - 30	50
31 - 45	75
46 or more	100

[**Note**: *CAD* Annex II Table 1]

14.3.5 G In cases of a system wide failure of a settlement or clearing system, a *firm* should refer to the emergency provisions in ■ GEN 1.3. Where the

requirements of ■ GEN 1.3.2 R are met, until the situation is rectified failure of a counterparty to settle a trade will not be deemed a default for purposes of credit risk.

[**Note**: *CAD* Annex II point 4]

14.4 Free deliveries

Scope

14.4.1 R ■ BIPRU 14.4 applies in respect of items in the *trading book* and the *non-trading book*.

14.4.2 R A *firm* must hold *capital resources* with respect to a *free delivery*, as set out in the Table in ■ BIPRU 14.4.3 R, if:

(1) it has paid for *securities*, *foreign currencies* or *commodities* before receiving them or it has delivered *securities foreign currencies* or *commodities* before receiving payment for them; and

(2) in the case of cross-border transactions, one day or more has elapsed since it made that payment or delivery.

[**Note**: *CAD* Annex II point 2]

Exposure

14.4.3 R Table: Capital treatment for free deliveries

This table belongs to ■ BIPRU 14.4.2 R.

Transaction Type	Up to first contractual *payment leg* or delivery leg	From first contractual *payment leg* or delivery leg up to four days after second contractual *payment leg* or delivery leg	From 5 business days post second contractual *payment leg* or delivery leg until extinction of the transaction
Free delivery	No capital charge in the *trading book*	Treat as an *exposure*	Deduct value transferred plus current positive *exposure* from *capital resources*

[**Note**: *CAD* Annex II Table 2]

14.4.4 R (1) In the case of the *non-trading book*, a *firm* must treat an *exposure* falling into columns 2 and 3 of the table in ■ BIPRU 14.4.3 R in accordance with the relevant provisions of the *standardised approach* to credit risk or the *IRB approach*, as the case may be.

(2) In the case of the *trading book*, a firm must apply the treatment set out in ■ BIPRU 14.4.5 R.

[**Note**: *CAD* Annex II point 3 (part)]

14.4.5 R

(1) In applying a *risk weight* to *free delivery exposures* treated according to column 3 of the table in ■ BIPRU 14.4.3 R, a *firm* using the *IRB approach* may assign *PD* to *counterparties*, for which they have no other *non-trading book exposure*, on the basis of the counterparty's external rating.

(2) A *firm* using own estimates of *LGDs* may apply the *LGD* set out in ■ BIPRU 4.4.34 R to ■ BIPRU 4.4.35 R■ BIPRU 4.4.35 R (IRB foundation approach: LGDs) to *free delivery exposures* treated according to column 3 of the table in ■ BIPRU 14.4.3 R, provided that it applies it to all such *exposures*.

(3) Alternatively, a *firm* using the *IRB approach* may apply the *risk weights*, as set out in the *standardised approach* to credit risk provided that it applies them to all such *exposures* or may apply a 100% *risk weight* to all such *exposures*.

[**Note**: *CAD* Annex II point 3 (part)]

14.4.6 R

If the amount of positive *exposure* resulting from *free delivery* transactions is not material, a *firm* may apply a *risk weight* of 100% to these *exposures*.

14.4.7 G

In cases of a system wide failure of a settlement or clearing system, a *firm* should refer to the emergency provisions in ■ GEN 1.3. Where the requirements of ■ GEN 1.3.2 R are met, until the situation is rectified failure of a counterparty to settle a trade will not be deemed a default for purposes of credit risk.

[**Note**: *CAD* Annex II point 4]

The Prudential Sourcebook For Banks, Building Societies And Investment Firms

BIPRU TP 2
Capital floors for a firm using the IRB approach

		Application
2.1	R	Subject to *BIPRU* TP 2.2R, this section applies to a *BIPRU firm* that applies the *IRB approach*.
2.2	R	*BIPRU* TP 2.30R to *BIPRU* TP 2.34G apply to any *firm* to which BIPRU 8 (Group risk - consolidation) applies and which applies the *IRB approach* on a consolidated basis.
		Purpose
2.3	G	Pursuant to the third paragraph of article 95(2) of the *UK CRR*, this section in part applies requirements that correspond to Articles 152(1) - (7) of the *Banking Consolidation Directive* and Article 43 of the *Capital Adequacy Directive*.
2.4	G	The purpose of this section is to limit the amount of capital reduction arising from the application of the requirements that correspond to the *Banking Consolidation Directive* and the *Capital Adequacy Directive* compared with the requirements arising from the previous versions of those Directives. As such it is effectively a comparison of the capital resource requirements arising from *BIPRU* with those arising from the appropriate *IPRU* sourcebook that would have applied as at 31 December 2006. However the effect of changes to the market risk requirements is removed by requiring BIPRU 7 (Market risk) to be used for both sides of the comparison.
		How to apply the capital floors
2.5	G	This section does not require a *firm* to continue to have capital resources equal to a fixed percentage of the capital requirement that applied to it as at 31 December 2006. Instead a *firm* should apply the requirements in this section to its business as it changes over time. So for example if a *firm* is calculating its capital requirements as at 31 December 2008 it will have two calculations. The first is carried out under *BIPRU* and *GENPRU*. The second is carried out under *IPRU* and this section. Both sets of requirements are applied to the *firm's* figures as at 31 December 2008.
2.6	G	This section is intended as a floor on the *firm's* capital resources. This section is also written as a second capital resources requirement that sits beside the general capital resources requirements of *BIPRU* and *GENPRU*. The reason for this is that a

		firm should meet the general capital resources requirements of *BIPRU* and *GENPRU* using *capital resources* calculated under GENPRU 2.2 (Capital resources). On the other hand a *firm* should meet the capital resources requirements of this section (which are based on *IPRU*) using the relevant *IPRU* definition. In practice the two sets of definitions of capital resources are similar apart from the provisions about *expected loss*. Therefore as shown by the example in *BIPRU* TP 2.12G and *BIPRU* TP 2.13G, in practice a *firm* is subject to a single capital resources requirement.
2.7	G	[deleted]
		Capital floors: solo
2.8	R	A *firm* calculating *risk weighted exposure amounts* in accordance with the *IRB approach* must during the following twelve-month periods after 31 December 2006 provide capital resources that equal or exceed the following amounts: (1) for the first twelve-month period, 95%; (2) for the second twelve-month period, 90%; and (3) for the third and each subsequent twelve-month period, 80%; of the solo capital resources requirement that applies to the *firm* under whichever part of *IPRU* applies under *BIPRU* TP 1.4R.
2.9	R	[deleted]
		Capital resources: solo
2.10	R	A *firm* must calculate its capital resources in accordance with whichever part of *IPRU* applies under *BIPRU* TP 1.4R.
2.11	R	Compliance with the requirements of this section must be on the basis of amounts of capital resources fully adjusted to reflect differences in the calculation of capital resources under *IPRU* and the calculation of *capital resources* under *GENPRU* and *BIPRU* deriving from the separate treatments of *expected loss* and unexpected *loss* under the *IRB approach*.
		Waiver from IPRU capital resources requirement
2.11A	G	The *appropriate regulator* may waive the capital floor calculation based on the *IPRU* capital resources requirement in *BIPRU* TP 2.8R(3) on a case-by-case basis only if a *firm* started to use the *IRB approach* on or after 1 January 2010. The *appropriate regulator* will consider an application for such a *waiver* in the light of the criteria in section 138A of the *Act* (Modification or waiver of rules). [**Note:** *BCD* Annex VII part 1 point 152]

2.11B	R	If a *firm* has a *waiver* referred to in *BIPRU* TP 2.11AG, it must provide *capital resources* that equal or exceed 80% of the *capital resources requirement* that the *firm* would be required to provide under the relevant sections of *BIPRU* applicable to it immediately before it started to use the *IRB approach* as those sections were in force on 31 December 2010.
2.12	G	[deleted]
2.13	G	[deleted]
		Adjustments to the calculation of capital resources
2.14	R	A *firm* may treat any *capital instrument* that complies with the requirements of GENPRU 2.2 (Capital resources) as complying with the corresponding requirements of *IPRU*.
2.15	G	An example of *BIPRU* TP 2.14R is that a *firm* may treat subordinated debt with a term of five years or over that qualifies as *lower tier two capital* for the purposes of *GENPRU* as complying with the corresponding provisions for five year subordinated debt under *IPRU*.
		Market risk
2.16	R	A *firm* must substitute the requirements in *BIPRU* for the calculation of the *market risk capital requirement* (excluding those provisions to the extent that they would involve using the *IRB approach*) for the corresponding provisions of *IPRU*.
2.17	G	BIPRU TP 4 to BIPRU TP 9 (Pre CRD capital requirements applying on a solo basis during 2007) explain which parts of *IPRU* correspond to the *market risk capital requirement*.
		CAD 1 model and VaR model
2.18	R	If a *firm* has a CAD 1 permission or a *VaR model permission* it must also use it for the purposes of the capital floor calculations in this section.
2.19	G	In applying *BIPRU* TP 2.18R, a *firm* should not adjust the CAD 1 permission approach or *VaR model approach* (including the scope of the CAD 1 permission or *VaR model permission*) so that it is consistent with Directive 93/6 (the Capital Adequacy Directive) as it stood on 31 December 2006.
		Individual capital guidance
2.20	R	[deleted]
2.21	G	Any further capital resource requirements that a *firm* is required to meet under GENPRU 1.2 (Adequacy of financial resources) (i.e. Pillar 2) should not be taken into account.
		How to apply IPRU
2.22	R	If the part of *IPRU* that applies to a *firm* applies different calculations to different types of *firm* the *firm* must use the calculations that it would have to use under BIPRU TP 3 (Pre CRD capital re-

		quirements applying on a solo basis during 2007) as applicable before its expiry.
2.23	R	If the part of *IPRU* that applies to a *firm* gives the *firm* a choice between methods of calculating capital resources or capital resources requirements it must exercise that choice consistently with the corresponding choices it makes in calculating *capital resources* or *capital resources requirement* under *GENPRU* and *BIPRU*.
2.24	G	BIPRU TP 4 to BIPRU TP 9 (Pre CRD capital requirements applying on a solo basis during 2007) as applicable before their expiry explain how concepts in *IPRU* and *GENPRU* map onto the ones in *IPRU*. This will enable a *firm* to decide which calculations it should use for the purposes of *BIPRU* TP 2.22R and *BIPRU* TP 2.23R.
2.25	G	[deleted]
2.26	R	[deleted]
2.27	G	[deleted]
2.28	R	The calculations under this section do not take into account the *base capital resources requirement* or the part of the *IPRU* solo capital resources requirement that corresponds to the *base capital resources requirement*.
		Solo consolidation
2.29	R	If a *firm* has a *solo consolidation waiver* it also applies for the purpose of this section in place of any corresponding provision of *IPRU*.
		Capital floors: consolidation
2.30	R	If a *firm* calculates *risk weighted exposure amounts* on a consolidated basis in accordance with the *IRB approach* on a consolidated basis, *BIPRU* TP 2.8R to *BIPRU* TP 2.27G apply on a consolidated basis in accordance with *BIPRU* TP 2.30R to *BIPRU* TP 2.31R.
2.31	R	A *firm* must calculate the consolidation requirements under *BIPRU* TP 2.30R for the group in question (the group in question is specified in *BIPRU* TP 2.32R) in accordance with the following: (1) [deleted] (2) [deleted] (3) if the group is an investment firm group as defined in *BIPRU* TP 1.7R, chapter 14 of *IPRU(INV)* applies.
2.32	R	The scope of the consolidation under *BIPRU* TP 2.30R and any exemption from consolidation is determined in accordance with BIPRU 8 (Group

		risk - consolidation) rather than *IPRU*. In particular, the following adjustments apply: (1) if a *firm* is a member of a *UK consolidation group* and applies the *IRB approach* with respect to that *UK consolidation group*, *BIPRU* TP 2.30R applies with respect to that *UK consolidation group*; and (2) if a *firm* is a member of a *non-UK sub-group* and applies the *IRB approach* with respect to that *non-UK sub-group*, *BIPRU* TP 2.30R applies with respect to that *non-UK sub-group*.
2.33	G	If for example the consolidation *rules* that apply for the purposes of this section are those in chapter 14 of *IPRU(INV)* (Consolidated supervision of *investment firms*) then *IPRU(INV)* 14.1 (Application) and 14.2 (Scope of consolidation) do not apply. BIPRU 8.2 (Scope and basic consolidation requirements for UK consolidation groups), BIPRU 8.3 (Scope and basic consolidation requirements for *non-UK sub-groups*), BIPRU 8.4 (CAD Article 22 groups and investment firm consolidation waiver) and BIPRU 8.5 (Basis of consolidation) apply instead.
		Capital floors: waiver from consolidation
2.34	G	If a *firm* has an *investment firm consolidation waiver* and it is applying the *IRB approach*, the *waiver* will explain how the *investment firm consolidation waiver* applies for the purpose of this section.

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BIPRU TP 15
Commodities firm transitionals: Exemption from capital requirements

		Application
15.1	R	Subject to *BIPRU* TP 15.2R, BIPRU TP 15 applies to a*BIPRU firm*: (1) whose main business consists exclusively of the provision of investment services or investment activities in relation to the financial instruments set out in paragraphs 5, 6, 7, 9 and 10 of Part 1 of Schedule 2 to the *Regulated Activities Order*; and (2) to whom the *ISD* would not have applied if it had remained in force in the form it was in on 31 December 2006.
15.2	R	*BIPRU* TP 15.13R to *BIPRU* TP 15.14G apply to any *firm* to which BIPRU 8 (Group risk - consolidation) applies.
		Purpose
15.3	G	BIPRU TP 15 applies requirements that correspond to Article 48(1) of the *Capital Adequacy Directive* as applied pursuant to the discretion in the third paragraph of article 95(2) of the *UK CRR*.
		Duration of exemption
15.4	R	BIPRU TP 15 applies until the entry into force of any amendments to BIPRU TP 15 under any legislative amendments to *CRD* and *UK CRR* following from the Commission's report under article 508(3) of the *UK CRR* on an appropriate prudential regime for the prudential supervision of investment *firms* and *firms* referred to in article 4(1)(2)(b) and (c) of the *UK CRR*.
15.5	G	[deleted]
		Exemption
15.6	R	The provisions of *GENPRU* and *BIPRU* on capital requirements and GENPRU 1.2 (Adequacy of financial resources) do not apply to a *firm* to which BIPRU TP 15 applies.
15.7	G	[deleted]
15.8	G	An *exempt BIPRU commodities firm* (which is the name in the *Glossary* given to a *firm* with the benefit of the exemption in *BIPRU* TP 15.6R) may be subject to the requirements of Chapter 3 of *IPRU(INV)*. Details of which *exempt BIPRU commodities firm* are subject to those requirements can be found in Chapter 3 of *IPRU(INV)*.

15.9	G	The table in *BIPRU* TP 15.10G provides an indication of which parts of *GENPRU* and *BIPRU* generally apply to an *exempt BIPRU commodities firm* and which parts in general do not apply. If a section is shown as not in general applying the table also identifies any significant aspects of that section that do apply.

15.10	G	Table: Parts of GENPRU and BIPRU that apply to exempt BIPRU commodities firms This table belongs to *BIPRU* TP 15.9G

GENPRU and *BIPRU* provisions	A Y denotes that the provision generally does apply An N denotes that generally it does not apply	Remarks
GENPRU TP (Transitional provisions)	Y	
GENPRU 1.1 (Application and scope)	Y	
GENPRU 1.2 (Adequacy of financial resources)	N	
GENPRU 1.3 (Valuation)	Y	
GENPRU 1.4 (Actions for damages)	Y	
GENPRU 1.5 (Application of GENPRU 1 to Lloyd's)	Not applicable as does not apply to *BIPRU firms*	
GENPRU 2.1 (Calculation of capital resources requirements)	N	
GENPRU 2.2 (Capital resources)	N	
GENPRU 2.3 (Application of GENPRU 2 to Lloyd's)	Not applicable as does not apply to *BIPRU firms*	
GENPRU 3.1 (Cross sector groups)	Y	Only applies if the *firm* is a member of a *financial conglomerate*
GENPRU 3.2 (Third-country groups)	Y	Provisions about *financial conglomerate* only apply if the *firm* is a member of a *financial conglomerate* See remarks on BIPRU 8 for provisions about a *third-country banking and investment group*
BIPRU TP (Transitional provisions)	Y	
BIPRU 1.1 (Application and scope)	Y	
BIPRU 1.2 (Definition of the trading book)	Y	
BIPRU 1.3 (Application for advanced approaches)	N	Provisions about BIPRU 2.1 and BIPRU 8 apply to the extent those parts of *BIPRU* apply. Otherwise does not apply.
BIPRU 1.4 (Actions for damages)	Y	
BIPRU 2.1 (Solo consolidation)	N	

GENPRU and *BIPRU* provisions	A Y denotes that the provision generally does apply An N denotes that generally it does not apply	Remarks
BIPRU 2.2 (Adequacy of financial resources)	N	
BIPRU 2.3 (Interest rate risk in the non-trading book)	N	
BIPRU 3 (Standardised approach to credit risk)	N	
BIPRU 4 (The IRB approach)	N	
BIPRU 5 (Credit risk mitigation)	N	
BIPRU 6 (Operational risk)	N	
BIPRU 7 (Market risk)	N	BIPRU 7.8.38 R and BIPRU 7.3.39 R (Risk management systems and controls) apply in theory although it is unlikely that a *firm* will be able to carry out these activities without losing the exemption in BIPRU TP 15.
BIPRU 8 (Group risk - consolidation)	Y	See *BIPRU* TP 15.13R to *BIPRU* TP 15.14G
BIPRU 9 (Securitisation)	N	*BIPRU* 9.1.6R to *BIPRU* 9.1.8G (Risk systems) apply
BIPRU 11 (Disclosure)	Y	
BIPRU 12	Chapter does not yet exist	
BIPRU 13 (Financial derivatives, SFTs and long settlement transactions)	N	
BIPRU 14 (Capital requirements for settlement and counterparty risk)	N	

15.11	G	*SYSC* applies to an *exempt BIPRU commodities firm*.	
		Definitions	
15.12	R	The terms financial instrument, investment services and investment activities have the same meaning as they do in the *MIFID*.	
		Consolidation	
15.13	R	BIPRU TP 15 does not apply for the purposes of BIPRU 8 with respect to a *firm's UK consolidation group* or, as the case may be, *non-UK sub-group* unless the following conditions are satisfied:	
		(1)	there is no *credit institution* in that group;
		(2)	each CAD investment firm in the group meets the conditions in *BIPRU* TP 15.1R(1); and
		(3)	[deleted]
		(4)	any CAD investment firm whose head office is outside the *UK* would have fallen into *BIPRU* TP 15.1R(2) if:

		(a)	its head office had been in an the *UK*; and
		(b)	it had carried on all its business in the *UK* and had obtained whatever authorisations for doing so were required under the *ISD* in the form that Directive was in on 31 December 2006.
15.14	G	If an *exempt BIPRU commodities firm* is a member of a group that meets the conditions in *BIPRU* TP 15.13R, BIPRU 8 will not apply to the group. Chapter 14 of IPRU(INV) (Consolidation) applies instead.	

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BIPRU TP 21
Close substitutes for commodities

		Application
21.1	R	This section applies to a *BIPRU firm* that on 31 December 2006 was applying the approach referred to in the first column of the table in *BIPRU* TP 21.3R with respect to particular grades or brands of the same *commodity*-class.
		Commodities: close substitutes
21.2	R	A notice given under the *IPRU* provision in the second column of the table in *BIPRU* TP 21.3R is treated as having been given under BIPRU 7.4.23 R (Notice to the *appropriate regulator* about treatment of different grades or brands of the same *commodity*) for the purposes of BIPRU 7.4.22 R (Treatment of different grades or brands of the same *commodity*) with respect to the *commodity* grades or brands referred to in *BIPRU* TP 21.1R.
21.3	R	Table: Commodity treatments under IPRU This table belongs to *BIPRU* TP 21.2R

IPRU provisions setting out *commodity* approach	*IPRU* provisions under which notice given
Paragraph 22(2) of appendix 6 of chapter 10 of *IPRU(INV)*	Paragraph 23 of appendix 6 of chapter 10 of *IPRU(INV)*
[deleted]	

		Explanation
21.4	G	BIPRU 7.4.22 R (1)(b) says that a *firm* should treat *positions* in different grades or brands of the same *commodity*-class as different *commodities* unless they are close substitutes and have price movements which have exhibited a stable correlation coefficient of at least 0.9 over the last

12 months. BIPRU 7.4.23 R says that a *firm* should notify the*FCA* in writing at least 20 *business days* prior to the date the *firm* starts relying on this treatment. The purpose of this section is to allow a notice given under the corresponding provisions of chapter 10 of *IPRU(INV)* to continue to have effect without the *firm* having to serve a new notice under BIPRU 7.4.23 R.

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BIPRU TP 29
Liquid assets buffer scalar: simplified ILAS BIPRU firms

Application		
29.1	R	[deleted]
Duration of transitional provisions		
29.2	R	[deleted]
Transitional provisions		
29.3	R	[deleted]
29.4	G	[deleted]
29.5	G	[deleted]

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Schedule 3
Fees and other requirement payments

Sch 3 G

There are no requirements for fees or other payments in *BIPRU*.

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Schedule 4
Powers exercised

4.1 G
[deleted]

Sch 4.2 G
[deleted]

Sch 4.3 G
[deleted]

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Schedule 5
Rights of action for damages

Sch 5 G

1. The table below sets out the rules in *BIPRU* contravention of which by an *authorised person* may be actionable under section 138D of the *Act* (Actions for damages) by a person who suffers loss as a result of the contravention.

2. If a "Yes" appears in the column headed "For private person", the rule may be actionable by a private person under section 138D (or, in certain circumstances, his fiduciary or representative; see article 6(2) and (3)(c) of the Financial Services and Markets Act 2000 (Rights of Action) Regulations 2001 (SI 2001/2256)). A "Yes" in the column headed "Removed" indicates that the *appropriate regulator* has removed the right of action under section 138D(3) of the Act. If so, a reference to the rule in which it is removed is also given.

3. The column headed "For other person" indicates whether the rule may be actionable by a person other than a private person (or his fiduciary or representative) under article 6(2) and (3) of those Regulations. If so, an indication of the type of person by whom the rule may be actionable is given.

		Right of action under section 138D		
Chapter/ Appendix	Section/Annex	For private person	Removed	For other person
All *rules* in *BIPRU*		No	Yes - BIPRU 1.4.1 R	No

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Schedule 6
Rules than can be waived

Sch 6 G

The rules in *BIPRU* may be waived by the *appropriate regulator* under section 138A of the *Act* (Modification or waiver of rules).