

Chapter 4

The IRB approach

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 *EU CRR*, ■ BIPRU 4 implements 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 *EU CRR*, ■ BIPRU 4 also implements Annex VIII of the *Banking Consolidation Directive* so far as it applies to the *IRB approach*. In particular, it implements (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 implements 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 the *Banking Consolidation Directive*.

- 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. However any differences will only be allowed if they are compliant with 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,

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) (in the case of *collateral* that is only eligible for recognition under paragraph 21 of Part 1 of Annex VIII of the *Banking Consolidation Directive* (Other physical collateral)) 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*.

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.