

## Chapter 4

# Own funds requirements

4.1Application

- 4.1.1R
- This chapter applies to:

(1) a MIFIDPRU investment firm; and

(2) a UK parent entity that is required by MIFIDPRU 2.5.7R to comply with MIFIDPRU 4 on the basis of its consolidated situation.
- 4.1.2R
- Where this chapter applies to a UK parent entity under MIFIDPRU 4.1.1R(2), it applies with the following modifications:

(1) MIFIDPRU 4.2.1R (Initial capital requirement) does not apply; and

(2) any reference to a "firm" or "MIFIDPRU investment firm" in this chapter is to the hypothetical single MIFIDPRU investment firm created under the consolidated situation.
- 4.1.3G
- MIFIDPRU 2.5 contains additional guidance on how a UK parent entity should apply the requirements in this chapter on a consolidated basis.

## 4.2 Initial capital requirement

### 4.2.1

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- (1) At the point at which a *firm* is first authorised as a *MIFIDPRU investment firm*, it must hold *initial capital* of not less than the amount in (2).
- (2) The relevant amount is the *permanent minimum capital requirement* that would apply if the *firm* had been granted the *permissions* that it has requested in its application for *authorisation*.

### 4.2.2

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- (1) The initial capital requirement in ■ MIFIDPRU 4.2.1R applies only at the point at which the FCA first grants *permission* to a *MIFIDPRU investment firm* to carry on *investment services and/or activities*. After a *firm* has been authorised as a *MIFIDPRU investment firm*, the *permanent minimum capital requirement* applies on an ongoing basis instead.
- (2) Where a *MIFIDPRU investment firm* applies to vary its *permissions* to add new *investment services and/or activities* that would result in an increase in its *permanent minimum capital requirement*, the FCA would generally expect to refuse the application unless the *firm* demonstrates that it can comply with the new *permanent minimum capital requirement*.
- (3) The FCA's approach to the application of the initial capital requirement under *MIFIDPRU* is based on the existence of the *permanent minimum capital requirement* for *MIFIDPRU investment firms*. For the avoidance of doubt, this *guidance* does not affect the FCA's approach to whether the initial capital requirement under another prudential sourcebook applies on an ongoing basis.

4.3 Own funds requirement

4.3.1 **R** A MIFIDPRU investment firm must at all times maintain *own funds* that are at least equal to its *own funds requirement*.

4.3.2 **R** The *own funds requirement* of a non-SNI MIFIDPRU investment firm is the highest of:

- (1) its *permanent minimum capital requirement* under ■ MIFIDPRU 4.4;
- (2) its *fixed overheads requirement* under ■ MIFIDPRU 4.5; or
- (3) its *K-factor requirement* under ■ MIFIDPRU 4.6.

4.3.3 **R** The *own funds requirement* of an SNI MIFIDPRU investment firm is the higher of:

- (1) its *permanent minimum capital requirement* under ■ MIFIDPRU 4.4; or
- (2) its *fixed overheads requirement* under ■ MIFIDPRU 4.5.

## 4.4 Permanent minimum capital requirement

- 4.4.1** R
- (1) Where a MIFIDPRU investment firm has permission to carry on any of the *investment services and/or activities* in (2), its *permanent minimum capital requirement* is £750,000, unless MIFIDPRU 4.4.6R applies.
  - (2) The relevant *investment services and/or activities* are:
    - (a) *dealing on own account*;
    - (b) underwriting of *financial instruments* and/or placing of *financial instruments* on a firm commitment basis; or
    - (c) *operating an organised trading facility*, if the firm is not subject to a *limitation* that prevents it from carrying on the activities otherwise permitted by MAR 5A.3.5R.
  - (3) Where a MIFIDPRU investment firm is appointed to act as a *depository* of an *unauthorised AIF* in accordance with FUND 3.11.10R(2), its *permanent minimum capital requirement* is £750,000, unless MIFIDPRU 4.4.6R applies.
- 4.4.2** G
- (1) Under MAR 5A.3.5R (Proprietary trading), a firm that has permission to operate an *organised trading facility* may deal on own account in the following ways without requiring separate permissions for *dealing on own account*:
    - (a) *matched principal trading* in the course of operating the OTF; or
    - (b) *dealing on own account* in relation to *sovereign debt instruments* for which there is no liquid market.
  - (2) A firm that is *operating an organised trading facility* and does not wish to carry on the activities in (1) may apply to the FCA under section 55H of the Act for a *limitation* that prohibits the firm from carrying on the activities on the basis of that *permission*.
  - (3) The effect of MIFIDPRU 4.4.1R(2)(c) is that if a firm is *operating an organised trading facility* and is not subject to the *limitation* described in (2), the firm's *permanent minimum capital requirement* is £750,000.
- 4.4.3** R
- (1) Where a MIFIDPRU investment firm satisfies the conditions in (2), its *permanent minimum capital requirement* is £150,000.

## 4.4.4

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- (2) The relevant conditions are:
- (a) the *firm* has *permission* for any of the following:
    - (i) *operating a multilateral trading facility*;
    - (ii) *operating an organised trading facility*, if the *firm* is subject to a *limitation* that prevents it from carrying on the activities otherwise permitted by ■ MAR 5A.3.5R;
    - (iii) holding *client money* or *client assets* in the course of *MiFID business*;
  - (b) the *firm* does not have *permission* for any of the following:
    - (i) *dealing on own account*;
    - (ii) underwriting of *financial instruments* and/or placing of *financial instruments* on a firm commitment basis;
    - (iii) *operating an organised trading facility*, if the *firm* is not subject to a *limitation* that prevents it from carrying on the activities otherwise permitted by ■ MAR 5A.3.5R; and
  - (c) the *firm* is not appointed to act as a *depository* in accordance with ■ FUND 3.11.10R(2) or ■ COLL 6.6A.8R(3)(b)(i).

(1) Where a *MIFIDPRU investment firm* satisfies the conditions in (2), its *permanent minimum capital requirement* is £75,000.

(2) The relevant conditions are:

- (a) the only *investment services and/or activities* that the *firm* has *permission* to carry on are one or more of the following:
  - (i) reception and transmission of orders in relation to one or more *financial instruments*;
  - (ii) *execution of orders on behalf of clients*;
  - (iii) *portfolio management*;
  - (iv) *investment advice*; or
  - (v) placing of *financial instruments* without a firm commitment basis; and
- (b) the *firm* is not permitted to hold *client money* or *client assets* in the course of *MiFID business*; and
- (c) the *firm* is not appointed to act as a *depository* in accordance with ■ FUND 3.11.10R(2) or ■ COLL 6.6A.8R(3)(b)(i).

## 4.4.5

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The relevant *permanent minimum capital requirement* under this section applies to a *collective portfolio management investment firm* in parallel with its *base own funds requirement* under ■ IPRU-INV 11. This means that a *collective portfolio management investment firm* must comply with both requirements, but they are not cumulative.

## 4.4.6

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Where a *MIFIDPRU investment firm* is appointed to act as the *depository* of a *UK UCITS* or an *authorised AIF*, its *permanent minimum capital requirement* is £4 million.

## 4.5 Fixed overheads requirement

- 4.5.1** **R**
- (1) The *fixed overheads requirement* of a MIFIDPRU investment firm is an amount equal to one quarter of the *firm's relevant expenditure* during the preceding year.
  - (2) When calculating its *fixed overheads requirement* in (1), a *firm* must use the figures resulting from the accounting framework applied by the *firm* in accordance with ■ MIFIDPRU 4.5.2R.
  - (3) This rule is subject to ■ MIFIDPRU 4.5.7R and ■ MIFIDPRU 4.5.9R.
- 4.5.2** **R**
- (1) For the purposes of the calculation in ■ MIFIDPRU 4.5.1R, a *firm* must use the figures in its most recent:
    - (a) audited *annual financial statements*; or
    - (b) unaudited *annual financial statements*, where audited financial statements are not available.
  - (2) If a *firm* has used unaudited *annual financial statements* in accordance with (1)(b) and audited *annual financial statements* subsequently become available, the *firm* must update the calculation in ■ MIFIDPRU 4.5.1R using the audited figures.
  - (3) Where the financial statements in (1) do not cover a 12-month period, the *firm* must:
    - (a) divide the amounts included in those statements by the number of *months* the financial statements cover; and
    - (b) multiply the result of the calculation in (a) by 12 to produce an equivalent annual amount.
- 4.5.3** **R**
- (1) For the purpose of ■ MIFIDPRU 4.5.1R(1), a *firm* must calculate its *relevant expenditure* by:
    - (a) calculating the *firm's* total expenditure before distribution of profits; and
    - (b) deducting any of the items in (2) from the total expenditure in (1)(a) to the extent that those items have been included in the expenditure.
  - (2) The items that a *firm* may deduct from its total expenditure are:
    - (a) any of the following, if they are fully discretionary:
      - (i) staff bonuses and other variable *remuneration*;

- (ii) *employees', directors', partners' and limited liability partnership members' shares in profits; and*
  - (iii) other appropriations of profits;
- (b) shared commission and fees payable that meet all of the following conditions:
  - (i) they are directly related to commission and fees receivable;
  - (ii) the commission and fees receivable are included within total revenue; and
  - (iii) the payment of the commission and fees payable is contingent on receipt of the commission and fees receivable;
- (c) fees paid to *tied agents*;
- (d) non-recurring expenses from non-ordinary activities;
- (e) unless ■ MIFIDPRU 4.5.4R applies, fees, brokerage and other charges paid to *central counterparties*, exchanges and other *trading venues* and intermediate brokers for the purposes of executing, registering and clearing transactions, provided that the fees, brokerage and charges are directly passed on and charged to customers;
- (f) 80% of the value of any fees, brokerage and other charges, excluding any fees or charges to which ■ MIFIDPRU 4.5.4R applies, paid to *central counterparties*, exchanges and other *trading venues* and intermediate brokers for the purposes of executing, registering and clearing transactions in relation to which:
  - (i) the *firm* is *dealing on own account*; and
  - (ii) the fees, brokerage or charges have not already been deducted under (e);
- (g) interest paid to customers on *client money*, where there is no obligation of any kind to pay the interest;
- (h) taxes where they fall due in relation to the annual profits of the *firm*;
- (i) losses from trading on own account in *financial instruments*;
- (j) payments related to contract-based profit and loss transfer agreements according to which the *firm* is obliged to transfer its annual profit to the *parent undertaking* following the preparation of the *firm's annual financial statements*;
- (k) payments into a fund for general banking risk in accordance with article 26(1)(f) of the *UK CRR*, as applied by ■ MIFIDPRU 3.3.1R; and
- (l) other expenses, to the extent that their value has already been reflected in a deduction from *own funds* under ■ MIFIDPRU 3.3.6R.

#### 4.5.4

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The deducted amounts in ■ MIFIDPRU 4.5.3R(2)(e) and ■ (f) must not include fees and other charges necessary to maintain membership of, or otherwise meet loss-sharing financial obligations to, central counterparties, exchanges and other trading venues.



### Additional deduction for commodity and emission allowance dealers

- 4.5.5** **R** In addition to the deductions in ■ MIFIDPRU 4.5.3R(2), a *commodity and emission allowance dealer* may deduct expenditure on raw materials in connection with the underlying commodity of the commodity derivatives the *firm* trades.

### Expenses incurred on behalf of the firm by third parties

- 4.5.6** **R**
- (1) A *firm* must add any fixed expenses that have been incurred on its behalf by a third party, including a *tied agent*, to the *firm's* total expenditure for the purposes of ■ MIFIDPRU 4.5.3R in accordance with this *rule*.
  - (2) A *firm* is not required to add fixed expenses incurred on its behalf by a third party to the *firm's* expenditure if the expenses are already included in the figures resulting from ■ MIFIDPRU 4.5.2R.
  - (3) Where a breakdown of the third party's expenses is available, the *firm* must add to the *firm's* total expenditure the share of the third party's expenses incurred on behalf of the *firm*.
  - (4) Where a breakdown of the third party's expenses is not available, the *firm* must:
    - (a) add to the *firm's* total expenditure the share of the third party's expenses incurred on behalf of the *firm* as projected in the *firm's* business plan; or
    - (b) if the *firm* does not have a business plan that projects the third party's expenses, reasonably estimate the share of those expenses that are attributable to the *firm's* business and add that estimated share of expenses to the *firm's* total expenditure.

### Material change to projected relevant expenditure during the year

- 4.5.7** **R**
- (1) This *rule* applies where there:
    - (a) is an increase of 30% or more in the *firm's* projected *relevant expenditure* for the current year; or
    - (b) would be an increase of £2 million or more in the *firm's* *fixed overheads requirement* based on projected *relevant expenditure* for the current year.
  - (2) Where this *rule* applies, a *firm* must:
    - (a) immediately recalculate its *fixed overheads requirement* by applying the methodology in ■ MIFIDPRU 4.5.3R to the projected *relevant expenditure*, taking into account the increase in (1);
    - (b) immediately substitute the revised *fixed overheads requirement* that results from the calculation in (a) for the *firm's* original *fixed overheads requirement* under ■ MIFIDPRU 4.5.1R(1); and
    - (c) immediately recalculate its *basic liquid assets requirement* using the revised *fixed overheads requirement* in (b) and substitute the updated amount for its original *basic liquid assets requirement*.

## 4.5.8

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- (1) Where there is a material increase in the *firm's* projected *relevant expenditure* that triggers the obligation in ■ MIFIDPRU 4.5.7R, a *firm* should also consider the potential impact on its *ICARA process* and the conclusions documented in its last *ICARA document*. In particular, the *firm* should consider any potential impact on:
  - (a) the *liquid assets* that the *firm* must hold to comply with ■ MIFIDPRU 6, as the requirements in that chapter are calibrated by reference to the *fixed overheads requirement*;
  - (b) the level of *own funds* and *liquid assets* that the *firm* must hold to comply with its obligations under ■ MIFIDPRU 7; and
  - (c) the calibration of the *firm's wind-down triggers*.
- (2) The review in (1) is particularly important if the *firm's own funds requirement* was determined by the *fixed overheads requirement* immediately before the change occurred.

## 4.5.9

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- (1) This *rule* applies where there:
  - (a) is a decrease of 30% or more in the *firm's* projected *relevant expenditure* for the current year; or
  - (b) would be a decrease of £2 million or more in the *firm's fixed overheads requirement* based on projected *relevant expenditure* for the current year.
- (2) Where this *rule* applies, a *firm* may:
  - (a) recalculate its *fixed overheads requirement* by applying the methodology in ■ MIFIDPRU 4.5.3R to the projected *relevant expenditure*, taking into account the decrease in (1); and
  - (b) if it has obtained prior permission from the *FCA*, substitute the revised *fixed overheads requirement* that results from the calculation in (a) for the *firm's* original *fixed overheads requirement* under ■ MIFIDPRU 4.5.1R.
- (3) To obtain the permission in (2), a *firm* must:
  - (a) complete the application form in ■ MIFIDPRU 4 Annex 11R and submit it to the *FCA* in accordance with the instructions on that form;
  - (b) demonstrate all of the following:
    - (i) that one of the conditions in (1)(a) or (b) is met and the projected reduction in the *firm's relevant expenditure* is a reasonable projection;
    - (ii) that the *firm* has adequately considered the impact of the reduction on the *firm's ICARA process* and the conclusions documented in the *firm's last ICARA document*; and
    - (iii) that there is a reasonable basis to conclude that, following the reduction in the *firm's fixed overheads requirement*, the *firm* will continue to hold sufficient *own funds* and *liquid assets* to comply with its obligations under ■ MIFIDPRU 7.

## 4.5.10

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- (1) Under ■ MIFIDPRU 4.5.1R, a *MIFIDPRU investment firm* is required to calculate its *fixed overheads requirement* based on its relevant

expenditure as set out in its *annual financial statements* for the previous year.

- (2) Under ■ MIFIDPRU 4.5.7R, if there is a material increase in the *firm's* projected *relevant expenditure* for the current year, the *firm* must recalculate its *fixed overheads requirement* on the basis of the projected increased *relevant expenditure*, taking into account the impact of that change.
- (3) However, under ■ MIFIDPRU 4.5.9R, if there is a material change that results in a decrease in the *firm's* projected *relevant expenditure* for the current year, the *firm* must obtain permission from the FCA before substituting a reduced *fixed overheads requirement* calculated on the basis of the projected decrease.
- (4) In many cases, a material change of the type specified in ■ MIFIDPRU 4.5.7R(1) or ■ MIFIDPRU 4.5.9R(1) would result from planned changes to the *firm's* business. Examples of these changes may include:
  - (a) starting or ceasing a major business line;
  - (b) acquiring or disposing of a major business; or
  - (c) undertaking a significant investment, upgrade or restructuring programme.

A *firm* that is planning to implement a material change to its business should calculate the anticipated impact of that change on its *fixed overheads requirement* (and its broader *own funds requirement*) before executing the relevant change. This should include considering the potential impact on its *ICARA process* and its obligations under ■ MIFIDPRU 7.

**Firms that have been providing investment services and/or activities for less than one year**

4.5.11 **R**

- (1) This *rule* applies where a *firm* has been in business for less than one year.
- (2) For the purposes of the calculation in ■ MIFIDPRU 4.5.1R, a *firm* must use the *relevant expenditure* included in its projections for the first 12 *months' trading*, as submitted in its application for *authorisation*.

## 4.6 Overall K-factor requirement

### 4.6.1

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The *K-factor requirement* of a *MIFIDPRU investment firm* is the sum of each of the following that apply to the *firm*:

- (1) *K-AUM requirement*;
- (2) *K-CMH requirement*;
- (3) *K-ASA requirement*;
- (4) *K-COH requirement*;
- (5) *K-NPR requirement*;
- (6) *K-CMG requirement*;
- (7) *K-TCD requirement*;
- (8) *K-DTF requirement*; and
- (9) *K-CON requirement*.

### 4.6.2

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- (1) The *rules* and *guidance* in ■ MIFIDPRU 4.7 to ■ MIFIDPRU 4.16 explain how a *MIFIDPRU investment firm* should calculate each component of its overall *K-factor requirement*.
- (2) The manner in which *firms* carry on activities that are potentially relevant to one or more *K-factor metrics* may vary considerably. It is not practical for the *FCA* to give an exhaustive set of *rules* and *guidance* covering every conceivable business arrangement that *firms* may operate when carrying on such activities.
- (3) If a *firm* is unsure whether a particular arrangement is within scope of one or more components of the *K-factor requirement*, the *FCA* expects the *firm* to apply a purposive approach to the interpretation of the requirement, as required by ■ GEN 2.2.1R. Among other factors, the *FCA* would therefore expect the *firm* to consider:
  - (a) whether the arrangement is sufficiently analogous to another arrangement that is clearly covered by any *rules* or associated *guidance*;
  - (b) the risks that the relevant component of the *K-factor requirement* is designed to address and whether the same or similar risks arise in relation to the arrangement in question; and

- (c) where the component of the *K-factor requirement* is calculated by reference to a specific *investment service and/or activity*, the approach that the *firm* has adopted to applying other *rules* or *guidance* elsewhere in the *Handbook* to the arrangement, where those *rules* or *guidance* refer to the same *investment service and/or activity*.
- (4) The *FCA* expects that if asked, a *firm* will be able to justify the approach that the *firm* has taken to applying the *K-factor requirement* to a particular activity.
- (5) *MIFIDPRU investment firms* are reminded that even if an activity does not contribute towards the *K-factor requirement*, they should still consider, in accordance with the requirements in ■ MIFIDPRU 7, whether that activity may give rise to potential material risks of harm or may be relevant to the *firm's* wind-down analysis.

4.7K-AUM requirement

- 4.7.1R
- The *K-AUM requirement* of a *MIFIDPRU investment firm* is equal to 0.02% of the *firm's average AUM*.
- 4.7.2R
- When measuring its *AUM*, a *MIFIDPRU investment firm* must include any amounts that relate to the *MiFID business* of the *firm* that is carried on by any *tied agents* acting on its behalf.
- 4.7.3G
- The definition of *AUM* does not include any amounts arising from the *firm's* provision of the *ancillary service* in paragraph 3 of Part 3A of Schedule 2 to the *Regulated Activities Order* (i.e. providing advice to undertakings on capital structure, industrial strategy and related matters and advice and services relating to mergers and the purchase of undertakings).
- 4.7.4R
- A *firm* must calculate its *K-AUM requirement* on the first *business day* of each *month*.
- 4.7.5R
- (1) A *firm* must calculate the amount of its *average AUM* by:

(a) taking the total *AUM* as measured on the last *business day* of each of the previous 15 *months*;

(b) excluding the 3 most recent monthly values; and

(c) calculating the arithmetic mean of the remaining 12 monthly values.

(2) When measuring the value of its *AUM* on the last *business day* of each *month*, a *firm* must convert any amounts in foreign currencies on that date into the *firm's* functional currency.

(3) For the purposes of the currency conversion in (2), a *firm* must:

(a) determine the conversion rate by reference to an appropriate market rate; and

(b) record the rate used.

4.7.6G

(1) The effect of ■ MIFIDPRU 4.7.5R(2) is that when measuring the value of *AUM* at the end of each *month*, a *firm* must apply the relevant conversion rate on that date to the *AUM* attributable to that *month*. The *AUM* for each relevant preceding *month* should continue to be
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measured by reference to the conversion rate that was applicable at the end of that particular preceding *month*.

- (2) For purposes of ■ MIFIDPRU 4.7.5R(3), where a *firm* is carrying out a conversion that involves sterling, the *FCA* considers that an example of an appropriate market rate is the relevant daily spot exchange rate against sterling published by the Bank of England.

## 4.7.7

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- (1) When measuring the amount of its *AUM*, a *firm* must:
  - (a) where available, use the market value of the relevant assets;
  - (b) where a market value is not available for an asset, use an alternative measure of fair value, which may include an estimated value calculated on a best efforts basis;
  - (c) exclude any amounts that are included in the *firm's* calculation of its *CMH*.
- (2) When measuring the amount of its *AUM*, a *firm* may offset any negative values or liabilities attributable to positions within the relevant portfolios, so that *AUM* is equal to the net total value of the relevant assets.

## 4.7.8

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Where the *firm* has delegated the management of assets to another entity, the *firm* must include the value of those assets in its measurement of *AUM*.

## 4.7.9

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- (1) Subject to (2), where a *financial entity* has formally delegated the management of assets to the *firm*, the *firm* may exclude the value of those assets from its measurement of *AUM*.
- (2) The exclusion in (1) does not apply if the *financial entity* has excluded the relevant assets from the *financial entity's* calculation of its own capital requirements because the *financial entity* is also acting as a delegated manager.
- (3) For the purposes of (1), formal delegation requires a legally binding agreement between the *financial entity* and the *firm* that sets out the rights and obligations of each party in relation to the delegation of the relevant *portfolio management* activities.

## 4.7.10

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- (1) ■ MIFIDPRU 4.7.8R and ■ MIFIDPRU 4.7.9R apply where one entity delegates management of assets to another entity. For these purposes, delegation involves a delegating entity ("A") assuming a duty to the relevant *client* to manage the assets, and A then delegating the performance of that duty (in whole or in part) to another entity ("B").
- (2) The following are not delegation for the purposes of ■ MIFIDPRU 4.7.8R or ■ MIFIDPRU 4.7.9R:
  - (a) where A only arranges for B to provide a service directly to a *client*, so that B owes a duty directly to the *client* to manage the assets and A does not; or



- (b) where A advises a *client* to use B's management services for the *client's* assets, but A does not assume any responsibility to the *client* for managing the assets.
- (3) ■ MIFIDPRU 4.7.8R states that a *MIFIDPRU investment firm* cannot reduce its *AUM* by delegating management of assets to another entity. This is because the *firm* will normally continue to owe a duty directly to the *client*, even if performance of that duty has been delegated (wholly or partly) to another entity.
- (4) However, ■ MIFIDPRU 4.7.9R(1) permits a *firm* to which the management of assets has been formally delegated to exclude the value of the assets when measuring its *AUM* if the delegating entity is a *financial entity*. However, if the delegation does not meet the requirements to be a formal delegation, the *firm* may not exclude the relevant assets from its measurement of *AUM*. The definition of a *financial entity* covers:
  - (a) entities that are subject to an AUM-based capital requirement that is similar to the *K-AUM requirement*;
  - (b) an *insurance undertaking* that forms part of the same *financial conglomerate* as the *firm* if the *FCA* is the coordinator for that *financial conglomerate*; and
  - (c) an *undertaking* that is part of the same *investment firm group* as the *firm*, provided that the *investment firm group* is subject to prudential consolidation under ■ MIFIDPRU 2.5 and both entities are included within the resulting *consolidated situation* of the *UK parent entity* of that *investment firm group*.
- (5) ■ MIFIDPRU 4.7.9R(1) is a limited exclusion that applies where assets under management have been delegated to the *firm* by a *financial entity*. This reflects the fact that the *financial entity* will either have a minimum AUM-based capital requirement or the *FCA* will have additional supervisory powers to take into account the position of the *financial entity* because it forms part of the same *financial conglomerate* or prudential consolidation group as the *firm*. However, even where a *financial entity* is included within the same *financial conglomerate* or *investment firm group* to which ■ MIFIDPRU 2.5 applies, ■ MIFIDPRU 4.7.9R(1) may be disapplied by ■ MIFIDPRU 4.7.9R(2) for sub-delegation arrangements. This is because extended chains of delegation may involve additional operational risks.
- (6) ■ MIFIDPRU 4.7.9R(2) applies if a *firm* is managing a portfolio under sub-delegation arrangements. Its effect is illustrated by the following example: Firm A (a *third country* entity that is a *financial entity*) formally delegates the management of a portfolio of assets to Firm B (a *MIFIDPRU investment firm*). Firm B formally sub-delegates the management of part of the portfolio to Firm C (another *MIFIDPRU investment firm*). Firm B may apply the exclusion in ■ MIFIDPRU 4.7.9R(1), on the basis that Firm A is a *financial entity*. However, if Firm B applies the ■ MIFIDPRU 4.7.9R(1) exclusion, Firm C cannot also exclude the value of the sub-delegated assets from Firm C's measurement of *AUM*. This is because ■ MIFIDPRU 4.7.9R(2) disapplies the ■ MIFIDPRU 4.7.9R(1) exclusion if the delegating entity has already applied a similar exclusion in relation to the same portfolio.



- (7) ■ MIFIDPRU 4.7.9R(2) also applies if the delegating entity is a *financial entity* in a *third country* and is applying an equivalent exclusion. For example, Firm D (an entity in a *third country*) delegates the management of a portfolio to Firm E (a *financial entity* in a *third country*). Firm E sub-delegates the management of part of that portfolio to Firm F (a *MIFIDPRU investment firm*). The *third country* rules to which Firm E is subject permit Firm E to exclude the value of the assets delegated by Firm D from Firm E's AUM-based capital requirement. If Firm E is relying on that exclusion, Firm F cannot rely on the exclusion in ■ MIFIDPRU 4.7.9R(1).

## 4.7.11

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Where a *financial entity* ("A") provides *investment advice of an ongoing nature* to a *MIFIDPRU investment firm* ("B") and B undertakes discretionary *portfolio management*, the arrangement does not fall within ■ MIFIDPRU 4.7.9R. This is because the arrangement is not a formal delegation of the management of assets by A to B, but involves 2 distinct activities: ongoing *investment advice* provided by A and discretionary *portfolio management* undertaken by B. In this situation, if A is a *MIFIDPRU investment firm*, it must include any assets in relation to which it is providing the advice in its measurement of AUM. Where B undertakes discretionary *portfolio management* in relation to the same assets, B must also include those assets in its own measurement of AUM.

## 4.7.12

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- (1) This *rule* applies where a *firm* has been managing assets for its clients under discretionary *portfolio management* or non-discretionary arrangements constituting *investment advice of an ongoing nature* for less than 15 *months*.
- (2) For the purposes of calculating average AUM under ■ MIFIDPRU 4.7.5R, a *firm* must use the modified calculation in ■ MIFIDPRU TP 4.11R(1) with the following adjustments:
  - (a) in ■ MIFIDPRU TP 4.11R(1)(b), *n* is the relevant number of *months* for which the *firm* has been managing assets for its *clients* under discretionary *portfolio management* or non-discretionary arrangements constituting *investment advice of an ongoing nature* (with the *month* during which the *firm* begins that activity counted as *month zero*); and
  - (b) during *month zero* of the calculation, the *firm* must:
    - (i) use a best efforts estimate of expected AUM for that month based on the *firm's* projections when beginning the new activity; and
    - (ii) use the estimate in (i) as its average AUM;
  - (c) during *month 1* of the calculation and each *month* thereafter, the *firm* must apply the approach in (a) using observed historical data from the preceding *months*; and
  - (d) the modified calculation ceases to apply on the date that falls 15 *months* after the date on which the *firm* began managing assets under (1).

## 4.7.13

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■ MIFIDPRU 4.10.26G to ■ MIFIDPRU 4.10.32G and ■ MIFIDPRU 4 Annex 12G contain additional *guidance* on the interaction between the measurement of a *firm's* AUM and the measurement of a *firm's* COH.

## Investment advice of an ongoing nature

4.7.14

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- (1) The definition of *investment advice of an ongoing nature* includes:
  - (a) the recurring provision of *investment advice*; or
  - (b) *investment advice* given in the context of the continuous or periodic assessment and monitoring, or review of a *client* portfolio of *financial instruments*, including of the *investments* undertaken by the *client* on the basis of a contractual arrangement.
- (2) In either case, the *firm* must provide *investment advice* as part of the relevant arrangement. This means that the *firm* must provide a personal recommendation to the *client*. Therefore, where a *firm* merely provides generic advice to a *client* that does not result in a personal recommendation, the *firm* does not need to include the value of any assets that are the subject of the generic advice in its measurement of AUM. *Firms* should refer to the guidance in ■ PERG 13.3 for further information on *investment advice*, personal recommendations and generic advice.
- (3) For example, a *firm* may undertake a periodic review of a *client's* portfolio to assess whether the balance between investments in equities and fixed income products is appropriate. If the *firm* advises the *client* only in general terms to invest a higher proportion of the portfolio in equities and a lower proportion in bonds, this would not normally constitute *investment advice*, unless the *firm* also gave advice on investing in specific equities or bonds. Provided that the *firm* does not give advice relating to specific investments (i.e. a personal recommendation), it therefore would not need to include the value of the portfolio when measuring its AUM.

4.7.15

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- (1) When giving *investment advice of an ongoing nature*, the assets that the *firm* must include within its measurement of AUM will depend on the scope of the *firm's* obligation to provide *investment advice*.
- (2) In some circumstances, a *firm* may have assumed a duty to provide *investment advice* in relation to the *client's* entire portfolio. For example, a financial adviser may agree to carry out periodic reviews of a *client's* entire portfolio and to make recommendations to the *client* about the specific *financial instruments* in which the *client* should invest. In that case, the *firm* must include the entire value of the *client's* portfolio (to the extent that the portfolio consists of *financial instruments*) in the *firm's* measurement of AUM. This is because the *firm* has assumed a duty to provide *investment advice of an ongoing nature* in relation to the entire portfolio.
- (3) In other situations, the scope of the *firm's* duty to provide *investment advice* may be more limited. For example, a *firm* may agree with a *client* that the *firm* will provide *investment advice* only on a particular subset of assets or only when specifically requested by the *client*. In that case, the *firm's* duty to provide *investment advice of an ongoing nature* is limited to the relevant subset of assets, or the specific *financial instruments* in respect of which the *client* requests advice. Therefore, the *firm* would be required to include only the value of those particular assets or *financial instruments* when measuring its AUM.

- (4) A *firm* may have assumed different duties in respect of different parts of a *client's* portfolio. For example, a *firm* may have agreed to carry out a general review of whether the *client's* portfolio is appropriately balanced in a manner that would constitute only generic advice, rather than a personal recommendation. However, the *firm* may also be under a duty to provide *investment advice* on the equities held within the portfolio. In that case, the general review would not constitute *investment advice* (as it is only generic advice) and therefore the *firm* does not need to include the entire value of the *client's* portfolio in the *firm's* measurement of *AUM*. However, as the *firm* does have an ongoing duty to provide *investment advice* in relation to the equities held in the portfolio, the *firm* must include the value of those assets within its measurement of *AUM*.
- (5) Where a *firm* provides recurring *investment advice* to a *client* without assuming a continuing duty, the *firm* is only required to include the value of the particular *financial instruments* in respect of which it provides *investment advice* in the *firm's* measurement of its *AUM*.

## 4.7.16

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- (1) *Investment advice of an ongoing nature* includes arrangements involving periodic or continuous *investment advice* and arrangements involving recurring *investment advice*.
- (2) Periodic or continuous *investment advice* is most likely to arise where a *firm* agrees with a *client* that the *firm* will keep the *client's* portfolio under review or will provide advice to the *client* at various points during a specified period. For example, a *firm* may agree to manage a *client's* portfolio on a non-discretionary basis so that the *firm* has an ongoing duty to make personal recommendations to the *client*, but the *client* decides whether to proceed with each transaction. Alternatively, the *firm* may agree with the *client* to review the *client's* portfolio on, for example, a quarterly basis and to provide the *client* with personal recommendations following each review.
- (3) Recurring *investment advice* does not require the *firm* to have assumed an ongoing or periodic duty to provide *investment advice* to the *client*. Instead, the *firm* provides *investment advice* to the same *client* repeatedly, even though there is no agreement with the *client* to establish a formal ongoing relationship. When considering whether *investment advice* is recurring for these purposes, a *firm* should assess whether, in substance, the type and pattern of advice that it provides is similar to periodic or continuous advice. This means that a *firm* cannot prevent what are, in substance, ongoing advisory arrangements for a *client* from constituting *investment advice of an ongoing nature* by artificially separating them into multiple individual agreements to provide advice to that *client*. If requested by the *FCA*, a *firm* should be able to justify why the *firm* has concluded that a particular set of advisory arrangements with a *client* does not constitute *investment advice of an ongoing nature*.
- (4) *Investment advice of an ongoing nature* does not include genuinely isolated or sporadic instances of *investment advice* provided to the same *client* that do not, in substance, amount to ongoing arrangements. However, a *firm* should assess the potential harms arising from any *investment advice* that is not *investment advice of an ongoing nature* as part of its *ICARA* process.

4.7.17

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- (1) Where a *firm* provides *investment advice* in the context of the continuous or periodic assessment and monitoring or review of a *client* portfolio of *financial instruments*, the value of *AUM* that the *firm* includes in respect of that portfolio should be determined by the scope of the *firm's* duty to the *client*.
- (2) If the *firm* is under a duty to review the *client's* entire portfolio and provide *investment advice* as a result, the value of all *financial instruments* in the portfolio should be included in *AUM*. If the *firm's* duty is limited to specific *financial instruments*, only those *financial instruments* need to be included in *AUM*.

4.7.18

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For the purposes of the calculation of *average AUM* in ■ MIFIDPRU 4.7.5R:

- (1) if the *firm* is under a duty to undertake a continuous assessment of the portfolio (or a subset of the portfolio), the *firm* must measure the value of *AUM* of the portfolio (or the relevant subset of it) on the last *business day* of each *month* during which that duty applies; and
- (2) if the *firm* is under a duty to undertake periodic assessments of the portfolio (or a subset of the portfolio), the *firm* must use the value of the portfolio (or the relevant subset of it) at the time of the last review as the relevant value of *AUM* for each *month* until the next periodic review occurs (or the *firm's* duty ends, if earlier).

4.7.19

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The requirement in ■ MIFIDPRU 4.7.18R(2) is illustrated by the following example:

- (1) On 1 March, the *firm* reviews the *client's* entire portfolio of *financial instruments* and provides *investment advice* to the *client*. The value of the *client's* portfolio is 100 on that date. The *firm* is required to carry out its next review of the *client's* portfolio on 1 June. The *firm* would include a value of 100 in its *AUM* for each of March, April and May.
- (2) On 1 June, the *firm* reviews the *client's* entire portfolio again and provides further *investment advice* to the *client*. The value of the *client's* portfolio on that date is 110. The *firm* would include a value of 110 in its *AUM* for June and each subsequent *month* until the time of the next review, or until the *firm's* duty to carry out a review of the *client's* portfolio ends (if earlier).

4.7.20

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- (1) Where a *firm* provides recurring *investment advice* to a *client*, the value of *AUM* that the *firm* must include in respect of that *client* should be measured by the value of the *financial instruments* that are the subject of the relevant *investment advice*.
- (2) Under ■ MIFIDPRU 4.7.5R, to calculate its *average AUM*, a *firm* must take the 15 most recent monthly values of *AUM* and exclude the most recent 3 months before calculating the arithmetic mean of the remaining values. ■ MIFIDPRU 4.7.21R explains how a *firm* should measure the monthly value of *AUM* when it is providing recurring *investment advice* to a *client*.

4.7.21 R

- (1) Subject to (2), for the purposes of the calculation of *average AUM* under ■ MIFIDPRU 4.7.5R, the value of *AUM* for recurring *investment advice* given in relation to a *client* in any given *month* is the sum of:
  - (a) the *AUM* arising from the recurring *investment advice* given by the *firm* to that *client* during that *month*; and
  - (b) the *AUM* arising from the recurring *investment advice* given by the *firm* to that *client* during the immediately preceding 11 *months*.
- (2) When measuring *AUM* under (1), a *firm* may adjust the *AUM* figure to reflect the fact that the *firm* has previously given *investment advice* in relation to the same assets during the preceding 11 *months*.

4.7.22 G

- (1) The effect of ■ MIFIDPRU 4.7.21R is illustrated by the following example.
- (2) A *firm* provides recurring *investment advice* to a *client*. The dates on which the *firm* provides advice and the value of the *financial instruments* that are the subject of the advice are set out in the table below. In October 2022, the *firm* provides advice in relation to the same assets worth 25 on which the *firm* advised in March 2022, plus additional assets worth 45.

| Date of advice | Value of financial instruments   |
|----------------|--|
| January 2022   | 50   |
| February 2022  | No advice given  |
| March 2022     | 25   |
| April 2022     | 100  |
| May 2022       | No advice given  |
| June 2022      | 50   |
| July 2022      | No advice given  |
| August 2022    | No advice given  |
| September 2022 | 80   |
| October 2022   | 70 (consisting of the same assets in March 2022 worth 25 and 45 of new assets) |
| November 2022  | No advice given  |
| December 2022  | 10   |
| January 2023   | No advice given  |
| February 2023  | No advice given  |
| March 2023     | 30   |

- (3) ■ MIFIDPRU 4.7.21R means that *AUM* from recurring *investment advice* is cumulative across a rolling 12-*month* period. The following table shows how the *firm* in (2) would calculate the *AUM* attributable to the provision of recurring *investment advice* to the *client*.

| Date of advice | Value of AUM |
|----------------|--------------|
| January 2022   | 50           |
| February 2022  | 50           |

| Date of advice | Value of AUM   |
|----------------|--|
| March 2022     | 75<br>(i.e. 50 + 25)   |
| April 2022     | 175<br>(i.e. 50 + 25 + 100)  |
| May 2022       | 175  |
| June 2022      | 225<br>(i.e. 50 + 25 + 100 + 50)   |
| July 2022      | 225  |
| August 2022    | 225  |
| September 2022 | 305<br>(i.e. 50 + 25 + 100 + 50 + 80)  |
| October 2022   | 350<br>(i.e. 50 + 25 + 100 + 50 + 80 + 70 = 375<br>375 – 25 (adjustment for the same assets in March 2022) = 350)      |
| November 2022  | 350  |
| December 2022  | 360<br>(i.e. 50 + 25 + 100 + 50 + 80 + 70 + 10 = 385<br>385 – 25 (adjustment for the same assets in March 2022) = 360) |
| January 2023   | 310<br>(i.e. 25 + 100 + 50 + 80 + 70 + 10 = 335<br>335 – 25 (adjustment for the same assets in March 2022) = 310)      |
| February 2023  | 310  |
| March 2023     | 340<br>(i.e. 100 + 50 + 80 + 70 + 10 + 30)   |

(4) At the end of March 2023, the *firm* would therefore calculate *average AUM* and the *K-AUM requirement* resulting from the above example of *investment advice of an ongoing nature* as follows:

|   |  |
|---|--|
| Sum of the most recent 15 months of AUM, excluding the 3 most recent monthly values | 50 + 50 + 75 + 175 + 175 + 225 + 225 + 225 + 305 + 350 + 350 + 360 = 2,565 |
| Average AUM   | 2,565 / 12 = 213.75  |
| K-AUM requirement   | 213.75 * 0.0002 = 0.043  |



## 4.8 K-CMH requirement

- 4.8.1** **R** The *K-CMH requirement* of a *MIFIDPRU investment firm* is equal to the sum of:
- (1) 0.4% of *average CMH* held by the *firm* in *segregated accounts*; and
  - (2) 0.5% of *average CMH* held by the *firm* in *non-segregated accounts*.
- 4.8.2** **G**
- (1) Generally, a *MIFIDPRU investment firm* should be holding *client money* in one or more *segregated accounts*. Under **■ MIFIDPRU 4.8.9E**, where a *firm* complies with the applicable requirements of **■ CASS 7** in relation to an amount of *client money*, there is a presumption that the *client money* is being held in a *segregated account*.
  - (2) As a result, the *K-CMH requirement* for *non-segregated accounts* is most likely to be relevant where:
    - (a) the *K-CMH requirement* applies on a *consolidated basis* and:
      - (i) the *consolidated situation* includes one or more entities to which *CASS* does not apply, such as *third country* entities, that receive *money* from customers; and
      - (ii) the arrangements under which the entity in (i) holds *money* received from customers do not meet the conditions in **■ MIFIDPRU 4.8.8R** (as they apply on a *consolidated basis* under **■ MIFIDPRU 2.5.30R**); or
    - (b) a *MIFIDPRU investment firm* has not complied with the **■ CASS 7** requirements, in which case the *firm* should treat any non-compliant arrangements as *non-segregated accounts* for the purposes of calculating any *K-CMH requirement* that includes that period of non-compliance.
  - (3) However, the scenario in (2)(b) does not affect any obligation that the *firm* has under *CASS*, or under any other *rule*, to take specified action or to notify the *FCA* where the *firm* has identified that it has breached the requirements of *CASS*.
- 4.8.3** **R** When calculating its *CMH* in accordance with this section, a *MIFIDPRU investment firm* must include any amounts that relate to *MiFID business* of the *firm* that is carried on by any *tied agent* acting on its behalf.
- 4.8.4** **G** As a result of the restrictions in **■ SUP 12.6.5R** and **■ SUP 12.6.15R**, the *FCA* generally expects that **■ MIFIDPRU 4.8.3R** would not be directly relevant to

## 4.8.5

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*MIFIDPRU investment firms* on an individual basis. However, where this section applies on a *consolidated basis* in accordance with ■ MIFIDPRU 2.5 (Prudential consolidation), the *UK parent entity* must include any *CMH* attributable to a *tied agent* of a *third country investment firm* included within the *consolidated situation*.

- (1) The definition of *CMH* includes only *client money* which is *MiFID client money*. Therefore, *client money* which is received in connection with business other than *MiFID business* does not need to be included within a *MIFIDPRU investment firm's* calculation of *CMH*, except to the extent that ■ MIFIDPRU 4.8.6R applies.
- (2) The definition of *MiFID client money* includes the following:
  - (a) *money* deposited into a *client bank account* in accordance with ■ CASS 7.13.3R;
  - (b) *money* originally received in connection with *MiFID business* which a *firm* has placed in a *qualifying money market fund* in accordance with ■ CASS 7.13.3R(4). This means that while the *units* or *shares* in the relevant *qualifying money market fund* must still be treated by the *firm* as *client assets* for the purposes of CASS and must be dealt with in accordance with ■ CASS 7.13.26R, the value of those *units* or *shares* must be included in *CMH* for the purposes of *MIFIDPRU*;
  - (c) an amount of the *firm's own money* that the *firm* has paid into its *client bank account* for the purposes of ■ CASS 7.13.65R where the *firm* is applying *alternative approach mandatory prudent segregation*; and
    - (i) *prudent segregation*;
    - (ii) *alternative approach mandatory prudent segregation*; or
    - (iii) *clearing arrangement mandatory prudent segregation*; and
  - (d) *money* received from a *client* in connection with *MiFID business* which a *firm* has allowed a third party (such as an exchange, a *clearing house* or an *intermediate broker*) to hold in accordance with ■ CASS 7.14 (Client money held by a third party).
- (3) Where a *firm* controls *money* under a *mandate* in accordance with ■ CASS 8, the *money* is not *MiFID client money* if it is not *client money* received or held by the *firm*. A *firm* is not required to include any *money* it controls but does not hold within its calculation of *CMH*.
- (4) Although *money* that is not *MiFID client money* does not contribute to the *K-CMH requirement*, a *MIFIDPRU investment firm* should still consider any potential material harms that may arise in connection with receiving *money* from *clients* as part of their *ICARA process* under ■ MIFIDPRU 7. This includes any material harms that may arise in relation to amounts received that are not treated as *client money*, such as under a *title transfer collateral arrangement*.

## 4.8.6

R

If a *MIFIDPRU investment firm* is unsure whether *client money* should be classified as *MiFID client money*, it must treat the relevant amount as *MiFID client money* for the purposes of this section until the firm is satisfied that the amount is not *MiFID client money*.



**4.8.7** G ■ MIFIDPRU 4.8.6R applies only for the purposes of determining how the *client money* concerned should be treated for the purposes of MIFIDPRU. It does not affect how the *client money* should be treated for the purposes of other provisions in the *Handbook* (such as CASS or COBS) or under any other legislation.

**4.8.8** R An arrangement is a *segregated account* if it is an arrangement in respect of which a *firm* ("A") ensures that all of the following conditions are met:

- (1) A keeps records and accounts enabling A, at any time and without delay, to distinguish assets held for one *client* from assets held for any other *client* and from A's own assets;
- (2) A maintains its records and accounts in a way that ensures their accuracy, and in particular that they correspond to the assets held for *clients* and may be used as an audit trail;
- (3) A conducts, on a regular basis, reconciliations between A's internal accounts and records and those of any third parties by whom those assets are held;
- (4) A takes the necessary steps to ensure that deposited *client* funds are held in an account or accounts identified separately from any accounts used to hold funds belonging to A;
- (5) A operates adequate organisational arrangements to minimise the risk of the loss or diminution of *client* assets or of rights in connection with those assets, as a result of misuse of the assets, fraud, poor administration, inadequate record-keeping or negligence; and
- (6) the applicable national law provides that, in the event of A's insolvency or entry into resolution or administration, assuming that A has complied with (1) to (5), *client* funds cannot be used to satisfy claims against A, other than claims by the relevant *clients*.

**4.8.9** E

- (1) This *rule* applies for the purposes of ■ MIFIDPRU 4.8.8R.
- (2) A MIFIDPRU investment firm which holds *client money* must comply with, among other requirements, the applicable requirements on:
  - (a) organisational requirements in relation to *client money* in ■ CASS 7.12;
  - (b) segregation of *client money* in ■ CASS 7.13 or *client money* held by a third party in ■ CASS 7.14;
  - (c) records, accounts and reconciliations in ■ CASS 7.15; and
  - (d) acknowledgement letters in ■ CASS 7.18.
- (3) Compliance with (2) in relation to an arrangement may be relied on as tending to establish compliance with the conditions for that arrangement to be classified as a *segregated account* in ■ MIFIDPRU 4.8.8R.
- (4) Contravention of (2) in relation to an arrangement may be relied on as tending to establish contravention of the conditions for that

|        |   |  |
|--------|---|--|
|        |   | arrangement to be classified as a <i>segregated account</i> in<br>■ MIFIDPRU 4.8.8R.   |
| 4.8.10 | G | The effect of ■ MIFIDPRU 4.8.9E is that if a <i>MIFIDPRU investment firm</i> complies with the provisions of CASS specified in ■ MIFIDPRU 4.8.9E(2) for a particular arrangement for <i>client money</i> , it can proceed on the basis that the <i>client money</i> is being held in a <i>segregated account</i> for the purposes of the <i>K-CMH requirement</i> . However, if the <i>firm</i> does not comply with the relevant CASS provisions in relation to a <i>client money</i> arrangement, this will generally be evidence that the relevant <i>client money</i> should be treated as being held in a <i>non-segregated account</i> for the purposes of calculating the <i>K-CMH requirement</i> .  |
| 4.8.11 | G | Where consolidation under ■ MIFIDPRU 2.5 (Prudential consolidation) applies to an <i>investment firm group</i> , ■ MIFIDPRU 2.5.30R and ■ MIFIDPRU 2.5.31R explain how to calculate the consolidated <i>K-CMH requirement</i> .  |
| 4.8.12 | R | A <i>firm</i> must calculate its <i>K-CMH requirement</i> on the first <i>business day</i> of each <i>month</i> .  |
| 4.8.13 | R | A <i>firm</i> must calculate the amount of its <i>average CMH</i> by: <ul style="list-style-type: none"> <li>(1) taking the total <i>CMH</i> as measured at the end of each <i>business day</i> during the previous 9 <i>months</i>;</li> <li>(2) excluding the daily values for the most recent 3 <i>months</i>; and</li> <li>(3) calculating the arithmetic mean of the daily values for the remaining 6 <i>months</i>.</li> </ul>   |
| 4.8.14 | R | For the purpose of the calculation in ■ MIFIDPRU 4.8.13R, a <i>firm</i> must measure <i>CMH</i> in accordance with, to the extent applicable: <ul style="list-style-type: none"> <li>(1) any records, accounts and reconciliations that the <i>firm</i> maintains to comply with the requirements of ■ CASS 7.15 (Records, accounts and reconciliations); and</li> <li>(2) any values contained in accounting records.</li> </ul>  |
| 4.8.15 | R | Where a <i>firm</i> has been holding <i>CMH</i> for less than 9 <i>months</i> , it must calculate its <i>average CMH</i> using the modified calculation in ■ MIFIDPRU TP 4.11R(1) with the following adjustments: <ul style="list-style-type: none"> <li>(1) in ■ MIFIDPRU TP 4.11R(1)(b), <i>n</i> is the relevant number of <i>months</i> for which the <i>firm</i> has been holding <i>CMH</i> (with the <i>month</i> during which the <i>firm</i> begins that activity counted as <i>month zero</i>);</li> <li>(2) during <i>month zero</i> of the calculation, the <i>firm</i> must: <ul style="list-style-type: none"> <li>(a) use a best efforts estimate of expected <i>CMH</i> for that <i>month</i> based on the <i>firm's</i> projections when beginning the new activity; and</li> </ul> </li> </ul> |

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- (b) use the estimate in (a) as its *average CMH*;
  - (3) during *month* 1 of the calculation and each *month* thereafter, the *firm* must apply the approach in (1) using observed historical data from the preceding *month*;
  - (4) the modified calculation ceases to apply on the date that falls 9 *months* after the date on which the *firm* began holding *CMH*.
- (1) Under ■ MIFIDPRU 4.8.13R(1), a *firm* must measure its *CMH* at the end of each *business day*. The relevant amount should reflect any subsequent adjustment that the *firm* must apply as a result of any requirement to carry out internal reconciliations in relation to *client money* (for example, under ■ CASS 7.15). Therefore, where an internal reconciliation subsequently identifies that the amount of *CMH* recorded for a particular *business day* is incorrect, the *firm* should update the relevant amount to reflect the correct figure.
- (2) Where the *K-CMH requirement* applies on a *consolidated basis*, the *guidance* in (1) also applies in relation to any reconciliations carried out in accordance with the requirements of the jurisdiction in which any *third country* entity included in the *consolidated situation* is based.



## 4.9 K-ASA requirement

- 4.9.1
- R
- The *K-ASA requirement* of a *MIFIDPRU investment firm* is equal to 0.04% of the *firm's average ASA*.
- 4.9.2
- R
- When calculating its *K-ASA requirement* in accordance with this section, a *MIFIDPRU investment firm* must include within its *ASA* any amounts that relate to *MiFID business* of the *firm* that is carried on by any *tied agents* acting on its behalf.
- 4.9.3
- G
- Due to the limited types of activities in respect of which a *tied agent* may be exempt from the requirement for *authorisation* in the *UK* (as explained in ■ SUP 12.2.7G), the *FCA* generally expects that ■ MIFIDPRU 4.9.2R would not be directly relevant to a *MIFIDPRU investment firm* on an individual basis. However, where ■ MIFIDPRU 4.9 applies on a *consolidated basis* in accordance with ■ MIFIDPRU 2.5 (Prudential consolidation), the *UK parent entity* must include any *ASA* attributable to a *tied agent* of a *third country investment firm* included within the *consolidated situation*.
- 4.9.4
- R
- A *firm* must exclude from its measurement of *ASA* any units or shares in a *qualifying money market fund* that are treated as *MiFID client money*.
- 4.9.5
- G
- (1) The definition of *ASA* includes only *client assets* held by a *MIFIDPRU investment firm* in the course of *MiFID business*. Therefore, *client assets* which are held in connection with business other than *MiFID business* do not need to be included within a *MIFIDPRU investment firm's* calculation of *ASA*, except to the extent that ■ MIFIDPRU 4.9.6R applies.

(2) As explained in ■ MIFIDPRU 4.8.5G, the definitions of *MiFID client money* and *CMH* include amounts that a *MIFIDPRU investment firm* has placed with *qualifying money market funds* in accordance with ■ CASS 7.13.3R(4). As a result, although the resulting units or shares in a *qualifying money market fund* may be treated as *client assets* for the purposes of the *custody rules*, under ■ MIFIDPRU 4.9.4R, their value must be included in *CMH* not in *ASA*.

(3) Although *client assets* that a *firm* holds other than in the course of *MiFID business* do not contribute to the *K-ASA requirement*, a *MIFIDPRU investment firm* should still consider any potential material harms that may arise in connection with receiving assets from *clients* as part of its *ICARA process* under ■ MIFIDPRU 7.

- (4) As part of its *ICARA process*, a *firm* should also consider material harms that may arise in relation to amounts received that are not treated as *client assets* for the purposes of the *custody rules* but in relation to which the *firm* may have future obligations to a *client*, such as under a *title transfer collateral arrangement*.
- 4.9.6** **R** If a *MIFIDPRU investment firm* is unsure whether *client assets* are held in the course of *MiFID business*, it must treat those assets as held in the course of *MiFID business* for the purposes of this section until it is satisfied that the assets are not held in the course of *MiFID business*.
- 4.9.7** **R** A *firm* must calculate its *K-ASA requirement* on the first *business day* of each month.
- 4.9.8** **R** A *firm* must calculate the amount of its average *ASA* by:
- (1) taking the total *ASA* as measured at the end of each *business day* for the previous 9 months;
  - (2) excluding the values for the most recent 3 months; and
  - (3) calculating the arithmetic mean of the daily values for the remaining 6 months.
- 4.9.9** **R** When measuring *ASA*, a *firm* must:
- (1) where available, use the market value of the relevant assets; and
  - (2) where a market value is not available for an asset, use an alternative measure of fair value, which may include an estimated value calculated on a best efforts basis.
- 4.9.10** **G** The values used by a *firm* under **MIFIDPRU 4.9.8R** should be consistent with the information on *client assets* in any relevant regulatory data reported by the *firm* to the *FCA*, and in any internal or external reconciliations and records maintained in accordance with **CASS 6.6** (Records, accounts and reconciliations) unless a *rule* or relevant *guidance* requires the *firm* to take a different approach.
- 4.9.11** **R** Where either of the following applies, a *firm* must include the value of the relevant assets in its measurement of *ASA*:
- (1) the *firm* has delegated the safeguarding and administration of assets to another entity; or
  - (2) another entity has delegated the safeguarding and administration of assets to the *firm*.
- 4.9.12** **G** The effect of **MIFIDPRU 4.9.11R** is that a *firm* will not reduce its level of *ASA* by delegating the safeguarding of assets to a third party. However, a *firm* will increase the level of its *ASA* by accepting the delegation of safeguarding

## 4.9.13

R

and administration of assets to the *firm* by a third party. This reflects the harm that may result from a breach of the *firm's* direct safeguarding responsibilities or the *firm's* responsibilities in relation to the selection, appointment and periodic review of any third party to which the *firm* has delegated safeguarding.

Where a *firm* has been safeguarding assets constituting ASA for less than 9 *months*, it must calculate its *average ASA* using the modified calculation in ■ MIFIDPRU TP 4.11R(1) with the following adjustments:

- (1) in ■ MIFIDPRU TP 4.11R(1)(b), *n* is the relevant number of *months* for which the *firm* has been safeguarding assets (with the *month* during which the *firm* begins that activity counted as *month zero*); and
- (2) during *month zero* of the calculation, the *firm* must:
  - (a) use a best efforts estimate of expected ASA for that *month* based on its projections when beginning the new activity;
  - (b) use the estimate in (a) as its *average ASA*;
- (3) during *month 1* of the calculation and each *month* thereafter, the *firm* must apply the approach in (1) using observed historical data from the preceding *months*; and
- (4) the modified calculation ceases to apply on the date that falls 9 *months* after the date on which the *firm* began safeguarding assets constituting ASA.

## 4.10 K-COH requirement

- 4.10.1** **R** The *K-COH requirement* of a *MIFIDPRU investment firm* is equal to the sum of:
- (1) 0.1% of *average COH* attributable to *cash trades*; and
  - (2) 0.01% of *average COH* attributable to *derivatives trades*.
- 4.10.2** **R** When calculating its *K-COH requirement* in accordance with this section, a *MIFIDPRU investment firm* must include within its *COH* any amounts that relate to *MiFID business* of the *firm* that is carried on by any *tied agent* acting on its behalf.
- 4.10.3** **G** The definition of *COH* includes orders that a *firm* handles when carrying on either of the following types of *MiFID business*:
- (1) reception and transmission of client orders; and
  - (2) *execution of orders on behalf of a client*.
- 4.10.4** **R** A *firm* is not required to include the following in its measurement of *COH*:
- (1) an order executed by a *firm* in its own name (including where the *firm* executes an order in its own name on behalf of a *client*);
  - (2) an order that a *firm* handles when acting in the capacity of the operator of a *multilateral trading facility* or *organised trading facility*;
  - (3) a transaction that falls within the definition of reception and transmission of *client* orders only as a result of the situation described in recital 44 of *MiFID*; and
  - (4) orders that are not ultimately executed.
- 4.10.5** **G** ■ MIFIDPRU 4.10.6G to ■ MIFIDPRU 4.10.17G contain further *guidance* on whether particular arrangements are included within the measurement of *COH*.

|         |              |  |
|---------|--------------|--|
| 4.10.6  | <div>G</div> | <div>Execution of orders in the firm’s own name</div> <div>Where a <i>firm</i> executes an order in its own name (irrespective of whether the order is ultimately for the benefit of a <i>client</i>), the order is included within the <i>firm</i>’s measurement of its <i>DTF</i> under ■ MIFIDPRU 4.15 (K-DTF requirement) and not within its measurement of <i>COH</i> under this section.</div>   |
| 4.10.7  | <div>G</div> | <div>The extended (“bringing together”) definition of reception and transmission</div> <div>Recital 44 of <i>MiFID</i> describes transactions that result from a <i>firm</i> bringing together 2 or more investors (such as introducing an issuer to a potential source of funding), but where the <i>firm</i> does not otherwise interpose itself within the chain of execution of any resulting order. In practice, this is most likely to be relevant in the context of <i>corporate finance business</i> or private equity business. A <i>firm</i> may exclude these transactions from its measurement of <i>COH</i> provided that its role does not go beyond this “extended” definition of reception and transmission. This is further described in the <i>guidance</i> in ■ PERG 13.3 (Investment Services and Activities).</div>   |
| 4.10.8  | <div>G</div> | <div>Matched principal trading</div> <div>A <i>firm</i> that trades in a matched principal capacity will be placing orders in its own name. These orders must therefore be included in the measurement of the <i>firm</i>’s <i>DTF</i> and are not included in the calculation of <i>COH</i>.</div>  |
| 4.10.9  | <div>G</div> | <div>Name give-up activities</div> <div><div>(1) The <i>FCA</i> understands that activities that are described as involving “name give-up” may take different forms.</div><div>(2) In certain cases, a <i>firm</i> may distribute indications of interest that indicate a willingness to enter into a transaction, but do not have fixed terms. The <i>firm</i> may then pass the names of the counterparties to each other following a match to allow them to facilitate the trade. These indications of interest and name-passing are not included within the measurement of <i>COH</i>. However, this does not mean that every transaction which begins with an indication of interest is outside the scope of <i>COH</i>. Where a <i>firm</i> is subsequently instructed to transmit an order on firm terms, or to execute an order, that transaction will be within scope of <i>COH</i>, even if the order results from a process that began with an initial indication of interest.</div><div>(3) In some circumstances, a <i>firm</i> may disseminate orders on firm terms that result in a transaction as soon as they are confirmed by the recipient, following which the <i>firm</i> will disclose the name of the relevant counterparty. This activity is included within the measurement of <i>COH</i> because it involves reception and transmission of an order on firm terms.</div></div> |
| 4.10.10 | <div>G</div> | <div>Exchange give-up activities</div> <div>(1) A <i>firm</i> may facilitate trading by its <i>clients</i> on exchanges. Once a transaction has been executed, the relevant trade is then given up to the <i>client</i>’s clearing firm.</div>   |



- (2) A *firm* should consider the exact capacity in which it is acting, and whether it incurs any liability as principal, when determining whether orders resulting from exchange give-up activities are included within the measurement of *COH*.
- (3) If the *firm* enters into the transaction in its own name and therefore incurs principal liability, even for a short period, in relation to the trade before it is given up, the order should be included within the *firm's* measurement of *DTF* and not within its measurement of *COH*.
- (4) If the *firm* does not incur liability as principal and merely acts as agent in the name of a third party in relation to the trade, the order should be included within the *firm's* measurement of *COH*.

#### Exchange block trades

4.10.11

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- (1) A *firm* may be involved in negotiating a bilateral trade in relation to an exchange-traded instrument between counterparties that takes place off-exchange because the size of the trade exceeds certain specified levels. In some cases, the exchange may provide communications functionality to facilitate the block trades, but the trades are not executed on the exchange's public market.
- (2) A *firm* must determine the capacity in which the *firm* is acting in relation to the block trade to determine if the value of the trade should be included in the *firm's* measurement of *COH*.
- (3) If the *firm* enters into the block trade in its own name and the trade is then given up to a *client*, the *firm* should include the value of that trade in its measurement of *DTF*.
- (4) If the *firm* executes the block trade as agent by committing the *client* to the terms of the trade, the *firm* should include the value of that trade in its measurement of *COH*.
- (5) If the *firm* receives firm terms of the block trade from the *client* and transmits the terms to the counterparty in order for the counterparty to confirm the terms to create a binding transaction, the *firm* should include the value of that trade in its measurement of *COH*.

#### Broker functionality

4.10.12

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A *firm* may be a member of an exchange and may provide functionality whereby trades can be executed and booked directly into the account of the relevant *client*. In this case, the *FCA* considers that the trades should be included in the *firm's* measurement of *COH*, as the *firm* is still being used to execute the relevant trade.

#### Orders connected with the operation of trading venues

4.10.13

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- (1) A *firm* which is operating a multilateral trading facility or operating an organised trading facility does not need to include any orders it handles solely in that capacity in its measurement of *COH*. However, it should consider as part of its *ICARA* process whether that activity gives rise to the risk of material potential harm which may require it to hold additional *own funds* or *liquid assets* under ■ MIFIDPRU 7.

- (2) However, if the operator of an *organised trading facility* is engaging in *matched principal trading*, as permitted by ■ MAR 5A.3.5R, any matched principal trades are included in its measurement of *DTF* under ■ MIFIDPRU 4.15 (K-DTF requirement).
- 4.10.14 G A *firm* that executes *client* orders on a *multilateral trading facility* or an *organised trading facility* when the *firm* is not acting in the capacity of the trading venue operator must include the orders in its measurement of *COH* (unless the *firm* executes the orders in its own name, in which case it must include the orders in its measurement of *DTF*).
- 4.10.15 G In certain circumstances, the same *firm* may both act as the operator of a *multilateral trading facility* or an *organised trading facility* and also submit an order on that *trading venue* on behalf of a *client*. In this case, although the *firm* is not required to measure *COH* in relation to its role as the operator of the *trading venue*, it must still measure *COH* (or *DTF* if it is possible to enter into transactions in its own name on the *trading venue* and it is executing in that capacity) in relation to the order that it executes for the *client*.
- Orders that are never executed**
- 4.10.16 G
- (1) The effect of ■ MIFIDPRU 4.10.4R(4) is that where a *firm* receives a *client* order but that order is not ultimately executed, it does not have to include the value of that order in its measurement of *COH*. However, as part of its *ICARA process*, a *firm* should consider whether the fact that an order has not been executed gives rise to any material risks to the *firm* or to its *clients*. This may depend on the reasons why the *client* order has not been executed.
- (2) If, for example, the order was not executed because market conditions did not allow the *firm* (or another entity to whom the order was ultimately transmitted) to achieve an appropriate outcome for the *client*, this may be consistent with the *firm's* contractual and regulatory duties. In that case, this may not give rise to any additional material risks.
- (3) However, if the *firm* failed to transmit or execute an order because of an oversight or an internal systems failure, this may indicate that the *firm* has been failing in its duties to its *client* or in its regulatory obligations. Alternatively, the *firm* may have successfully transmitted an order, but failed to select an appropriate entity to receive and execute the order, and therefore may have failed to comply with its obligations to act in the best interests of the *client* when transmitting the order. In this case, the *firm* should consider as part of its *ICARA process* whether the failures may give rise to material risks and how these risks should be addressed.
- 4.10.17 G
- (1) Although failure to achieve the execution of an individual order does not necessarily indicate potential material harms, a series or pattern of failures may be evidence of potential material harms.
- (2) A *firm's* analysis under its *ICARA process* is separate from the application of any individual regulatory or other legal duties owed to

an individual *client*. Therefore, while a *firm* may conclude that an isolated oversight in relation to a *client* order does not give rise to the risk of material harm under the *ICARA process*, this does not affect any obligations that the *firm* owes to the *client*.

### Calculating COH

**4.10.18** **R** A *firm* must calculate its *K-COH requirement* on the first *business day* of each month.

- 4.10.19** **R**
- (1) A *firm* must calculate the amount of its *average COH* by:
    - (a) taking the total *COH* measured throughout each *business day* over the previous 6 months;
    - (b) excluding the daily values for the most recent 3 months; and
    - (c) calculating the arithmetic mean of the daily values of the remaining 3 months.
  - (2) When measuring the value of *COH* for a particular *business day*, a *firm* must convert any amounts in foreign currencies on that date into the *firm's* functional currency.
  - (3) For the purposes of the currency conversion in (2), a *firm* must:
    - (a) determine the conversion rate by reference to an appropriate market rate; and
    - (b) record the rate used.

### Measuring the value of orders for COH

- 4.10.20** **R**
- (1) When measuring its *COH*, a *firm* must use the sum of the absolute value of each buy order and sell order, as determined in accordance with the remainder of this *rule*.
  - (2) For *cash trades* relating to *financial instruments*, the value of the order is the amount paid or received on the trade at the time at which it is executed, unless the *firm* has applied the approach in ■ MIFIDPRU 4.10.23R.
  - (3) For *derivatives trades* other than orders relating to interest rate derivatives, the value of the order is the notional amount of the contract, determined in accordance with ■ MIFIDPRU 4.14.20R(2).
  - (4) For orders relating to interest rate derivatives, the value of the order is the notional amount of the contract determined in accordance with ■ MIFIDPRU 4.14.20R(2), adjusted in accordance with ■ MIFIDPRU 4.10.25R.
  - (5) A *firm* may calculate the value of an order by deducting any transaction costs to reflect the consideration received or paid by the *client* for the relevant instruments, provided that the transaction costs are not paid separately to the *firm* by the *client*.

## 4.10.21

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- (1) Under the general approach in ■ MIFIDPRU 4.10.20R(2), a *firm* determines the gross value of an order by multiplying the market price of the instrument by the quantity of the instrument being purchased or sold.
- (2) However, ■ MIFIDPRU 4.10.20R(5) permits (but does not require) a *firm* to calculate the value of an order by reference to the consideration paid or received by the *client* for the instruments (i.e. net of transaction costs), provided that the transaction costs are included in the gross value of the order and are not paid by the *client* to the *firm* separately.
- (3) For example, Firm A executes an order for a *client* to buy 100 shares. The total cost of the order, including transaction costs, is £100. The *client* receives shares worth £88, after the *firm* uses £12 to cover transaction costs. Under the standard approach in ■ MIFIDPRU 4.10.20R(2), the *firm* may record the value of the order in its *COH* as £100 (i.e. the gross cost of the order). The *firm* may, for example, choose this approach for reasons of simplicity and administrative convenience.
- (4) Alternatively, in the example above, the *firm* may apply the approach under ■ MIFIDPRU 4.10.20R(5) to record the value of the order in its *COH* as £88 (i.e. net of transaction costs paid by the *client* in relation to the transaction).
- (5) However, a *firm* cannot rely on ■ MIFIDPRU 4.10.20R(5) to reduce the value of an order by transaction costs that are paid separately by the *client* to the *firm*. For example, Firm B executes an order for a *client* to buy 100 shares. The total cost of the order is £100. The *client* additionally pays £12 to Firm B for transaction costs. In this case, the *firm* must record the net value of the order under ■ MIFIDPRU 4.10.20R(5) in its *COH* as £100 (and not £88), as the transaction costs have been paid separately.
- (6) The effect of ■ MIFIDPRU 4.10.19R(2) is that when measuring the value of *COH* at the end of each *business day*, a *firm* must apply the relevant conversion rate on that date to any amounts in foreign currencies forming part of the *COH* attributable to that *business day*. The *COH* for each preceding *business day* should continue to be measured by reference to the conversion rate that was applicable on that preceding day.
- (7) For the purposes of ■ MIFIDPRU 4.10.19R(3), where a *firm* is carrying out a conversion that involves sterling, the *FCA* considers that an example of an appropriate market rate is the relevant daily spot exchange rate against sterling published by the Bank of England.

## 4.10.22

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For *cash trades* relating to exchange-traded options, the amount paid or received under ■ MIFIDPRU 4.10.20R(2) is the premium paid for the option.

## 4.10.23

R

- (1) By way of derogation from ■ MIFIDPRU 4.10.20R(2), a *firm* that receives and transmits an order that is a *cash trade* may apply the approach in this *rule* to determine the value of that order for the purposes of measuring *COH*.

- (2) Where a *firm* applies the approach in this *rule*, the value of the order shall be determined by reference to:
  - (a) for an order which specifies a fixed price or limit price at which the order should be executed, that price; or
  - (b) for an order which does not specify a price, the market price of the relevant instrument at the end of the day on which the order is transmitted by the *firm*.
- (3) A *firm* that applies the approach in this *rule* must apply it either:
  - (a) in relation to all *cash trades* that the *firm* receives and transmits; or
  - (b) only in relation to *cash trades* that the *firm* receives and transmits where it does not receive timely information from the executing entity about the terms on which the order was executed.
- (4) A *firm* that applies the approach in this *rule* must document which basis in (3) applies.

4.10.24 G

- (1) The effect of ■ MIFIDPRU 4.10.23R is to permit a *firm* that receives and transmits orders that are *cash trades* to determine the *COH* attributable to the orders using an alternative approach. A *firm* may either:
  - (a) apply the standard approach in ■ MIFIDPRU 4.10.20R(2) and use the price at which the relevant order was ultimately executed, once this has been confirmed by the entity that executes the order; or
  - (b) apply the alternative approach in ■ MIFIDPRU 4.10.23R and use a deemed price that is determined by reference to the limit price of the order or, if there is no limit price, the end-of-day market price at the time at which the order is transmitted.
- (2) However, a *firm* must not use the alternative approach in ■ MIFIDPRU 4.10.23R for regulatory arbitrage to reduce its *K-COH requirement*. To prevent this, a *firm* may only apply the alternative approach either:
  - (a) in relation to all *cash trades* that the *firm* receives and transmits; or
  - (b) in relation to *cash trades* that the *firm* receives and transmits where the *firm* does not receive timely information from the broker about the terms on which the order was executed. In this case, the *firm* must apply the standard approach in ■ MIFIDPRU 4.10.20R(2) in relation to all other *cash trades*. This is designed to ensure that the *firm* can record daily information for *COH* in circumstances where information about the ultimate execution of the order is otherwise missing or significantly delayed.

4.10.25 R

- (1) For the purposes of ■ MIFIDPRU 4.10.20R(4), a *firm* must adjust the notional amount of an interest rate derivative by multiplying the notional amount by the duration.

- (2) The duration in (1) shall be determined in accordance with the following formula:

$$\text{Duration} = \text{time to maturity (in years)} / 10$$

### Interaction between K-COH requirement and K-AUM requirement

- 4.10.26** **G** ■ MIFIDPRU 4.10.27G to ■ MIFIDPRU 4.10.32G and ■ MIFIDPRU 4 Annex 12G explain the circumstances in which a *firm* must include orders that arise in connection with *portfolio management* or *investment advice* in, or may exclude orders from, its measurement of *COH*.
- 4.10.27** **G**
- (1) The basic definition of *COH* includes:
- (a) orders that the *firm* executes when providing execution services for a *client*; and
  - (b) orders that the *firm* has received from a *client* and transmitted to another entity for execution.
- (2) The *rules* and *guidance* in ■ MIFIDPRU 4.10.28R to ■ 4.10.32G explain how this definition applies in particular scenarios and certain exclusions or modifications that may apply.
- 4.10.28** **R** A *firm* may exclude from its calculation of *COH* any order that the *firm* generates in the course of providing either of the following in relation to a portfolio, if the portfolio is included in the *firm's* calculation of its *K-AUM* requirement:
- (1) *portfolio management*; or
  - (2) *investment advice of an ongoing nature*.
- 4.10.29** **R**
- (1) This *rule* applies where:
- (a) *portfolio management* has been delegated to a *firm* by a *financial entity*; and
  - (b) as a result of the delegation in (a), the *firm* has excluded the delegated portfolio from its calculation in *AUM* in accordance with ■ MIFIDPRU 4.7.9R.
- (2) The *firm* in (1) must include in its measurement of *COH* any orders that the *firm* executes in the course of providing *portfolio management* in relation to the delegated portfolio.
- (3) The *firm* in (1) is not required to include in its measurement of *COH*:
- (a) any order that the *firm* passes back to the delegating *financial entity* for execution (whether the order is executed by that *financial entity* or is transmitted by the *financial entity* to another entity for execution); or
  - (b) any order that the *firm* places with another entity for execution in the course of providing *portfolio management* in relation to the delegated portfolio.



**4.10.30** G The exclusions in ■ MIFIDPRU 4.7.9R, ■ MIFIDPRU 4.10.28R and ■ MIFIDPRU 4.10.29R(3) may result in a *firm* that carries on delegated *portfolio management* having no *K-AUM requirement* or *K-COH requirement* in relation to all or part of a delegated portfolio. Where one or more exclusions apply, a *firm* should still assess as part of its *ICARA process* whether the activity of providing delegated *portfolio management* may give rise to potential material harms that may need to be covered by additional financial resources. *Firms* should refer to the *rules and guidance* in ■ MIFIDPRU 7 for additional information on the *ICARA process*.

**4.10.31** G

- (1) ■ MIFIDPRU 4.10.29R does not apply where a *financial entity* ("A") carries on *portfolio management* in relation to a portfolio and a *MIFIDPRU investment firm* ("B") provides *investment advice of an ongoing nature* to A in relation to that portfolio. In this situation, A has not delegated *portfolio management* to B. Instead, A provides the service of *portfolio management* to A's *client*, and B provides the separate service of *investment advice* to A. If A is a *MIFIDPRU investment firm*, A will include the value of the relevant portfolio when calculating its *K-AUM requirement*. B will calculate its own *K-AUM requirement* in relation to the same portfolio.
- (2) Although ■ MIFIDPRU 4.10.29R does not apply in this scenario, B may benefit from the separate exclusion in ■ MIFIDPRU 4.10.28R(2) and therefore would not be required to include any orders that result from its ongoing *investment advice* within B's calculation of *COH*, because B will calculate a *K-AUM requirement* in relation to the relevant portfolio.

**4.10.32** G When measuring *COH* for the purposes of ■ MIFIDPRU 4.10.19R, a *firm* must include:

- (1) an order that the *firm* executes, or receives and transmits, as a result of providing *investment advice* (other than *investment advice of an ongoing nature*, if the *firm* calculates a *K-AUM requirement* in relation to the advice) to a *client* and subsequently receiving instructions from the *client* to transmit or execute the relevant order; and
- (2) an order that a *firm* receives from another *firm* ("X"), where:
  - (a) X provides *investment advice* (including *investment advice of an ongoing nature*) to a *client*;
  - (b) as a result of the advice in (a), the *client* instructs X to place an order with the *firm*; and
  - (c) the *firm* executes or receives and transmits the order received from X.

## Firms with less than 6 months data on COH

**4.10.33** R

- (1) This *rule* applies where a *firm* has been handling *client* orders constituting *COH* for less than 6 *months*.
- (2) For the purposes of its calculation of *average COH* under ■ MIFIDPRU 4.10.19R, a *firm* must use the modified calculation in ■ MIFIDPRU TP 4.11R(1) with the following adjustments:

- (a) in ■ MIFIDPRU TP 4.11R(1)(b), *n* is the relevant number of *months* for which the *firm* has been handling *client* orders constituting *COH* (with the *month* during which the *firm* begins that activity being counted as *month zero*); and
- (b) during *month zero* of the calculation, the *firm* must:
  - (i) generate a best efforts estimate of expected *COH* for that *month* based on the *firm's* projections when beginning the new activity; and
  - (ii) use the estimate in (i) as its *average COH*;
- (c) during *month 1* of the calculation and each *month* thereafter, the *firm* must apply the approach in (a) using observed historical data from the preceding *months*; and
- (d) the modified calculation ceases to apply on the date that falls 6 *months* after the date on which the *firm* began handling *client* orders constituting *COH*.



## 4.11 Trading book and dealing on own account: general provisions

- 4.11.1** G References to *trading book* positions in MIFIDPRU include all *trading book* positions of the *firm*, including positions in:
- (1) equity instruments;
  - (2) debt instruments (including securitisation instruments);
  - (3) collective investment undertakings;
  - (4) foreign exchange;
  - (5) gold; and
  - (6) commodities and emissions allowances.
- 4.11.2** G
- (1) For the purposes of the definition of a *position held with trading intent* in relation to the *trading book*, positions arising from client servicing include those arising out of contracts in relation to which a *firm* is acting as principal (even in the context of activity described as 'broking' or 'customer business'). This applies even if the nature of the business means that the only risks incurred by the *firm* are counterparty risks (i.e. no market risk charges apply).
  - (2) If the nature of the business means that the only risks incurred by the *firm* are counterparty risks, the position will generally still be a *position held with trading intent*.
  - (3) The FCA understands that business carried out under International Uniform Brokerage Execution ("Give-Up") Agreements involve back to back trades as principal. If so, positions arising out of business carried out under such agreements should be allocated to a *firm's trading book*.
- 4.11.3** R
- (1) A MIFIDPRU investment firm must manage its *trading book* in accordance with Chapter 3 of Title I of Part Three of the UK CRR in the form in which it stood at 31 December 2021, with the following modifications:
    - (a) if a *firm* is unsure whether a position is a *position held with trading intent* or is held to hedge a *position held with trading intent*, the *firm* must include that position within its *trading book*;

- (b) the following provisions of the *UK CRR* do not apply:
- (i) article 102(1);
  - (ii) article 102(4);
  - (iii) article 104(2)(g); and
  - (iv) article 106;
- (c) the reference in article 104(1) of the *UK CRR* to “policies and procedures for determining which position to include in the trading book” is a reference to “policies and procedures for identifying which positions form part of the trading book”.
- (2) Any reference to the *UK CRR* in this rule is to the *UK CRR* as applied and modified by (1).
- 4.11.4** R The following requirements only apply to a *firm* that *deals on own account*, whether on its own behalf or on behalf of its *clients*:
- (1) the *K-NPR requirement*;
  - (2) the *K-CMG requirement*; and
  - (3) the *K-TCD requirement*.
- 4.11.5** R The *K-DTF requirement* applies to a *firm* that:
- (1) *deals on own account*; or
  - (2) *executes orders on behalf of clients* in the *firm’s* own name.
- 4.11.6** G A MIFIDPRU investment *firm* that *deals on own account* is also subject to the *K-CON requirement* in accordance with ■ MIFIDPRU 5.
- 4.11.7** G A MIFIDPRU investment *firm* that has permission to operate an organised trading facility may rely on that permission to:
- (1) carry out *matched principal trading* in certain types of *financial instruments* with *client* consent, in accordance with ■ MAR 5A.3.5R(1); and
  - (2) *deal on own account* in illiquid *sovereign debt* instruments in accordance with ■ MAR 5A.3.5R(2).
- In either case, the *firm* will be *dealing on own account* and is therefore subject to the requirements in ■ MIFIDPRU 4.11.4R and ■ MIFIDPRU 4.11.5R to the extent relevant to the transactions it undertakes. ■ MIFIDPRU 5 explains how the *K-CON requirement* applies to such *firms*.
- 4.11.8** R A *firm* to which ■ MIFIDPRU 4.11.4R applies is required to calculate its *K-NPR requirement* and *K-CMG requirement* only in relation to:
- (1) *trading book* positions; and

## 4.11.9

**R**

- (2) positions other than *trading book* positions where the positions give rise to foreign exchange risk or commodity risk.
- (1) This *rule* applies where a *firm* has deliberately taken a position to hedge against the adverse impact of a foreign exchange rate on:
  - (a) the *firm's own funds requirement*; or
  - (b) an item which the *firm* has deducted from its *own funds*.
- (2) A *firm* may exclude a position in (1) from its net open currency positions for the purpose of article 352 of the *UK CRR* (as applied by ■ MIFIDPRU 4.12.2R) if the *firm* has prior permission from the *FCA*.
- (3) To obtain the permission in (2), a *firm* must:
  - (a) complete the application form in ■ MIFIDPRU 4 Annex 1R and submit it to the *FCA* using the *online notification and application system*;
  - (b) in the application, demonstrate to the satisfaction of the *FCA* that the position is:
    - (i) used for one of the hedging purposes in (1)(a) or (1)(b); and
    - (ii) of a non-trading or structural nature.
- (4) This *rule* replaces article 352(2) *UK CRR* where that article would otherwise apply under ■ MIFIDPRU 4.12.2R.

## 4.11.10

**R**

A *firm* to which ■ MIFIDPRU 4.11.4R applies is required to calculate its *K-TCD requirement* only in relation to the following:

- (1) transactions that form part of its *trading book*; and
- (2) transactions specified in ■ MIFIDPRU 4.14.3R(7).

## 4.12 K-NPR requirement

- 4.12.1** **R** A MIFIDPRU investment firm must calculate its K-NPR requirement by reference to every position referred to in **■ MIFIDPRU 4.11.8R** that does not form part of a *portfolio* for which the *firm* has been granted a K-CMG permission.
- 4.12.2** **R**
- (1) The K-NPR requirement of a MIFIDPRU investment firm must be calculated in accordance with Title IV of Part Three of the UK CRR in the form in which it stood at 31 December 2021.
  - (2) Any reference in this section to the UK CRR is to the UK CRR as applied by (1) and modified by the *rules* in this section.
  - (3) When applying the UK CRR in accordance with (1):
    - (a) any provision in the UK CRR relating to the effect that the market risk of a position has on the “own funds requirement” should be interpreted as relating instead to the effect that the position has on the K-NPR requirement of the MIFIDPRU investment firm;
    - (b) article 363 of the UK CRR does not apply;
    - (c) any reference in Title IV of Part Three of the UK CRR to:
      - (i) article 363 of the UK CRR (permission to use internal models) refers to **■ MIFIDPRU 4.12.4R** to **■ MIFIDPRU 4.12.7R**; and
      - (ii) permissions granted under article 363 of the UK CRR refers to equivalent permissions granted under **■ MIFIDPRU 4.12.4R** to **■ MIFIDPRU 4.12.7R**.
- 4.12.2A** **R**
- (1) When applying the UK CRR for the purposes of this section, a *firm* must apply the following, as modified by (2):
    - (a) the *Appropriately Diversified Indices RTS*;
    - (b) the *Market Definition RTS*; and
    - (c) the *Non-Delta Risk of Options RTS*.
  - (2) The relevant modifications are as follows:
    - (a) a reference to an “institution” is a reference to the *firm*;
    - (b) a reference to “Regulation (EU) No 575/2013” is a reference to the UK CRR as modified by the *rules* in MIFIDPRU;

- (c) a reference to an “own funds requirement” is a reference to the contribution of a position to the *firm’s K-NPR requirement*; and
- (d) a reference to the calculation of requirements “on a consolidated basis” is a reference to the calculation of those requirements on a *consolidated basis* under ■ MIFIDPRU 2.5.

[Note: BTS 525/2014, BTS 528/2014 and BTS 945/2014.]

## 4.12.2B

**R**

Where a provision in Title IV of Part Three of the *UK CRR* requires a *firm* to determine a risk weighting by reference to the Standardised Approach to credit risk, for the purposes of this section, a *firm* must:

- (1) apply the provisions in the *UK CRR* relating to the Standardised Approach to credit risk in the form in which they stood on 31 December 2021; but
- (2) for the purposes of determining any mapping of credit quality steps under the provisions in (1), use the ECAI mappings applied by the *PRA* for the purposes of the rules in the *PRA Rulebook* relating to the Standardised Approach to credit risk for CRR firms, as amended from time to time.

[Note: BTS 2016/1799.]

## 4.12.2C

**G**

- (1) Certain market risk provisions in the *UK CRR* (in the form in which it stood on 31 December 2021) require a *firm* to consider the underlying credit risk attaching to a position under the *UK CRR* Standardised Approach to credit risk. In certain cases, the credit risk rules require a *firm* to determine the risk attaching to the position by reference to “credit quality steps”, which are mapped to credit ratings issued by particular *credit rating agencies*. As the credit risk requirements in the *UK CRR* are no longer directly relevant under *MIFIDPRU*, the *FCA* will no longer be maintaining an *FCA* version of the ECAI credit quality step mappings in BTS 2016/1799 for these purposes.
- (2) The effect of ■ MIFIDPRU 4.12.2BR is that where a *firm* needs to determine the underlying credit risk of a position for the purposes of the *K-NPR requirement* by reference to credit quality steps, the *firm* should use the updated ECAI mappings maintained by the *PRA* for the purposes of the Standardised Approach to credit risk as it applies to CRR firms under the *PRA Rulebook*.

## 4.12.2D

**R**

A *firm* may treat the currency pairs listed in ■ MIFIDPRU 4 Annex 13R as closely correlated for the purposes of article 354(1) of the *UK CRR*.

### Instruments for which no treatment is specified in the UK CRR

## 4.12.3

**R**

- (1) Where a *MIFIDPRU investment firm* has a position in a *financial instrument* for which no treatment is specified in the *UK CRR*, it must consider whether:
  - (a) the position is sufficiently similar to a position for which a treatment is specified in the *UK CRR*; and

- (b) the application of the treatment in (a) would be prudent and appropriate.
- (2) If there is a treatment in the *UK CRR* that meets the requirements in (1), the *firm* must calculate the *K-NPR requirement* resulting from that position by applying that treatment.
- (3) If there are multiple treatments in the *UK CRR* that meet the requirements in (1), the *firm* must calculate the *K-NPR requirement* resulting from that position by applying the most appropriate treatment.
- (4) If there are no appropriate treatments in the *UK CRR*, the *firm* must add an appropriate percentage of the current value of the position to its overall *K-NPR requirement*. An appropriate percentage is either 100%, or a percentage that takes into account the characteristics of the position.
- (5) A *firm* must document its policies and procedures for calculating the *K-NPR requirement* of positions under this *rule* in its *trading book* policy statement.

#### Permission to use internal models

##### 4.12.4



- (1) A *firm* must obtain prior permission from the *FCA* before using an internal model to calculate any of the following requirements under Part Three, Title IV, Chapter 5 of the *UK CRR*:
  - (a) general risk of equity instruments;
  - (b) specific risk of equity instruments;
  - (c) general risk of debt instruments;
  - (d) specific risk of debt instruments;
  - (e) foreign exchange risk; and
  - (f) commodities risk.
- (2) To obtain the permission in (1), a *firm* must:
  - (a) complete the application form in ■ MIFIDPRU 4 Annex 2R and submit it to the *FCA* using the *online notification and application system*; and
  - (b) in the application, demonstrate to the satisfaction of the *FCA* that:
    - (i) the *firm* meets the conditions for the use of the internal model specified in Part Three, Title IV, Chapter 5 of the *UK CRR*, as supplemented by the *rules* and *guidance* in this section; and
    - (ii) the internal model covers a significant share of the positions of the relevant risk category in (1).
- (3) A *firm* must obtain a separate permission under this *rule* for each risk category in (1).

**4.12.5** **G** ■ MIFIDPRU 4.12.8R to ■ MIFIDPRU 4.12.65G contain *rules* and *guidance* setting out requirements for internal models and explaining the factors that the *FCA* will consider when deciding whether to grant permission to use an internal model.

**4.12.6** **R**

- (1) A *firm* that has a permission under ■ MIFIDPRU 4.12.4R for an internal model must obtain approval from the *FCA* before it:
  - (a) implements a material change to the use of the model; or
  - (b) makes a material extension to the use of the model.
- (2) To determine if a change or extension is material for the purposes of (1), a *firm* must apply the criteria and methodology set out in article 3 (to the extent that it relates to the Internal Models Approach (IMA)), articles 7a and 7b and Annex III of the *Market Risk Model Extensions and Changes RTS*.
- (3) To obtain the approval in (1), a *firm* must:
  - (a) complete the application form in ■ MIFIDPRU 4 Annex 3R and submit it to the *FCA* using the *online notification and application system*; and
  - (b) perform an initial calculation of stressed value-at-risk in accordance with article 365(2) of the *UK CRR* on the basis of the model as changed or extended and submit the results as part of the application in (a).

**4.12.7** **R**

- (1) A *firm* that has a permission under ■ MIFIDPRU 4.12.4R for an internal model must notify the *FCA* before it:
  - (a) implements a change to the use of the model that is not a material change; or
  - (b) extends the use of the model in a manner that is not material.
- (2) A *firm* must notify the *FCA* by completing the form in ■ MIFIDPRU 4 Annex 4R and submitting it using the *online notification and application system*.

## Use of internal models: risk capture

**4.12.8** **R** A MIFIDPRU investment firm that has a permission to use an internal model in accordance with Part Three, Title IV, Chapter 5 of the *UK CRR* must:

- (1) identify any material risks (or group of risks are material in aggregate) that are not captured by those models;
- (2) hold *own funds* to cover those risk(s) in addition to the *own funds* required to comply with the *K-NPR requirement*, calculated in accordance with Part Three, Title IV, Chapter 5 of the *UK CRR*; and
- (3) hold additional *own funds* for value-at-risk (VaR) and stressed value-at-risk (sVaR) models that apply to the *firm*.

## 4.12.9

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- (1) The methodology for identifying the risks in ■ MIFIDPRU 4.12.8R and calculating additional *own funds* for VaR and sVaR models is called the "Risks not in VaR (RNIV) framework". A *firm* is responsible for identifying these additional risks and this should be an opportunity for risk managers and the *firm's* management to better understand the shortcomings of the *firm's* models. Following this initial assessment, the *FCA* will engage with the *firm* to provide challenge and ensure an appropriate outcome.
- (2) The RNIV framework is intended to ensure that *own funds* are held to meet all risks that are not captured, or not captured adequately, by the *firm's* VaR and sVaR models. These include, but are not limited to, missing and/or illiquid risk factors such as cross-risks, basis risks, higher-order risks, and calibration parameters. The RNIV framework is also intended to cover event risks that could adversely affect the relevant business.
- (3) A *firm* should systematically identify and measure all risks that are not captured, or not captured adequately. This analysis should be carried out at least quarterly, but the *FCA* may request more frequent analysis. The measurement of these risks should capture the losses that could arise due to the risk factor(s) of all products that are within the scope of the permission for the relevant internal model, but are not adequately captured by the relevant internal model.
- (4) On a quarterly basis, the *firm* should identify and assess individual risk factors covered by the RNIV framework. The *FCA* will review the results of this exercise and may require that *firms* identify additional risk factors as being eligible for measurement.
- (5)
  - (a) Where sufficient data is available, and where it is appropriate to do so, the *FCA* expects a *firm* to calculate a VaR and sVaR metric for each risk factor within scope of the framework. The stressed period for the RNIV framework should be consistent with that used for sVaR. No offsetting or diversification may be recognised across risk factors included in the RNIV framework. The multipliers used for VaR and sVaR should be applied to generate a *K-NPR requirement*.
  - (b) If it is not appropriate to calculate a VaR and sVaR metric for a risk factor, a *firm* should instead measure the size of the risk based on a stress test. The confidence level and capital horizon of the stress test should be commensurate with the liquidity of the risk, and should be at least as conservative as comparable risk factors under the internal model approach. The capital charge should be at least equal to the losses arising from the stress test.

### Standardised approach for options

## 4.12.10

R

- (1) A MIFIDPRU investment firm may use its own estimates for delta for the purposes of the standardised approach for options under article 329, article 352(1) or article 358 of the *UK CRR* if:
  - (a) the option is:
    - (i) an over-the-counter option; or
    - (ii) is traded on an exchange, but delta for the option is not available from that exchange;



- (b) the *firm* adequately reflects non-delta risks in the *K-NPR requirement* in accordance with the *Non-Delta Risk of Options RTS*;
- (c) the model the *firm* uses meets the minimum standards set out in ■ MIFIDPRU 4.12.12G to ■ MIFIDPRU 4.12.18G (Minimum standards for own estimates of delta) for each type of option for which it calculates delta;
- (d) the *firm* notifies the *FCA* that the requirements in (a) to (c) have been met before the *firm* begins to use its own estimates for the relevant delta; and
- (e) the notification in (d) is made using the form in ■ MIFIDPRU 4 Annex 5R and submitted using the *online notification and application system*.

(2) The value of delta is 1 where:

- (a) a *MIFIDPRU investment firm* is not permitted to use its own estimates for delta in accordance with (1); and
- (b) if the option is traded on an exchange, delta is not available from that exchange.

**4.12.11** G If a *MIFIDPRU investment firm* has notified the *FCA* under ■ MIFIDPRU 4.12.10R that a model meets the minimum standards for a particular option type, but is subsequently unable to demonstrate to the *FCA* that the model meets those minimum standards, the *FCA* may apply a capital add-on and agree a risk mitigation plan. If a *firm* does not comply with the risk mitigation plan within the mandated timeframe, the *FCA* may take further supervisory measures. This may include variation of a *firm's Part 4A permission* so that the *firm* is no longer allowed to trade the relevant option types.

#### Minimum standards for own estimates of delta

**4.12.12** G The sophistication of a pricing model used to calculate own estimates of delta for use in the standardised approach for options should be proportionate to the complexity and risk of each option and the overall risk of the *firm's* options trading business. In general, the *FCA* considers that the risk of sold options will be higher than the risk of the same options when bought.

**4.12.13** G Delta should be recalculated at least daily. A *firm* should also recalculate delta promptly if there are significant movements in the market parameters used as inputs to calculate delta.

**4.12.14** G The pricing model used to calculate delta should be:

- (1) based on appropriate assumptions that have been assessed and challenged by suitably qualified parties independent of the development process;
- (2) independently tested, including validation of the mathematics, assumptions and software implementation; and
- (3) developed or approved independently of the trading desk.

|  |   |   |
|--|---|---|
| 4.12.15                                  | G | A <i>firm</i> should use generally accepted industry standard pricing models for the calculation of own deltas where these are available, such as for relatively simple options.  |
| 4.12.16                                  | G | The IT systems used to calculate delta should be sufficient to ensure delta is calculated accurately and reliably.  |
| 4.12.17                                  | G | <p>A <i>firm</i> should have adequate systems and controls in place when using a pricing model to calculate delta. This should include the following documented policies and procedures:</p> <ul style="list-style-type: none"><li>(1) clearly defined responsibilities of the various areas involved in the calculation;</li><li>(2) frequency of independent testing of the accuracy of the model used to calculate delta; and</li><li>(3) guidelines for the use of unobservable inputs, where relevant.</li></ul>   |
| 4.12.18                                  | G | <p>A <i>firm</i> should ensure its risk management functions are aware of weaknesses of the model used to calculate a delta. Where a <i>firm</i> identifies weaknesses, it should ensure that estimates of delta result in a prudent contribution to the <i>K-NPR requirement</i>. The outcome should be prudent across the whole portfolio of options and underlying positions at all times.</p>   |
| <b>Netting: convertible</b>              |   |   |
| 4.12.19                                  | R | The netting of a <i>convertible</i> and an offsetting position in the underlying instrument is permitted for the purposes of article 327(2) of the <i>UK CRR</i> (Netting).   |
| 4.12.20                                  | G | <p>For the purposes of article 327(2) of the <i>UK CRR</i>, the <i>convertible</i> should be:</p> <ul style="list-style-type: none"><li>(1) treated as a position in the <i>equity</i> into which it converts; and</li><li>(2) the component of the <i>firm's K-NPR requirement</i> attributable to the general and specific risk in its <i>equity</i> instruments should be adjusted by making:<ul style="list-style-type: none"><li>(a) an addition equal to the current value of any loss that the <i>firm</i> would make if it did convert to <i>equity</i>; or</li><li>(b) a deduction equal to the current value of any profit that the <i>firm</i> would make if it did convert to <i>equity</i> (subject to a maximum deduction equal to the <i>K-NPR requirement</i> that would be attributable to the notional position underlying the <i>convertible</i>).</li></ul></li></ul> |
| <b>Offsetting derivative instruments</b> |   |   |
| 4.12.21                                  | G | Article 331(2) of the <i>UK CRR</i> (Interest rate risk in derivative instruments) sets out conditions that must be met before a <i>firm</i> not using interest rate pre-processing models can fully offset interest rate risk on derivative instruments. One of the conditions is that the reference rate (for floating-rate positions) or coupon (for fixed-rate positions) should be 'closely matched'. The <i>FCA</i> will  |

normally consider a difference of less than 15 basis points as indicative of the reference rate or coupon being 'closely matched' for the purposes of this requirement. A *firm* that wishes to use sensitivity models to calculate interest rate risk on derivative instruments in accordance with article 331(1) of the UK CRR should refer to ■ MIFIDPRU 4.12.66R.

#### Exclusion of overshootings when determining multiplication factor addends

- 4.12.22 G
- (1) The FCA's starting assumption is that all overshootings should be taken into account to calculate addends. If a *firm* believes that an overshooting should not count for that purpose, it should seek a variation of its VaR model permission from the FCA in accordance with ■ MIFIDPRU 4.12.4R to exclude the overshooting.
  - (2) An example of when a *firm's* overshooting might properly be disregarded is when it has arisen as a result of a risk that is not captured in a *firm's* VaR model but against which *own funds* are already held.

#### Derivation of notional positions for standardised approaches: general

- 4.12.23 G ■ MIFIDPRU 4.12.24G to ■ MIFIDPRU 4.12.38G set out *guidance* for the derivation of notional positions for standardised approaches to market risk under the UK CRR.

#### Futures and forwards on a basket or index of debt securities

- 4.12.24 G Futures or forwards on a basket or index of debt securities should be converted into forwards on single debt securities as follows:
- (1) futures or forwards on a single currency basket or index of debt securities should 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 that 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 or forwards on multiple currency baskets or indices of debt securities should be treated as either:
    - (a) a series of forwards (using the method 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 that is a proportionate part of the total underlying the contract according to the weighting of the relevant currency in the basket.

- 4.12.25 G Notional debt securities derived through this treatment should be 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.

4.12.26

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. A *firm* should select the highest percentages, even if 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.

**Bonds where coupons and principal are paid in different currencies**

4.12.27

G

Where a debt security pays coupons in one currency but will be redeemed in a different currency, it should 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.

**Interest rate risk on other futures, forwards and swaps**

4.12.28

G

Other futures, forwards, and swaps for which a treatment is not specified in article 328 of the *UK CRR* (Interest rate futures and forwards) should 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, as set out in the table in ■ MIFIDPRU 4.12.29G.

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This table belongs to■ MIFIDPRU 4.12.28G.

| 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           | A long position if the contract involves an actual (or notional) sale                  | or                 | A short position if the contract involves an actual (or notional) pur-                      |

| Instrument               | Notional positions             |
|--------------------------|--------------------------------|
| of the underlying equity | chase of the underlying equity |

#### Deferred start interest rate swaps or foreign currency swaps.....

- 4.12.30 **G** Interest rate swaps or foreign currency swaps with a deferred start should be treated as two notional positions (one long, one short). The paying leg should be treated as a short position in a zero specific risk security with a coupon equal to the fixed rate of the swap. The receiving leg should be treated as a long position in a zero specific risk security that also has a coupon equal to the fixed rate of the swap.

- 4.12.31 **G** The maturities of the notional positions in ■ MIFIDPRU 4.12.30G are set out in the table in ■ MIFIDPRU 4.12.32G.

- 4.12.32 **G** This table belongs to ■ MIFIDPRU 4.13.31G.

|                                     | Paying leg                                     | Receiving leg                                  |
|-------------------------------------|--|--|
| Receiving fixed and paying floating | The maturity equals the start date of the swap | The maturity equals the end date of the swap   |
| Paying fixed and receiving floating | The maturity equals the end date of the swap   | The maturity equals the start date of the swap |

#### Swaps where only one leg is an interest rate leg.....

- 4.12.33 **G** For interest rate risk, a *firm* should treat a swap (such as an equity 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) that is a long position if the *firm* is receiving interest payments and is a short position if making interest payments.

#### Foreign exchange forwards, futures and contracts for differences.....

- 4.12.34 **G**
- (1) A *firm* should treat a foreign currency forward, future or contract for differences as two notional currency positions as follows:
    - (a) a long notional position in the currency that the *firm* has contracted to buy; and
    - (b) a short notional position in the currency that the *firm* has contracted to sell.
  - (2) In (1), the notional positions should have a value equal to either:
    - (a) the contracted amount of each currency to be exchanged in a forward, future or contract for differences held outside the *trading book*; or

4.12.35

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- (b) the present value of the amount of each currency to be exchanged in a forward, future or contract for differences held in the *trading book*.

#### Foreign currency swaps

- (1) A *firm* should 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 should have a value equal to either:
  - (a) the nominal amount of each currency underlying the swap if it is held outside the *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*.

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#### Futures, forwards and contract for differences on a single commodity

Where a forward, future or contract for differences settles according to:

- (1) the difference between the price set on trade date and the price prevailing at contract expiry, the notional position should:
  - (a) equal the total quantity underlying the contract; and
  - (b) have a maturity equal to the expiry date of the contract;
- (2) the difference between the price set on trade date and the average of prices prevailing over a certain period up to contract expiry, a notional position should be derived 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.

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#### Buying or selling a single commodity at an average of spot prices prevailing in the future

Commitments to buy or sell at the average spot price of the commodity prevailing over some period between trade date and maturity should 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 should be:
  - (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 should:

- (a) be long if the position under (1) is short, or short if the position under (1) is long;
- (b) be equal to a fractional share of the total quantity underlying the contract; and
- (c) have a maturity date of the relevant reference date.

### Cash legs of repurchase agreements and reverse repurchase agreements

**4.12.38** G The forward cash leg of a repurchase agreement or reverse repurchase agreement should be treated as a notional position in a zero specific risk security that:

- (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 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
- 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.

### Expectations relating to internal models

**4.12.39** G ■ MIFIDPRU 4.12.40G to ■ MIFIDPRU 4.12.65G describe some of the standards that the FCA expects to be met when it is considering an application under ■ MIFIDPRU 4.12.4R to use an internal model.

### High-level standards

**4.12.40** G A *firm* should be able to demonstrate that it meets the risk management standards in article 368 of the *UK CRR* (Qualitative requirements) on a legal entity and business-line basis where appropriate. This is particularly important for a *subsidiary* in a *group* subject to matrix management where the business lines cut across legal entity boundaries.

### Categories of position

**4.12.41** G A VaR model permission generally sets out the broad classes of position within each risk category in its scope. It may also specify how individual products within one of the classes may be brought into or taken out of the scope of the VaR model permission. The broad classes of permission are:

- (1) linear products, which comprise securities with linear pay-offs (such as bonds and *equities*) and derivative products which have linear pay-offs in the underlying risk factor (such as interest rate swaps, *FRAs*, and total return swaps);



- (2) European, American and Bermudan put and call options (including caps, floors, and swaptions) and investments with these features;
- (3) Asian options, digital options, single barrier options, double barrier options, look-back options, forward-starting options, compound options and investments with these features; and
- (4) all other option-based products (such as basket options, quantos, outperformance options, timing options, and correlation-based products) and investments with these features.

Data standards

4.12.42

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A *firm* should ensure that the data series used by its VaR model is reliable. Where a reliable data series is not available, the *firm* may use proxies or any other reasonable value-at-risk measurement if the model meets the requirements in article 367(2)(e) of the *UK CRR* (Requirements on risk measurement). The technique must be appropriate and must not materially understate the modelled risks.

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Data may be insufficient if, for example, it contains missing data points or data points that contain stale data. For less liquid risk factors or positions, the *FCA* expects the *firm* to make a conservative assessment of those risks, using 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.

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A *firm* is expected to update data sets to maintain standards of reliability in accordance with the frequency set out in its VaR model permission, or more frequently if necessary due to volatility in market prices or rates. This is in order to ensure a prudent calculation of the VaR measure.

Aggregating VaR measures

- 4.12.45
- G
- (1) In determining whether it is appropriate for a *firm* to use empirical correlations within risk categories and across risk categories within a model, the *FCA* will consider whether such an approach is sound and implemented with integrity. In general, the *FCA* expects a *firm* to determine the aggregate VaR measure by adding the relevant VaR measure for each category, unless the *firm's* permission provides for a different method of aggregating VaR measures that is empirically sound.
  - (2) The *FCA* does not expect a *firm* to use the square root of the sum of the squares approach when aggregating measures across risk categories 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 should simply be added to determine its aggregate VaR measure. However, to the extent that a *firm's* VaR model permission provides for a different way of aggregating VaR measures:
    - (a) that method applies instead; and



(b) if the correlations between risk categories used for that purpose cease to be empirically justified then the *firm* is expected to notify the *FCA* immediately.

Testing prior to model validation

- 4.12.46 G A *firm* should demonstrate its ability to comply with the requirements for a VaR model permission. In general, a *firm* should have a back-testing programme in place and should provide 3 *months* of back-testing history.
- 4.12.47 G A *firm* should carry out a period of initial monitoring or live testing before the *FCA* will recognise a VaR model. This will be agreed on a *firm-by-firm* basis.
- 4.12.48 G The *FCA* will take into account the results of internal model validation procedures used by the *firm* to assess the VaR model when assessing the *firm's* VaR model and risk management.

Back-testing

- 4.12.49 G ■ MIFIDPRU 4.12.50G to ■ MIFIDPRU 4.12.53G provide further *guidance* on how a *firm* should comply with the requirements in article 366 of the *UK CRR* (Regulatory back testing and multiplication factors).
- 4.12.50 G If the *day* on which a loss is made is 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 back-testing also takes place on day *n+1*. The *firm's* supervisor should be notified of any overshootings by close of business on day *n+2*.
- 4.12.51 G Any overshooting initially counts for the purpose of the calculation of the plus factor, even if subsequently the *FCA* agrees to exclude it. Therefore, where the *firm* experiences an overshooting and already has 4 or more overshootings during the previous 250 *business days*, changes to the multiplication factor resulting from changes to the plus factor become effective at day *n+3*.
- 4.12.52 G A longer time period generally improves the power of back-testing. 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.
- 4.12.53 G The *FCA* will review a *firm's* processes and documentation relating to the derivation of profit and loss used for back-testing when assessing a VaR model permission application under ■ MIFIDPRU 4.12.4R. 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.

**Planned changes to the VaR model**

- 4.12.54 **G** Under [MIFIDPRU 4.12.6R](#), a *firm* must provide the *FCA* with details of any significant planned changes to the VaR model before those changes are implemented. This must include detailed information about the nature of the change, including an estimate of the impact on VaR numbers and the incremental risk charge. Material changes to internal models or material extensions to the use of internal models will require prior approval from the *FCA*.

**Bias from overlapping intervals for 10-day VaR and stressed VaR**

- 4.12.55 **G** The use of overlapping intervals of 10-day holding periods for article 365 of the *UK CRR* (VaR and sVaR calculation) introduces an autocorrelation into the data that would not exist should truly independent 10-day periods be used. This may give rise to an under-estimation of the volatility and the VaR at the 99% confidence level. To obtain clarity on the materiality of the bias, a *firm* should measure the bias arising from the use of overlapping intervals for 10-day VaR and sVaR when compared to using independent intervals. A report on the analysis, including a proposal for a multiplier on VaR and sVaR to adjust for the bias, should be submitted to the *FCA* for review and approval.

**Stressed VaR calculation**

- 4.12.56 **G** Under article 365 of the *UK CRR* (VaR and sVaR calculation), a *firm* that uses an internal model for calculating its *K-NPR requirement* must calculate, at least weekly, a sVaR of their current portfolio. The *FCA* would expect a sVaR internal model to contain the features in [MIFIDPRU 4.12.57G](#) to [MIFIDPRU 4.12.60G](#) before the *FCA* will grant permission to use the relevant model.

**Quantile estimator**

- 4.12.57 **G** A *firm* should calculate the sVaR measure to be greater than or equal to the average of the second and third worst loss in a 12-month time series comprising of 250 observations. The *FCA* expects, as a minimum, that a corresponding linear weighting scheme should be applied if the *firm* uses a larger number of observations.

**Meaning of ‘period of significant financial stress relevant to the institution’s portfolio’**

- 4.12.58 **G** A *firm* should ensure that the sVaR period chosen is equivalent to the period that would maximise VaR, given the *firm’s* portfolio. A stressed period should be identified at each legal entity level at which capital is reported. Therefore, group level sVaR measures should be based on a period that maximises the group level VaR, whereas entity level sVaR should be based on a period that maximises VaR for that entity.

**Antithetic data**

- 4.12.59 **G** The *firm* should consider whether the use of antithetic data in the calculation of the sVaR measure is appropriate to the *firm’s* portfolio. The *firm* should provide a justification to the *FCA* for using or not using antithetic data as part of an application to use an internal model.

Absolute and relative shifts

4.12.60 **G** In its application to use an internal model, the *firm* should explain the reasons for the choice of absolute or relative shifts for both VaR and sVaR methodologies. In particular, the *firm* should evidence the statistical processes driving the risk factor changes for both VaR and sVaR.

4.12.61 **R** A *firm* that uses an internal model must submit the following information to the *FCA* on a quarterly basis:

- (1) analysis to support the equivalence of the *firm's* current approach to a VaR-maximising approach on an ongoing basis;
- (2) the reasons for the selection of key major risk factors used to find the period of significant financial stress;
- (3) a summary of ongoing internal monitoring of stressed period selection for the current portfolio;
- (4) analysis to support capital equivalence of upscaled 1-day VaR and sVaR measures to corresponding full 10-day VaR and sVaR measures;
- (5) a graphed history of sVaR/VaR ratio;
- (6) analysis to demonstrate accuracy of partial revaluation approaches specifically for sVaR purposes (for *firms* using revaluation ladders or spot/vol-matrices), including a review of the ladders/matrices or spot/vol-matrices, ensuring that they are extended to include wider shocks to risk factors that occur in stress scenarios; and
- (7) minutes of risk committee meetings or other evidence of governance and senior management oversight of sVaR methodology.

4.12.62 **G** Under article 372 of the *UK CRR* (Requirement to have an internal IRC model), a *firm* that uses an internal model for calculating own funds requirements for specific risk of traded debt instruments must also have an internal incremental default and migration risk (IRC) model in place to capture the default and migration risk of its trading book positions that are incremental to the risks captured by its VaR model. When the *FCA* considers a *firm's* application for permission to use an IRC internal model under **MIFIDPRU 4.12.4R**, it expects that the matters in **MIFIDPRU 4.12.63G** to **MIFIDPRU 4.12.65G** will be included to demonstrate compliance with the standards in article 372.

Basis risks for migration

4.12.63 **G** The *FCA* expects the IRC model to capitalise pre-default basis risk. In this respect, the model should reflect that in periods of stress the basis could widen substantially. The *firm* should disclose to the *FCA* its material basis risks that are incremental to those already captured in existing market risk capital measures (VaR-based and others). This must take into account actual close-out periods during periods of illiquidity.

**Price/spread change model**

4.12.64

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The price/spread change model used to capture the profit and loss impact of migration should calibrate spread changes to long-term averages of differences between spreads for relevant ratings. These should either be conditioned on actual rating events, or use the entire history of spreads regardless of migration. Point-in-time estimates are not acceptable, unless the *firm* can demonstrate that they are as conservative as long-term averages.

**Dependence of the recovery rate on the economic cycle**

4.12.65

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To achieve a soundness standard comparable to those under the Internal Ratings Based (IRB) approach, loss given default (LGD) estimates should reflect the economic cycle. Therefore, the *FCA* expects a *firm* to incorporate dependence of the recovery rate on the economic cycle into the IRC model. If the *firm* uses a conservative parameterisation to comply with the IRB standard of the use of downturn estimates, the *firm* should submit evidence of this in its quarterly reporting to the *FCA*. A *firm* should note that for trading portfolios that contain long and short positions, downturn estimates will not be a conservative choice in all cases.

**Permission to use sensitivity models to calculate interest rate risk on derivative instruments**

4.12.66

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- (1) A *firm* must obtain prior permission from the *FCA* to use a sensitivity model in accordance with article 331(1) of the *UK CRR* to calculate the interest rate risk for positions in:
  - (a) derivative instruments under articles 328 to 330 of the *UK CRR*; or
  - (b) any bond which is amortised over its residual life, rather than via one final payment of principal.
- (2) To obtain the permission in (1), a *firm* must:
  - (a) where the permission relates to one or more of the derivative instruments in (1)(a), mark to market the instruments and manage the interest rate risk on the instruments on a discounted cash flow basis;
  - (b) complete the form in ■ MIFIDPRU 4 Annex 6R and submit it using the *online notification and application system*; and
  - (c) in its application under (b), demonstrate to the satisfaction of the *FCA* that:
    - (i) the model generates positions that have the same sensitivity to interest rate changes as the underlying cash flows; and
    - (ii) the sensitivity in (i) is assessed with reference to independent movements in sample rates across the yield curve, with at least one sensitivity point in each of the maturity bands set out in Table 2 in article 339 of the *UK CRR*.
- (3) Where a *firm* has been granted permission to apply a sensitivity model under this *rule*, any relevant positions must be included in the *firm's* calculation of its general risk of debt instruments for its *K-NPR* requirement.

## 4.13 K-CMG requirement

- 4.13.1** **R** (1) Subject to (2), the *K-CMG requirement* applies to a *MIFIDPRU investment firm* for *portfolios* for which the firm has been granted a *K-CMG permission*.
- (2) A *MIFIDPRU investment firm* must include a position specified in **■ MIFIDPRU 4.11.8R** within the calculation of its *K-NPR requirement* if that position:
- (a) is included in a *portfolio* for which the *firm* has been granted a *K-CMG permission*;
  - (b) is a proprietary position of the *firm* that results from a trade that has settled;
  - (c) is not included in the calculation of the required margin under the margin model of the *clearing member* or *authorised central counterparty* in **■ MIFIDPRU 4.13.9R(2)(b)**; and
  - (d) is not a position to which the *clearing member* or *authorised central counterparty* has applied a "haircut" of the type specified in **■ MIFIDPRU 4.13.6R(2)**.
- 4.13.2** **G** **■ MIFIDPRU 4.13.1R(2)** is intended to cover the risks arising from proprietary trades that form part of a *portfolio* for which a *firm* has a *K-CMG permission*. Where trades have settled, the resulting proprietary position of the *firm* may no longer be included within the margin requirement calculated by the *clearing member* or *authorised central counterparty* for that *portfolio* and therefore would not contribute to the *firm's K-CMG requirement*. The *firm* should therefore include these positions within its calculation of the *K-NPR requirement* to take account of the resulting market risk. For these purposes, a *firm* is not required to apply this approach to a position that results from client servicing.
- 4.13.3** **G** In an application for a *K-CMG permission*, a *firm* must identify each *portfolio* for which it wishes to calculate a *K-CMG requirement*.
- 4.13.4** **R** **■ MIFIDPRU 4.11.8R(2)** includes positions held outside the *trading book* that give rise to foreign exchange or commodities risk. The *FCA* considers that it is unlikely that such positions would be eligible for a *K-CMG permission*. Therefore, even if the *FCA* has granted a *K-CMG permission* in relation to all *portfolios* in the *firm's trading book*, a *firm* may need to calculate a *K-NPR requirement* in relation to positions it holds outside of the *trading book*.

- 4.13.5** **R** The *K-CMG requirement* of a *MIFIDPRU investment firm* must be calculated using the following formula:
- $$K-CMG\ requirement = TM * 1.3$$
- where TM is the third highest amount of total margin as calculated under **■ MIFIDPRU 4.13.6R** required from the *firm* on a daily basis over the preceding 3 months.
- 4.13.6** **R** For the purposes of **■ MIFIDPRU 4.13.5R**, the total margin must be calculated as the sum of the following in relation to all *clearing members* and to the extent that **■ MIFIDPRU 4.13.9R(2)(c)(i)** applies, all *authorised central counterparties*:
- (1) the amount of margin required by the margin model referenced in **■ MIFIDPRU 4.13.9R(2)(e)**; plus
  - (2) the value of any "haircut" applied by the *clearing member* or *authorised central counterparty* to positions included in the *portfolio* that represent settled trades and which the *clearing member* or *authorised central counterparty* is treating as collateral to secure the present or future obligations of the *MIFIDPRU investment firm*.
- 4.13.7** **G** **■ MIFIDPRU 4.13.6R** requires a *MIFIDPRU investment firm* to determine the amount of margin that is required under the relevant margin model of each *clearing member* (or, for a self-clearing *firm*, of each *authorised central counterparty*) for *portfolios* in respect of which the *firm* has been granted a *K-CMG permission*. For these purposes, the *clearing member's* (or, where applicable, *authorised central counterparty's*) margin model must satisfy the criteria in **■ MIFIDPRU 4.13.14R**. The effect of **■ MIFIDPRU 4.13.6R** is that if, notwithstanding the requirement under the margin model, the *MIFIDPRU investment firm* agrees with the *clearing member* or *authorised central counterparty* to provide a different amount of margin, it is the amount required under the model that must be used for the purposes of calculating the *firm's K-CMG requirement* and not the amount of margin that is actually provided by the *firm*. This ensures that the *firm's K-CMG requirement* is not artificially reduced by commercial negotiations that may result in the *clearing member* or *authorised central counterparty* accepting a lower amount of margin than the model requires.
- 4.13.8** **G** The calculation in **■ MIFIDPRU 4.13.5R** means that for each trading day during the calculation period, the *firm* must calculate the total combined margin in accordance with **■ MIFIDPRU 4.13.6R** provided to all *clearing members* in aggregate in respect of the relevant *portfolios*. The *K-CMG requirement* is then calculated on the basis of the third highest daily aggregate amount.
- 4.13.9** **R** To obtain a *K-CMG permission* for a *portfolio*, a *firm* must:
- (1) complete the application form in **■ MIFIDPRU 4 Annex 7R** and submit it using the *online notification and application system*;
  - (2) in the application, demonstrate to the satisfaction of the *FCA* that:
    - (a) the *firm* is not part of a *group* containing a *credit institution*;



- (b) the clearing and settlement of the transactions in the relevant *portfolio* take place under the responsibility of a *clearing member* of an *authorised central counterparty*;
- (c) the *clearing member* in (b) is one of the following:
  - (i) a *MIFIDPRU investment firm* (which may be the *firm* itself, where it is self-clearing);
  - (ii) a *UK credit institution*;
  - (iii) a *designated investment firm*;
  - (iv) a *third country investment firm*; or
  - (v) a *credit institution* established in a *third country*;
- (d) transactions in the relevant *portfolio* are either:
  - (i) centrally cleared in an *authorised central counterparty*; or
  - (ii) settled on a delivery-versus-payment basis under the responsibility of the *clearing member* in (b);
- (e) the *firm* is required to provide total margin calculated on the basis of a margin model that satisfies the criteria in ■ MIFIDPRU 4.13.14R and is operated by:
  - (i) where the *clearing member* in (b) (where applicable, including the *firm* itself) is a *MIFIDPRU investment firm* or a *third country investment firm*, the *authorised central counterparty* in (b); or
  - (ii) in any other case, the relevant *clearing member* in (b);
- (f) the reasons for the *firm's* choice of calculating a *K-CMG requirement* for the *portfolio* have been clearly documented and approved by the *firm's management body* or risk management function; and
- (g) the choice of the *portfolio* to be subject to a *K-CMG requirement* has not been made with a view to engaging in regulatory arbitrage between the *K-NPR requirement* and the *K-CMG requirement* in a disproportionate or prudentially unsound manner.

4.13.10 **R**

- (1) A *firm* that has been granted a *K-CMG permission* for a *portfolio* must notify the *FCA* immediately if it becomes aware that any of the conditions in ■ MIFIDPRU 4.13.9R are no longer met in relation to the *portfolio*.
- (2) The notification in (1) must be made using the form in ■ MIFIDPRU 4 Annex 8R and submitted via the *online notification and application system*.

4.13.11 **G**

The *FCA* may revoke a *K-CMG permission* for a *portfolio* where one or more of the conditions in ■ MIFIDPRU 4.13.9R is no longer met in relation to that *portfolio*. The *FCA* may review the appropriateness of any *K-CMG permissions* as part of any *SREP* it undertakes in relation to the *firm* in accordance with ■ MIFIDPRU 7.

- 4.13.12** **R** A *firm* that is an *indirect client* of a *clearing member* may obtain a *K-CMG permission* if:
- (1) the indirect clearing arrangement satisfies all of the conditions in ■ MIFIDPRU 4.13.9R and both the *clearing member* and the *client* of the *clearing member* that is providing clearing services to the *firm* are entities that are listed in ■ MIFIDPRU 4.13.9R(2)(c); and
  - (2) the *FCA* is satisfied that the relevant arrangement does not result in undue risks.
- 4.13.13** **R**
- (1) A *firm* that is relying on a *K-CMG permission* must ensure that:
    - (a) the *individuals* in the *firm* who are responsible for the *firm's* risk management function, or for the oversight of that function, have a reasonable understanding of the operation of the margin model referred to in ■ MIFIDPRU 4.13.9R(2)(e); and
    - (b) the *firm* integrates this understanding of the margin model into its *ICARA process* for the purposes of considering whether:
      - (i) the resulting *K-CMG requirement* is sufficient to cover the relevant risks to which the *firm* is exposed; and
      - (ii) the *K-CMG permission* remains appropriate in relation to the *portfolio(s)* for which it was granted.
  - (2) For the purposes of (1), a *firm* may use suitable advice or analysis provided by an appropriate third party, but the *firm* is responsible for ensuring that the *individuals* in (1)(a) have the necessary knowledge and understanding of the margin model.
  - (3) An appropriate third party under (2) includes:
    - (a) a suitably qualified professional adviser;
    - (b) the relevant *clearing member*; or
    - (c) another *undertaking* within the same *investment firm group* as the *firm* where individuals within that *undertaking* have the requisite knowledge and understanding of the margin model.
- 4.13.14** **R**
- (1) The criteria referred to in ■ MIFIDPRU 4.13.9R(2)(e) are that:
    - (a) the margin requirements are sufficient to cover losses that may result from at least 99% of the exposures movements over an appropriate time horizon with at least a two-*business day* holding period; and
    - (b) the margin model used by the *clearing member* or *authorised central counterparty* to call the margin is always designed to achieve a level of prudence similar to that required in the provisions on margin requirements in article 41 of *EMIR*.
  - (2) If the parameters of a margin model operated by a *clearing member* or *authorised central counterparty* do not meet the criteria in (1)(a), those criteria shall nonetheless be deemed to be met if:
    - (a) an adjustment mechanism is applied to produce an alternative margin requirement; and



- (b) the alternative requirement in (a) is at least equivalent to the margin requirement that would be produced by a margin model that meets the criteria in (1)(a).
- (3) An adjustment mechanism under (2) may be applied by either of the following, provided that the conditions in (4) are met:
  - (a) the relevant *clearing member*; or
  - (b) the *MIFIDPRU investment firm* that has been granted the relevant *K-CMG permission*.
- (4) The conditions are that the *MIFIDPRU investment firm* that has been granted the relevant *K-CMG permission*:
  - (a) can provide to the *FCA* upon request a reasonable explanation of the adjustment that has been applied under (2); and
  - (b) monitors and reviews the effectiveness of the adjustment mechanism on an ongoing basis as part of its *ICARA process*.

- 4.13.15 G
- (1) ■ [MIFIDPRU 4.13.14R\(2\)](#) permits the output of a margin model of a *clearing member* or *authorised central counterparty* to be adjusted to meet the criteria in ■ [MIFIDPRU 4.13.14R\(1\)\(a\)](#). The adjustment is used solely to determine the *K-CMG requirement* of a *firm*. It does not affect the actual amount of margin that the *clearing member* or *authorised central counterparty* will receive from the *firm*, which will continue to be determined by the underlying (unadjusted) model.
  - (2) For example, the *clearing member's* or *authorised central counterparty's* original margin model may produce margin requirements that are sufficient to cover losses that may result from at least 95% of the exposures movements over a two-business day holding period. This would not meet the minimum criteria in ■ [MIFIDPRU 4.13.14R\(1\)\(a\)](#). To determine the *firm's K-CMG requirement*, the output of that model may be adjusted to produce a requirement that would cover losses that may result from at least 99% of the exposures movements over that same holding period. If the conditions in ■ [MIFIDPRU 4.13.14R\(3\)](#) and ■ (4) are satisfied, the minimum criteria in ■ [MIFIDPRU 4.13.14R\(1\)\(a\)](#) will be deemed to be met when the adjustment is applied. This is the case even though the actual margin received by the *clearing member* or *authorised central counterparty* is determined by the underlying (unadjusted) model.

- 4.13.16 G
- Where the margin model of a *clearing member* uses parameters that are more conservative than the minimum criteria in ■ [MIFIDPRU 4.13.14R\(1\)](#), the output of the model may be adjusted downwards under ■ [MIFIDPRU 4.13.14R\(2\)](#) to produce margin requirements that are consistent with the minimum criteria. The requirements in ■ [MIFIDPRU 4.13.14R\(3\)](#) and ■ (4) still apply to a downwards adjustment. A *firm* is not required to apply a downwards adjustment to a more conservative model.

- 4.13.17 G
- The *FCA* will consider whether the *firm's* reasons for choosing a *K-CMG requirement* under ■ [MIFIDPRU 4.13.9R\(2\)\(f\)](#) have taken adequate account of the nature of, and risks arising from, the *firm's* trading activities, including whether:

## 4.13.18

G

- (1) the main activities of the *firm* are essentially trading activities that are subject to clearing and margining under the responsibility of a *clearing member*; and
  - (2) other activities performed by the *firm* are immaterial in comparison to those main activities.
- 
- (1) For the purposes of ■ MIFIDPRU 4.13.9R(2)(g), the fact that a *K-CMG permission* for a *portfolio* may result in a *K-CMG requirement* that is lower than the equivalent *K-NPR requirement* for that *portfolio* does not automatically mean that the choice to apply a *K-CMG requirement* has been made with a view to engaging in regulatory arbitrage in a disproportionate or prudentially unsound manner.
  - (2) When considering whether the condition in ■ MIFIDPRU 4.13.9R(2)(g) is satisfied, a *firm* should consider whether the *K-CMG requirement* that would result from the relevant *K-CMG permission* more closely reflects the underlying economic risk of the relevant *portfolio* when compared with the equivalent *K-NPR requirement* for the same *portfolio*.
  - (3) The *FCA* considers that even in circumstances where the *K-CMG requirement* is considerably lower than the equivalent *K-NPR requirement*, this does not automatically prevent a *firm* from meeting the conditions for a *K-CMG permission*. A significant difference between the two requirements may result from the calculation of the *K-CMG requirement* being better adapted for capturing the economic risks of the particular *portfolio* in question. For example, the margin model underlying the *K-CMG requirement* may have been specifically designed for *firms* that specialise in trading that type of *portfolio*. A *firm* that is applying for a *K-CMG permission* should provide a clear explanation of how the conditions in ■ MIFIDPRU 4.13.9R(2) are satisfied for the *portfolio*. The *firm* should keep the appropriateness of a *K-CMG permission* under regular review as part of its *ICARA process*.

## 4.13.19

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- (1) Except where (2) applies, a *firm* that has a *K-CMG permission* for a *portfolio* must calculate a *K-CMG requirement* for that *portfolio* for a continuous period of at least 24 *months* from the date that the permission is granted.
- (2) The requirement in (1) does not apply if:
  - (a) the *FCA* revokes the relevant *K-CMG permission* in relation to that *portfolio* on its own initiative in the circumstances described in ■ MIFIDPRU 4.13.11G; or
  - (b) the business strategy or operations of the *trading desk* with responsibility for the *portfolio* have changed to such an extent that it has become a different *trading desk*.

## 4.13.20

R

- (1) Where a *firm* that has been granted a *K-CMG permission* in relation to a *portfolio* subsequently chooses to calculate a *K-NPR requirement* for that *portfolio*, the *firm* must submit the notification in (2) to the *FCA* before the *firm* begins to calculate the *K-NPR requirement*.

(2) The notification in (1) must:

- (a) confirm that the requirement in ■ MIFIDPRU 4.13.19R(1) has been met in relation to the *portfolio*, or that the circumstance in ■ MIFIDPRU 4.13.19R(2)(b) applies;
- (b) specify the date on which the *K-CMG permission* should cease to apply to the *firm*; and
- (c) be made using the form in ■ MIFIDPRU 4 Annex 9R and submitted using the *online notification and application system*.

4.13.21

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Where a *firm* has submitted a notification in ■ MIFIDPRU 4.13.20R(2), the *FCA* will not normally grant another *K-CMG permission* for the same *portfolio* until at least 24 *months* after the previous *K-CMG permission* ceased to apply.

## 4.14 K-TCD requirement

- 4.14.1** **R** (1) The *K-TCD requirement* of a MIFIDPRU investment firm is an amount equal to the sum of the *TCD own funds requirement* for all transactions specified in (2).
- (2) This *rule* applies to the transactions in ■ MIFIDPRU 4.14.3R where the transactions:
- (a) are recorded in the *trading book* of a *firm dealing on own account* (whether for itself or on behalf of a *client*); or
  - (b) in the case of the transactions specified in ■ MIFIDPRU 4.14.3R(2)-(7), are carried out by a *firm* that has the necessary *permissions* to *deal on own account*.

- 4.14.2** **G** (1) The effect of ■ MIFIDPRU 4.14.1R(2)(b) is that where a *firm* is authorised to *deal on own account*, it must include in the calculation of its *K-TCD requirement* any transactions specified in ■ MIFIDPRU 4.14.3R(2)-(7). This applies even if the *firm's* involvement in the transaction does not constitute *dealing on own account* and the transaction may not be recorded in its *trading book*.
- (2) A *firm* that is not authorised to *deal on own account* is not subject to the *K-TCD requirement* under ■ MIFIDPRU 4.14.1R, even if it is involved in a transaction that would otherwise fall within ■ MIFIDPRU 4.14.3R(2)-(7).

### Transactions to which K-TCD applies

- 4.14.3** **R** Subject to ■ MIFIDPRU 4.14.5R, the transactions to which ■ MIFIDPRU 4.14.1R applies are as follows:
- (1) derivative contracts listed in Annex II to the *UK CRR*, with the exception of the following:
- (a) derivative contracts directly or indirectly cleared through a *CCP*, where all of the following conditions are met:
    - the positions and assets of the *firm* related to the contracts are distinguished and segregated, at the level of both the *clearing member* and the *CCP*, from the position and assets of the *clearing member* and the other clients of that *clearing member* and, as a result of that distinction and segregation, those positions and assets are bankruptcy remote under applicable law in the event of default or insolvency of the *clearing member* or one or more of its other clients;

|        |   |   |
|--------|---|---|
|        |   | <ul style="list-style-type: none"> <li>(ii) the legal requirements applicable to or binding the <i>clearing member</i> facilitate the transfer of the client's positions relating to the contracts and of the corresponding collateral to another <i>clearing member</i> within the applicable margin period of risk in the event of default or insolvency of the original <i>clearing member</i>; and</li> <li>(iii) the <i>firm</i> has obtained an independent, written and reasoned legal opinion that concludes that, in the event of a legal challenge, the <i>firm</i> would bear no losses on account of the insolvency of its <i>clearing member</i> or of any of its <i>clearing member's</i> clients;</li> </ul> <ul style="list-style-type: none"> <li>(b) exchange-traded derivative contracts; and</li> <li>(c) derivative contracts held for hedging a position of the <i>firm</i> resulting from an activity outside the <i>trading book</i>;</li> </ul> <ul style="list-style-type: none"> <li>(2) <i>long settlement transactions</i>;</li> <li>(3) <i>repurchase transactions</i>;</li> <li>(4) <i>securities or commodities lending or borrowing transactions</i>;</li> <li>(5) <i>margin lending transactions</i>;</li> <li>(6) any other types of <i>securities financing transactions</i>; and</li> <li>(7) credits and loans referred to in the activity in point 2 of paragraph 1 of Part 3A of Schedule 2 to the <i>Regulated Activities Order</i>, if the <i>firm</i> is: <ul style="list-style-type: none"> <li>(a) executing the trade in the name of the <i>client</i>; or</li> <li>(b) receiving and transmitting the order without executing it.</li> </ul> </li> </ul> |
| 4.14.4 | R | <p>A derivative contract that is directly or indirectly cleared through an <i>authorised central counterparty</i> is deemed to meet the conditions in ■ MIFIDPRU 4.14.3R(1)(a).</p>   |
| 4.14.5 | R | <p>The <i>K-TCD requirement</i> does not apply to transactions with the following counterparties:</p> <ul style="list-style-type: none"> <li>(1) central governments and central banks, where the underlying exposures would receive a 0% risk weight under article 114 of the <i>UK CRR</i>;</li> <li>(2) multilateral development banks listed in article 117(2) of the <i>UK CRR</i>; or</li> <li>(3) international organisations listed in article 118 of the <i>UK CRR</i>.</li> </ul>   |
| 4.14.6 | R | <ul style="list-style-type: none"> <li>(1) With the prior consent of the <i>FCA</i>, a <i>firm</i> may exclude transactions with the following counterparties from the calculation of its <i>K-TCD requirement</i> under ■ MIFIDPRU 4.14.1R: <ul style="list-style-type: none"> <li>(a) its <i>parent undertaking</i>;</li> </ul> </li> </ul>   |

- (b) its *subsidiary*;
  - (c) a *subsidiary* of its *parent undertaking*; or
  - (d) an *undertaking* with which the *firm* is linked by *majority common management*.
- (2) To obtain the *FCA* consent in (1), the *firm* must demonstrate all of the following to the satisfaction of the *FCA*:
- (a) the counterparty is subject to appropriate prudential requirements and is one of the following:
    - (i) a *credit institution*;
    - (ii) an *investment firm*; or
    - (iii) a *financial institution*;
  - (b) the counterparty is:
    - (i) included in the same prudential consolidation group as the *firm* on a full basis in accordance with the *UK CRR* or the consolidation provisions in ■ MIFIDPRU 2.5; or
    - (ii) supervised along with the *firm* for compliance with the group capital test in ■ MIFIDPRU 2.6;
  - (c) the counterparty is subject to the same risk evaluation, measurement and control procedures as the *firm*;
  - (d) the counterparty is established in the *UK*; and
  - (e) there is no current or foreseen material practical or legal impediment to the prompt transfer of *own funds* or repayment of liabilities from the counterparty to the *firm*.
- (3) To apply for *FCA* consent under (1), a *firm* must complete the form in ■ MIFIDPRU 4 Annex 10R and submit it using the *online notification and application system*.

#### Calculation of TCD own funds requirement

##### 4.14.7



The *TCD own funds requirement* for each transaction or *netting set* must be calculated using the following formula:

$$TCD \text{ own funds requirement} = \alpha * EV * RF * CVA$$

where:

- (1)  $\alpha = 1.2$
- (2)  $EV$  = the exposure value calculated in accordance with ■ MIFIDPRU 4.14.8R
- (3)  $RF$  = the risk factor applicable to the counterparty type as set out in the table in ■ MIFIDPRU 4.14.29R
- (4)  $CVA$  = the credit valuation adjustment calculated in accordance with ■ MIFIDPRU 4.14.30R

### Exposure value

4.14.8

**R**

The exposure value must be calculated using the following formula:

Exposure value = Max (0; RC + PFE – C)

where:

- (1) RC = the replacement cost calculated in accordance with [■ MIFIDPRU 4.14.9R](#) (which may be a positive value, thereby increasing the exposure value, or a negative value, thereby decreasing the exposure value)
- (2) PFE = potential future exposure calculated in accordance with [■ MIFIDPRU 4.14.10R](#)
- (3) C = collateral as determined in accordance with [■ MIFIDPRU 4.14.24R](#) and [■ MIFIDPRU 4.14.25R](#) (which may be a positive value, thereby decreasing the exposure value, or a negative value, thereby increasing the exposure value)

### Replacement cost

4.14.9

**R**

- (1) A *firm* must calculate the replacement cost for all transactions referred to in [■ MIFIDPRU 4.14.3R](#).
- (2) The replacement cost must be determined as follows:
  - (a) for derivative contracts, the replacement cost is the *CMV*;
  - (b) for *long settlement transactions*, the replacement cost is the settlement amount of cash to be paid or to be received by the *firm* upon settlement, with a receivable being treated as a positive amount and a payment being treated as a negative amount;
  - (c) unless (d) applies, for *repurchase transactions* and *securities or commodities lending or borrowing transactions*, the replacement cost is the amount of cash lent or borrowed, with cash lent by the *firm* being treated as a positive amount and cash borrowed by the *firm* being treated as a negative amount;
  - (d) for *securities financing transactions*, where both legs of the transaction are securities, the replacement cost is the *CMV* of the security lent by the *firm*, increased by the corresponding volatility adjustment in [■ MIFIDPRU 4.14.25R](#); and
  - (e) for *margin lending transactions* and the credits and loans referred to in [■ MIFIDPRU 4.14.3R\(7\)](#), the replacement cost is the book value of the asset in accordance with the applicable accounting framework.

### Potential future exposure

4.14.10

**R**

- (1) A *firm* is required to calculate potential future exposure (PFE) only for derivative contracts.
- (2) A *firm* must calculate the potential future exposure for derivative contracts in a *netting set* using one of the following approaches:



- (a) the hedging approach in ■ MIFIDPRU 4.14.14R; or
- (b) the derivative netting ratio approach in ■ MIFIDPRU 4.14.18R.
- 4.14.11** **R** Where a single derivative contract cannot be allocated to a *netting set* with other derivative contracts, it must be treated as a separate *netting set* for the purposes of ■ MIFIDPRU 4.14.10R.
- 4.14.12** **R** A *firm* must apply its chosen approach under ■ MIFIDPRU 4.14.10R:
- (1) continuously for at least 24 *months*; and
- (2) consistently across all its *netting sets*.
- Potential future exposure: hedging approach**
- 4.14.13** **G**
- (1) If a derivative contract has a negative replacement cost, a *firm* should still calculate a PFE in relation to that contract if it is possible for the replacement cost to become positive before the maturity date.
- (2) As the replacement cost of an individual written option can never be a positive amount, written options are exempt from the requirement to calculate a PFE, unless they are subject to netting with contracts other than written options for the purposes of calculating PFE in accordance with ■ MIFIDPRU 4.14.14R and ■ MIFIDPRU 4.14.16R.
- (3) If a written option is subject to netting for the purposes of calculating PFE, a *firm* may cap the PFE in relation to that option at an amount that would result in a replacement cost of zero.
- 4.14.14** **R**
- (1) For the purposes of calculating the PFE of derivative contracts included within a *netting set* under ■ MIFIDPRU 4.14.16R, a *firm* must:
- (a) calculate the effective notional amount of each contract (EN) in accordance with ■ MIFIDPRU 4.14.20R;
- (b) allocate each derivative contract to an asset class in accordance with (2) and (3); and
- (c) calculate a separate net notional amount for each asset class in (b) by netting the EN of all derivative contracts allocated to that asset class, with long positions to be treated as positive amounts and short positions to be treated as negative amounts.
- (2) Subject to (3), a *firm* must assign derivative contracts to separate asset classes as follows:
- (a) except as specified in (b) to (d), a derivative contract must be allocated to the relevant asset class specified in the table in ■ MIFIDPRU 4.14.22R;
- (b) interest rate derivatives must be allocated to separate asset classes according to their currency;
- (c) foreign exchange derivatives must be allocated to separate asset classes according to each currency pair; and

- (d) derivative contracts falling within the “other” class in ■ MIFIDPRU 4.14.22R may be allocated to the same class if their primary risk driver is identical, but otherwise must each be treated as a separate class.
- (3) Derivative contracts that would fall within a specific asset class under (2) must be allocated to a separate asset class if:
  - (a) they reference the basis between two risk factors and are denominated in a single currency (i.e. they are basis transactions), in which case all basis transactions referencing that same pair of risk factors must be allocated to a separate asset class; or
  - (b) they reference the volatility of a risk factor (i.e. they are volatility transactions), in which case all volatility transactions referencing that same risk factor must be allocated to a separate asset class.

## 4.14.15

G

- (1) ■ MIFIDPRU 4.14.14R(2) defines the main asset classes to which derivative contracts should be assigned to calculate the potential future exposure of a *netting set*. For example, a single name equity derivative would be allocated to the equity single name asset class in ■ MIFIDPRU 4.14.22R, while a credit derivative would be allocated to the credit asset class in that *rule*.
- (2) ■ MIFIDPRU 4.14.14R(3) requires basis transactions or volatility swaps that would otherwise fall within one of the main asset classes in ■ MIFIDPRU 4.14.14R(2) to be allocated to separate asset classes. The separate asset classes are defined according to the relevant risk factor or pair of risk factors.
- (3) For example, an equity index future on Equity Index A and another equity index future on Equity Index B would be allocated to the same asset class under ■ MIFIDPRU 4.14.14R(2)(a), as they both fall within the asset class (i.e. equity indices) in ■ MIFIDPRU 4.14.22R. However, a volatility swap that references Equity Index A must be allocated to a separate class under ■ MIFIDPRU 4.14.14R(3)(b), but can be grouped with another volatility swap that also references Equity Index A (i.e. the same risk factor).
- (4) For derivative contracts relating to foreign exchange, a *firm* may net contracts relating to a currency pair (for example, USD/EUR) against contracts relating to the inverse pair (i.e. in this example, EUR/USD) by treating one pair as a long position and the inverse pair as a short position.
- (5) For interest rate derivative contracts that have multiple legs, the *firm* should add together the notional amounts of the positive (receive) and negative (pay) legs, after adjusting for the duration and the supervisory delta in accordance with the calculation of the effective notional amount in ■ MIFIDPRU 4.14.20R. The net amount should then be included in the calculation of PFE.

## 4.14.16

R

For the purposes of ■ MIFIDPRU 4.14.10R(2)(a), a *firm* must calculate the potential future exposure of derivative contracts included within a *netting set* by:

- (1) multiplying the absolute value of the net notional amount under ■ MIFIDPRU 4.14.14R(1)(c) for each asset class within the *netting set* by the supervisory factor for that asset class specified in ■ MIFIDPRU 4.14.22R;
- (2) adding together the product of the calculation in (1) for all asset classes within the *netting set*; and
- (3) multiplying the sum under (2) by:
  - (a) 0.42, for *netting sets* of transactions with financial or non-financial counterparties for which, if required, collateral is exchanged bilaterally with the counterparty in accordance with the conditions laid down in article 11 of *EMIR*; or
  - (b) 1, for other *netting sets*.

#### Potential future exposure: derivative netting ratio approach

4.14.17

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- (1) If a derivative contract has a negative replacement cost, a *firm* should still calculate a potential future exposure (PFE) in relation to that contract if it is possible for the replacement cost to become positive before the maturity date.
- (2) As the replacement cost of an individual written option can never be a positive amount, written options are exempt from the requirement to calculate a PFE, unless they are subject to netting with contracts other than written options for the purposes of calculating PFE in accordance with ■ MIFIDPRU 4.14.18R.

4.14.18

R

A *firm* must calculate a net potential future exposure for each *netting set* using the following formula:

$$\text{PFE}_{\text{net}} = \frac{\text{RC}_{\text{net}}}{\text{RC}_{\text{gross}}} \cdot \text{PFE}_{\text{gross}}$$

where:

- (1)  $\text{PFE}_{\text{net}}$  = the net potential future exposure for the *netting set*;
- (2)  $\text{PFE}_{\text{gross}}$  = the sum of the potential future exposure of all derivative contracts included in the *netting set*, calculated by multiplying the absolute value of the effective notional amount of each derivative contract (as calculated in accordance with ■ MIFIDPRU 4.14.20R) by the relevant supervisory factor for the corresponding asset class specified in ■ MIFIDPRU 4.14.22R;
- (3)  $\text{RC}_{\text{net}}$  = the sum of the replacement cost (as determined in accordance with ■ MIFIDPRU 4.14.9R) of all transactions included in the *netting set*, unless that sum is a negative amount, in which case  $\text{RC}_{\text{net}}$  is zero;
- (4)  $\text{RC}_{\text{gross}}$  = the sum of the replacement cost (as determined in accordance with ■ MIFIDPRU 4.14.9R) of all transactions included in the *netting set* that have a positive *CMV*, and

- (5) where the value of RCgross is zero, then the result of RCnet divided by RCgross is deemed to be:
  - (a) a value of '1' when a *netting set* consists of a single derivative contract; or
  - (b) a value of zero when a *netting set* consists of more than one derivative contract.

**4.14.18A** **G** For the purposes of **■ MIFIDPRU 4.14.18R(5)**, a *firm* should:

- (1) still consider any residual risk of potential harm that may arise in connection with using the derivative netting ratio approach as part of the *ICARA process* under **■ MIFIDPRU 7**; and
- (2) be consistent in its approach to allocating transactions to *netting sets*.

**4.14.19** **R** For the purposes of **■ MIFIDPRU 4.14.10R(2)(b)**, the potential future exposure for the derivative contracts included within a *netting set* is the product of multiplying PFEnet (as determined in accordance with **■ MIFIDPRU 4.14.18R**) by:

- (1) 0.42, for *netting sets* of transactions with financial or non-financial counterparties for which, if required, collateral is exchanged bilaterally with the counterparty in accordance with the conditions laid down in article 11 of *EMIR*; or
- (2) 1, for other *netting sets*.

### Effective notional amount

- 4.14.20** **R**
- (1) The effective notional amount is calculated as follows:
 

Effective notional amount =  $N * D * SD$

    - (a) N = the notional amount, determined in accordance with (2);
    - (b) D = the duration, calculated in accordance with (3); and
    - (c) SD = the supervisory delta, calculated in accordance with (5).
  - (2) The notional amount, unless clearly stated and fixed until maturity, is determined as follows:
    - (a) for foreign exchange derivative contracts:
      - (i) if one leg of the contract is in the domestic currency, the notional amount is the notional amount of the foreign currency leg of the contract, converted into the domestic currency;
      - (ii) if both legs of the contract are denominated in currencies other than the domestic currency, the notional amount of each leg must be converted into the domestic currency and the leg with the larger value in the domestic currency is the notional amount; and
      - (iii) the term "domestic currency", when used in this *rule*, refers to the currency in which the *firm* reports to the *FCA*;
    - (b) for equity and commodity derivatives contracts and emissions allowances and derivatives thereof, the notional amount is the

- product of the market price of one unit of the instrument and the number of units referenced by the trade;
- (c) for transactions with multiple pay-offs that are state contingent including digital options or target redemption forwards, a *firm* must calculate the notional amount for each state and use the largest resulting calculation;
  - (d) where the notional is a formula of market values, the *firm* must use the *CMVs* to determine the trade notional amount;
  - (e) for variable notional swaps such as amortising and accreting swaps, a *firm* must use the average notional over the remaining life of the swap as the trade notional amount;
  - (f) leveraged swaps must be converted to the notional amount of the equivalent unleveraged swap so that where all of the rates in a swap are multiplied by a factor, the stated notional amount is multiplied by the factor on the interest rates to determine the notional amount; and
  - (g) for a derivative contract with multiple exchanges of principal, the stated notional amount must be multiplied by the number of exchanges of principal in the derivative contract to determine the notional amount.
- (3) The duration must be determined in accordance with the following:
- (a) for all derivative contracts other than interest rate contracts and credit derivative contracts, the duration is 1;
  - (b) for interest rate contracts and credit derivative contracts, the duration is determined in accordance with the following formula in which the time to maturity is specified in years:  

$$\text{Duration} = (1 - \exp(-0.05 * \text{time to maturity})) / 0.05$$
- (4) The maturity of a contract must be determined as follows:
- (a) for an option, the maturity is the latest contractual exercise date as specified by the contract;
  - (b) for a derivative contract that is structured such that on specified dates, any outstanding exposure is settled and the terms are reset so that the fair value of the contract is zero, the remaining maturity is the time until the next reset date;
  - (c) for any other derivative contract, the maturity is the latest date on which the contract may still be executed; and
  - (d) in each case, if the derivative contract references the value of another interest rate or credit instrument, the time period must be determined on the basis of that underlying instrument.
- (5) The supervisory delta must be determined as follows:
- (a) for options and swaptions, the *firm* may calculate the supervisory delta itself by using an appropriate model if:
    - (i) the model the *firm* uses meets the minimum standards set out in ■ MIFIDPRU 4.12.12G to ■ MIFIDPRU 4.12.18G (Minimum standards for own estimates of delta), as modified by ■ MIFIDPRU 4.14.21R, for each type of option or swaption for which it calculates delta;

- (ii) the *firm* has notified the *FCA* that the minimum standards in (i) are met before the *firm* begins to use its own estimates for the relevant supervisory delta; and
- (iii) the notification in (ii) is made using the form in ■ MIFIDPRU 4 Annex 5R and submitted using the *online notification and application system*;
- (b) for transactions other than options and swaptions, or transactions in respect of which a *firm* is unable to use an appropriate model in accordance with (a), the supervisory delta is 1 or -1; and
- (c) in each case, the supervisory delta must reflect the relationship between the contract and the underlying, whereby a contract that increases exposure (by increasing RC) as the underlying increases shall have a positive supervisory delta, and a contract that decreases exposure (by decreasing RC) as the underlying increases shall have a negative supervisory delta.

4.14.21 R

- (1) When applying the minimum standards in ■ MIFIDPRU 4.12.12G to ■ MIFIDPRU 4.12.18G for the purposes of ■ MIFIDPRU 4.14.20R(5)(a), the standards apply with the following modifications:
  - (a) a reference to the “standardised approach” is a reference to the *rules* in this section relating to the calculation of the *K-TCD requirement*; and
  - (b) a reference to the *K-NPR requirement* is a reference to the *K-TCD requirement*.
- (2) In addition to the minimum standards in ■ MIFIDPRU 4.12.12G to ■ MIFIDPRU 4.12.18G a *firm* must also confirm to the *FCA* that the relevant model estimates the rate of change of the value of the option for small changes in the market value of the underlying.

4.14.22 R

The supervisory factor for each asset class is set out in the following table:

| Asset class                      | Supervisory factor |
|----------------------------------|--------------------|
| Interest rate                    | 0.5%               |
| Foreign exchange                 | 4%                 |
| Credit                           | 1%                 |
| Equity single name               | 32%                |
| Equity index                     | 20%                |
| Commodity and emission allowance | 18%                |
| Other                            | 32%                |

4.14.23 R

Transactions relating to gold or gold derivatives must be allocated to the foreign exchange asset class in ■ MIFIDPRU 4.14.22R.

Value of collateral

4.14.24 R

- (1) This *rule* applies for the purposes of determining the value of C under ■ MIFIDPRU 4.14.8R.

- (2) For the transactions specified in ■ MIFIDPRU 4.14.3R(1), ■ (5) and ■ (7), the value of the C is the notional amount of collateral received by the *firm*, decreased in accordance with the relevant volatility adjustment specified in ■ MIFIDPRU 4.14.25R.
- (3) Unless (4) applies, for the transactions specified in ■ MIFIDPRU 4.14.3R(2), ■ (3), ■ (4) and ■ (6), the value of the C is the sum of:

(a) the *CMV* of the *security* leg; and

(b) the net amount of collateral posted or received by the *firm*.
- (4) For *securities financing transactions* where both legs of the transaction are *securities*, the value of the C is the *CMV* of the *security* borrowed by the *firm*.
- (5) Where the *firm* is purchasing or has lent the *security*, the *CMV* of the *security* shall be treated as a negative amount and shall be decreased to a larger negative amount, using the volatility adjustment specified in ■ MIFIDPRU 4.14.25R.
- (6) Where the *firm* is selling or has borrowed the *security*, the *CMV* of the *security* shall be treated as a positive amount and be decreased by the volatility adjustment specified in ■ MIFIDPRU 4.14.25R.
- (7) Where different types of transactions are covered by a contractual netting agreement that meets the requirements in ■ MIFIDPRU 4.14.28R(3), the applicable volatility adjustments in column C (volatility adjustment other transactions) of the table in ■ MIFIDPRU 4.14.25R must be applied to the respective amounts calculated under (3)(a) and (b) on an issuer basis within each asset class.
- (8) Where there is a currency mismatch between the transaction and the collateral received or posted, an additional currency mismatch volatility adjustment of 8% shall apply.

4.14.25

R

- (1) A *firm* must apply the volatility adjustments in (2) to all transactions referred to in ■ MIFIDPRU 4.14.3R.
- (2) Collateral for bilateral and cleared transactions shall be subject to volatility adjustments in accordance with the following table:

| (A)  |                   | (B)  | (C)   |
|--|-------------------|--|---|
|  |                   | Volatility ad-<br>justment: re-<br>purchase trans-<br>actions and se-<br>curities lending<br>and borrowing<br>transactions | Volatility ad-<br>justment: other<br>transactions |
| Asset class  |                   |  |   |
| Debt securities issued by central governments or central banks | ≤ 1 year          | 0.707%   | 1%  |
|  | > 1 year ≤ 5 year | 2.121%   | 3%  |
|  | > 5 years         | 4.243%   | 6%  |



| (A)   |                    | (B)   | (C)                                       |
|---|--------------------|---|---|
| Asset class   |                    | Volatility adjustment: re-purchase transactions and securities lending and borrowing transactions | Volatility adjustment: other transactions |
| Debt securities issued by other entities  | ≤ 1 year           | 1.414%  | 2%  |
|   | > 1 year ≤ 5 years | 4.243%  | 6%  |
|   | > 5 years          | 8.485%  | 12%                                       |
| Securitisation positions (excluding re-securitisation positions)                    | ≤ 1 year           | 2.828%  | 4%  |
|   | > 1 year ≤ 5 years | 8.485%  | 12%                                       |
|   | > 5 years          | 16.970%   | 24%                                       |
| Listed equities and convertibles  |                    | 14.143%   | 20%                                       |
| Other financial instruments (including re-securitisation positions) and commodities |                    | 17.678%   | 25%                                       |
| Gold  |                    | 10.607%   | 15%                                       |
| Cash  |                    | 0%  | 0%  |

**4.14.26** **G** The references to years in column A of the table in ■ MIFIDPRU 4.14.25R are references to the remaining maturity of the relevant security or position.

**4.14.27** **G** The following is an example of how the volatility adjustment under ■ MIFIDPRU 4.14.24R and ■ MIFIDPRU 4.14.25R applies. A *firm* enters into an OTC derivative contract and receives collateral in the form of a debt security issued by a central bank with a maturity of 6 years. The notional value of the debt security is 100. ■ MIFIDPRU 4.14.24R(2) requires the notional value of the collateral to be decreased by the applicable volatility adjustment. In accordance with the table in ■ MIFIDPRU 4.14.25R, the relevant volatility adjustment is 6%. The resulting value of the collateral after the volatility adjustment has been applied is therefore 94.

### Netting

**4.14.28** **R** For the purposes of calculating its *K-TCD requirement*, a *firm* may, in the following order:

- (1) first, treat perfectly matching contracts included in a netting agreement as if they were a single contract with a notional principal equivalent to the net receipts;
- (2) second, net other transactions subject to novation under which all obligations between the *firm* and its counterparty are automatically amalgamated in such a way that the novation legally substitutes one set single net amount for the previous gross obligations; and
- (3) third, net other transactions where the *firm* ensures that the following conditions have been met:

- (a) the transactions are covered by a netting contract with the counterparty, or by another agreement that creates a single legal obligation, such that the *firm* would have either a claim to receive, or obligation to pay, only the net sum of the positive and negative mark-to-market values of the individual transactions if a counterparty fails to perform due to any of the following:
  - (i) default;
  - (ii) bankruptcy;
  - (iii) liquidation; or
  - (iv) similar circumstances;
- (b) in the event of default of a counterparty, the netting contract does not contain any clause that permits a non-defaulting counterparty to make limited payments only, or no payments at all, to the estate of the defaulting party even if the defaulting party is a net creditor;
- (c) the *firm* has obtained an independent, written and reasoned legal opinion that, in the event of a legal challenge to the netting agreement, the *firm's* claims and obligations would be equivalent to those referred to in (a) under each of the following legal regimes:
  - (i) the law of the jurisdiction in which the counterparty is incorporated;
  - (ii) if a foreign branch of a counterparty is involved, the law of the jurisdiction in which the branch is located;
  - (iii) the law that governs the individual transactions included in the netting agreement; or
  - (iv) the law that governs any contract or agreement necessary to effect the netting.

Risk factor

4.14.29 R

The risk factor for a counterparty is set out in the following table:

| Counterparty type   | Risk factor |
|---|-------------|
| Central governments, central banks and public sector entities | 1.6%        |
| Credit institutions and investment firms                      | 1.6%        |
| Other counterparties  | 8%          |

Credit valuation adjustment

4.14.30 R

- (1) For the purposes of this *rule*, the “credit valuation adjustment” (CVA) means an adjustment to the mid-market valuation of the portfolio of transactions with a counterparty that reflects the *CMV* of the credit risk of the counterparty to the *firm*, but does not reflect the *CMV* of the credit risk of the *firm* to the counterparty.
- (2) The CVA for all transactions is 1.5, except for the transactions in (3).
- (3) The CVA for the following transactions is 1:

- (a) the following transactions, if they do not exceed the clearing threshold specified in article 10(3) and (4) of *EMIR*:
  - (i) transactions with non-financial counterparties (as defined in point (9) of article 2 of *EMIR*); or
  - (ii) transactions with non-financial counterparties established in a *third country*;
- (b) intra-group transactions as provided for in article 3 of *EMIR*;
- (c) *long settlement transactions*;
- (d) *securities financing transactions* unless the *FCA* has notified the *firm* that the *firm's* CVA risk exposures arising from those transactions are material; and
- (e) credits and loans referred to in ■ MIFIDPRU 4.14.3R(7).

## 4.15 K-DTF requirement

- 4.15.1** **R** Subject to ■ MIFIDPRU 4.15.11R, the *K-DTF requirement* of a MIFIDPRU investment firm is equal to the sum of:
- (1) 0.1% of average *DTF* attributable to cash trades; and
  - (2) 0.01% of average *DTF* attributable to derivatives trades.
- 4.15.2** **G**
- (1) The definition of *DTF* includes transactions that a firm enters into when *dealing on own account* or when executing *client* orders in the firm's own name.
  - (2) A firm that has permission to operate an organised trading facility may engage in:
    - (a) *matched principal trading* in certain types of financial instruments with *client* consent, in accordance with ■ MAR 5A.3.5R(1); and/or
    - (b) *dealing on own account* in illiquid sovereign debt instruments in accordance with ■ MAR 5A.3.5R(2).
  - (3) Where a firm engages in either activity in (2), it must include those transactions in the measurement of its *DTF*.
  - (4) Except for the transactions in (2), *DTF* does not include orders that a firm handles in the course of operating an organised trading facility. However, *DTF* includes transactions entered into by a firm in its own name through an organised trading facility where the firm is not operating that organised trading facility.
- 4.15.3** **R** A firm must calculate its *K-DTF requirement* on the first business day of each month.
- 4.15.4** **R**
- (1) A firm must calculate the amount of its average *DTF* as:
    - (a) taking the total *DTF* as measured throughout each business day in each of the previous 9 months;
    - (b) excluding the daily values for the most recent 3 months; and
    - (c) calculating the arithmetic mean of the daily values for the remaining 6 months.

- |        |   |   |
|--------|---|---|
| 4.15.5 | G | <ul style="list-style-type: none"> <li>(2) When measuring the value of <i>DTF</i> for a particular <i>business day</i>, a <i>firm</i> must convert any amounts in foreign currencies on that date into the <i>firm's</i> functional currency.</li> <li>(3) For the purposes of the currency conversion in (2), a <i>firm</i> must:               <ul style="list-style-type: none"> <li>(a) determine the conversion rate by reference to an appropriate market rate; and</li> <li>(b) record the rate that was chosen.</li> </ul> </li> </ul>  |
| 4.15.6 | R | <ul style="list-style-type: none"> <li>(1) The effect of ■ MIFIDPRU 4.15.4R(2) is that when measuring the value of <i>DTF</i> at the end of each <i>business day</i>, a <i>firm</i> must apply the relevant conversion rate on that date to any amounts in foreign currencies forming part of the <i>DTF</i> attributable to that <i>business day</i>. The <i>DTF</i> for each preceding <i>business day</i> should continue to be measured by reference to the conversion rate that was applicable on that preceding day.</li> <li>(2) For the purposes of ■ MIFIDPRU 4.15.4R(3), where a <i>firm</i> is carrying out a conversion that involves sterling, the <i>FCA</i> considers that an example of an appropriate market rate would be the relevant daily spot exchange rate against sterling published by the Bank of England.</li> </ul> |
| 4.15.7 | G | <ul style="list-style-type: none"> <li>(1) When measuring its <i>DTF</i>, a <i>firm</i> must use the sum of the absolute value of each buy order and sell order, as determined in accordance with this <i>rule</i>.</li> <li>(2) For <i>cash trades</i> relating to <i>financial instruments</i>, the value of the order is the amount paid or received on the trade.</li> <li>(3) For <i>derivatives trades</i> other than orders relating to interest rate derivatives, the value of the order is the notional amount of the contract, determined in accordance with ■ MIFIDPRU 4.14.20R(2).</li> <li>(4) For orders relating to interest rate derivatives, the value of the order is the notional amount of the contract determined in accordance with ■ MIFIDPRU 4.14.20R(2), adjusted in accordance with ■ MIFIDPRU 4.15.8R.</li> </ul>    |
| 4.15.8 | R | <p>For <i>cash trades</i> relating to exchange-traded options, the amount paid or received on the trade under ■ MIFIDPRU 4.15.6R(2) is the premium paid for the option.</p> <ul style="list-style-type: none"> <li>(1) For the purposes of ■ MIFIDPRU 4.15.6R(4), a <i>firm</i> must adjust the notional amount of an interest rate derivative by multiplying that notional amount by the duration.</li> <li>(2) For the purposes of (1), the duration must be determined in accordance with the following formula:               <div style="margin-left: 40px;"> <math display="block">\text{Duration} = \text{time to maturity (in years)} / 10</math> </div> </li> </ul>  |

- 4.15.9** G When measuring *DTF* for the purposes of ■ MIFIDPRU 4.15.4R, a *firm* must include transactions executed by a *firm* in its own name either for itself or on behalf of a *client*.
- 4.15.10** R
- (1) This *rule* applies where a *firm* has had a *daily trading flow* for less than 9 *months*.
  - (2) For the purposes of its calculation of *average DTF* under ■ MIFIDPRU 4.15.4R, a *firm* must use the modified calculation in ■ MIFIDPRU TP 4.11R(1) with the following adjustments:
    - (a) in ■ MIFIDPRU TP 4.11R(1)(b), *n* is the relevant number of *months* for which the *firm* has had a *daily trading flow* (with the *month* during which the *firm* begins that activity being counted as *month zero*); and
    - (b) during *month zero* of the calculation, the *firm* must:
      - (i) use a best efforts estimate of expected *DTF* for that *month* based on its projections when beginning the new activity; and
      - (ii) use the estimate in (i) as its *average DTF*;
    - (c) during *month 1* of the calculation and each *month* thereafter, the *firm* must apply the approach in (a) using observed historical data from the preceding *months*;
    - (d) the modified calculation ceases to apply on the date that falls 9 *months* after the date on which the *firm* first had a *daily trading flow*.
- Adjusted coefficient in stressed market conditions**.....
- 4.15.11** R
- (1) This *rule* applies where a *firm's* measurement of its *DTF* under ■ MIFIDPRU 4.15.4R includes a proportion of *daily trading flow* that occurred on a trading segment of a *trading venue* to which stressed market conditions (as defined in article 6 of the *Market Making RTS*) applied.
  - (2) Where this *rule* applies, a *firm* may apply the following adjusted coefficients:
    - (a) for *cash trades*, a coefficient determined in accordance with (3) instead of the relevant coefficient in ■ MIFIDPRU 4.15.1R(1); or
    - (b) for *derivatives trades*, a coefficient determined in accordance with (4) instead of the relevant coefficient in ■ MIFIDPRU 4.15.1R(2).
  - (3) For *cash trades*, the adjusted coefficient must be determined by using the following formula:
$$\text{CadjCash} = C * (\text{DTFexcl}/\text{DTFincl})$$

where:

    - (a) CadjCash = the adjusted coefficient in (2)(a);
    - (b) C = the original coefficient in ■ MIFIDPRU 4.15.1R(1);
    - (c) DTFexcl = the *average DTF* of *cash trades* calculated in accordance with ■ MIFIDPRU 4.15.4R, excluding the value of any *cash trade*

that occurred on a trading segment of a *trading venue* between the time at which the *trading venue* determined that:

- (i) stressed market conditions began to apply; and
- (ii) stressed market conditions ceased to apply;
- (d) DTFincl = the *average DTF* of all *cash trades* calculated in accordance with ■ MIFIDPRU 4.15.4R.

- (4) For *derivative trades*, the adjusted coefficient must be determined by using the following formula:

$$\text{CadjDer} = C * (\text{DTFexcl}/\text{DTFincl})$$

where:

- (a) CadjDer = the adjusted coefficient in (2)(b);
- (b) C = the original coefficient in ■ MIFIDPRU 4.15.1R(2);
- (c) DTFexcl = the *average DTF* of *derivative trades* calculated in accordance with ■ MIFIDPRU 4.15.4R, excluding the value of any *derivative trade* that occurred on a trading segment of a *trading venue* between the time at which the *trading venue* determined that:
  - (i) stressed market conditions began to apply; and
  - (ii) stressed market conditions ceased to apply;
- (d) DTFincl = the *average DTF* of all *derivative trades* calculated in accordance with ■ MIFIDPRU 4.15.4R.

#### 4.15.12 G

- (1) ■ MIFIDPRU 4.15.11R permits a *firm* to apply a reduced coefficient for the purposes of determining its *K-DTF requirement* where part of the *firm's average DTF* for the relevant period is attributable to transactions that took place on a segment of a *trading venue* to which stressed market conditions applied. The relevant coefficient must be calculated separately for *cash trades* and *derivative trades*.
- (2) ■ MIFIDPRU 4.15.11R permits a *firm* to substitute a reduced coefficient that applies to the *firm's average DTF* for the relevant calculation period. The size of the reduction is proportional to the value of trades that were placed on a segment of a *trading venue* during stressed market conditions within the calculation period, relative to the overall value of trades entered into by the *firm* during that period.

#### 4.15.13 G

- (1) The following is an example of how the adjusted coefficient in ■ MIFIDPRU 4.15.11R applies.
- (2) A *firm* executes total *cash trades* in its own name worth £9,600m during the 6-month calculation period for determining *average DTF* under ■ MIFIDPRU 4.15.4R(1)(c). That 6-month period includes 128 *business days*.
- (3) The total £9,600m of *cash trades* includes £375m of *cash trades* that were executed on *trading venues* during stressed market conditions (as defined in article 6 of the *Market Making RTS*).



(4) In this example:

$$DTFincl = £9,600m / 128 \text{ days} = £75m$$

$$DTFexcl = (£9,600m - £375m) / 128 \text{ days} = £9,225m / 128 \text{ days} = £72.07m$$

$$C = 0.1\%$$

$$CadjCash = 0.1\% \times (72.07 / 75) = 0.1\% \times 0.961 = 0.0961\%$$

(5) To calculate its *K-DTF requirement* for this calculation period, the *firm* multiplies the full amount of its *average DTF* for the period by the adjusted coefficient (CadjCash). Therefore:

$$K-DTF \text{ requirement for cash trades} = £75m \times 0.0961\% = £72,075$$

## 4.16 K-CON requirement

### 4.16.1

G

■ MIFIDPRU 5 contains the provisions relating to the calculation of the *K-CON requirement* of a *MIFIDPRU investment firm*.



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## **Application under MIFIDPRU 4.11.9R – permission to exclude hedges from article 352 of the UK CRR**

4

[Editor's note: the form can be found at this address: [https://www.handbook.fca.org.uk/form/MIFIDPRU 4 Annex 1R Application under MIFIDPRU 4.11.9R for permission to exclude positions taken to hedge against the adverse effect of the exchange rate on the o.pdf](https://www.handbook.fca.org.uk/form/MIFIDPRU%204%20Annex%201R%20Application%20under%20MIFIDPRU%204.11.9R%20for%20permission%20to%20exclude%20positions%20taken%20to%20hedge%20against%20the%20adverse%20effect%20of%20the%20exchange%20rate%20on%20the%20o.pdf)]



Application under MIFIDPRU 4.12.4R for permission to use an advanced internal market risk model

[Editor’s note: the form can be found at this address: [https://www.handbook.fca.org.uk/form/MIFIDPRU 4 Annex 2R Application under MIFIDPRU 4.12.4R for permission to use an advanced internal market risk model.pdf](https://www.handbook.fca.org.uk/form/MIFIDPRU%204%20Annex%202R%20Application%20under%20MIFIDPRU%204.12.4R%20for%20permission%20to%20use%20an%20advanced%20internal%20market%20risk%20model.pdf)]





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## **Application under MIFIDPRU 4.12.6R – material change or extension to internal market risk models**

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[Editor's note: the form can be found at this address: [https://www.handbook.fca.org.uk/form/MIFIDPRU 4 Annex 3R Application under MIFIDPRU 4.12.6R for permission to make a material change or a material extension to the use of an advanced internal market .pdf](https://www.handbook.fca.org.uk/form/MIFIDPRU%204%20Annex%203R%20Application%20under%20MIFIDPRU%204.12.6R%20for%20permission%20to%20make%20a%20material%20change%20or%20a%20material%20extension%20to%20the%20use%20of%20an%20advanced%20internal%20market.pdf)]



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## **Notification under MIFIDPRU 4.12.7R – non-material change or extension to use of an internal model**

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[Editor's note: the form can be found at this address: [https://www.handbook.fca.org.uk/form/MIFIDPRU 4 Annex 4R Notification under MIFIDPRU 4.12.7R of the intended non-material change or extension to the use of an internal model.pdf](https://www.handbook.fca.org.uk/form/MIFIDPRU%204%20Annex%204R%20Notification%20under%20MIFIDPRU%204.12.7R%20of%20the%20intended%20non-material%20change%20or%20extension%20to%20the%20use%20of%20an%20internal%20model.pdf)]



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## **Notification under MIFIDPRU 4.12.10R and 4.14.20R – use of own delta estimates for standardised approach for options (K-NPR)**

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[Editor's note: the form can be found at this address: [https://www.handbook.fca.org.uk/form/MIFIDPRU 4 Annex 5R Notification under MIFIDPRU 4.12.10R and 4.14.20R of the intended use of own delta estimates.pdf](https://www.handbook.fca.org.uk/form/MIFIDPRU%204%20Annex%205R%20Notification%20under%20MIFIDPRU%204.12.10R%20and%204.14.20R%20of%20the%20intended%20use%20of%20own%20delta%20estimates.pdf)]



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**Application under MIFIDPRU 4.12.66R to use sensitivity models to  
calculate interest rate risk on derivative instruments**

[Editor's note: the form can be found at this address: [MIFIDPRU4\\_Annex 6R\\_20220101.pdf](#)]





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## **Application under MIFIDPRU 4.13.9R – permission for K-CMG**

[Editor's note: the form can be found at this address: [https://www.handbook.fca.org.uk/form/MIFIDPRU 4 Annex 7R Application under MIFIDPRU 4.13.9R for permission to apply K-CMG to a portfolio, instead of K-NPR.pdf](https://www.handbook.fca.org.uk/form/MIFIDPRU%204%20Annex%207R%20Application%20under%20MIFIDPRU%204.13.9R%20for%20permission%20to%20apply%20K-CMG%20to%20a%20portfolio,%20instead%20of%20K-NPR.pdf)]



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## **Notification under MIFIDPRU 4.13.10R – K-CMG conditions no longer satisfied**

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[Editor's note: the form can be found at this address: [https://www.handbook.fca.org.uk/form/MIFIDPRU 4 Annex 8R Notification under MIFIDPRU 4.13.10R that a firm no longer satisfies all the conditions of a K-CMG.pdf](https://www.handbook.fca.org.uk/form/MIFIDPRU%204%20Annex%208R%20Notification%20under%20MIFIDPRU%204.13.10R%20that%20a%20firm%20no%20longer%20satisfies%20all%20the%20conditions%20of%20a%20K-CMG.pdf)]



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## **Notification under MIFIDPRU 4.13.20R – cancellation of K-CMG permission**

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[Editor's note: the form can be found at this address: [https://www.handbook.fca.org.uk/form/MIFIDPRU 4 Annex 9R Notification under MIFIDPRU 4.13.20R to cancel a K-CMG permission.pdf](https://www.handbook.fca.org.uk/form/MIFIDPRU%204%20Annex%209R%20Notification%20under%20MIFIDPRU%204.13.20R%20to%20cancel%20a%20K-CMG%20permission.pdf)]



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## **Application under MIFIDPRU 4.14.6R – permission to exclude transactions with some counterparties from K-TCD**

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[Editor's note: the form can be found at this address: [https://www.handbook.fca.org.uk/form/MIFIDPRU 4 Annex 10R Application under MIFIDPRU 4.14.6R for permission to exclude transactions with some counterparties.pdf](https://www.handbook.fca.org.uk/form/MIFIDPRU%204%20Annex%2010R%20Application%20under%20MIFIDPRU%204.14.6R%20for%20permission%20to%20exclude%20transactions%20with%20some%20counterparties.pdf)]





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## **Application under MIFIDPRU 4.5.9R – permission to rebase fixed overhead requirement**

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[Editor's note: the form can be found at this address: [https://www.handbook.fca.org.uk/form/MIFIDPRU 4 Annex 11R Application under MIFIDPRU 4.5.9R for permission to rebase fixed overhead requirement to a lower amount.pdf](https://www.handbook.fca.org.uk/form/MIFIDPRU%204%20Annex%2011R%20Application%20under%20MIFIDPRU%204.5.9R%20for%20permission%20to%20rebase%20fixed%20overhead%20requirement%20to%20a%20lower%20amount.pdf)]



Guidance on the interaction between K-AUM and K-COH

- (1) This annex contains *guidance* on the interaction between the *K-AUM requirement* and the *K-COH requirement* in certain scenarios.
- (2) The scenarios contained in this annex are not intended to be exhaustive. *MIFIDPRU investment firms* should analyse any arrangement that is not covered by the *guidance* in this annex by reference to the *rules and guidance* in ■ [MIFIDPRU 4.7](#) (in relation to the *K-AUM requirement*) and ■ [MIFIDPRU 4.10](#) (in relation to the *K-COH requirement*). *Firms* should also refer to the *guidance* in ■ [MIFIDPRU 4.6.2G](#).
- (1) The following table indicates whether a *MIFIDPRU investment firm* is required to calculate a *K-AUM requirement* or a *K-COH requirement* in a particular scenario.
- (2) In the table, a reference to:
- (a) “DPM” is to the activity of discretionary *portfolio management*;

(b) “IF1” is to the first *MIFIDPRU investment firm*;

(c) “IF2” is to the second *MIFIDPRU investment firm*;

(d) “IF3” is to the third *MIFIDPRU investment firm*;

(e) a dash (-) indicates that there is no second *MIFIDPRU investment firm* involved in the relevant scenario;

(f) “Yes” means that the relevant requirement applies to that activity; and

(g) “No” means that the relevant requirement does not apply to that activity.

|   | IF1   | IF1 K-AUM | IF1 K-COH | IF2   | IF2 K-AUM | IF2 K-COH |
|---|---|-----------|-----------|---|-----------|-----------|
| 1 | DPM, executes the resulting orders                                  | Yes       | No        | -   | -         | -         |
| 2 | DPM, delegates DPM to IF2   | Yes       | No        | Undertakes delegated DPM and executes the resulting orders            | No        | Yes       |
| 3 | DPM, delegates DPM to IF2. Receives orders back from IF2 to execute | Yes       | No        | Undertakes delegated DPM and passes orders back to IF1 to execute     | No        | No        |
| 4 | DPM, delegates DPM to IF2   | Yes       | No        | Undertakes delegated DPM and passes orders back to IF3 to executeNoNo | No        | No        |

|    | IF1  | IF1 K-AUM | IF1 K-COH | IF2  | IF2 K-AUM | IF2 K-COH |
|----|--|-----------|-----------|--|-----------|-----------|
| 5  | DPM, delegates DPM to IF2. Receives orders back from IF2 and passes them to IF3 to execute   | Yes       | No        | Undertakes delegated DPM and passes orders back to IF1 | No        | No        |
| 6  | DPM, passes orders to IF2 for execution  | Yes       | No        | Executes orders on behalf of IF1                       | No        | Yes       |
| 7  | DPM, receives ongoing advice from IF2  | Yes       | No        | Gives ongoing advice on assets managed by IF1          | Yes       | No        |
| 8  | Provides ongoing investment advice in relation to assets and executes resulting orders       | Yes       | No        | -  | -         | -         |
| 9  | Provides ongoing investment advice in relation to assets, with orders executed by IF2        | Yes       | No        | Executes orders received from IF1 for execution        | No        | Yes       |
| 10 | Provides "one-off" investment advice to a client. Any orders are passed to IF2 for execution | No        | Yes       | Executes orders received from IF1 for execution        | No        | Yes       |
| 11 | Provides "one-off" investment advice to a client. Executes any resulting orders              | No        | Yes       | -  | -         | -         |
| 12 | Execution only of client orders  | No        | Yes       | -  | -         | -         |
| 13 | Client orders received are passed to IF2   | No        | Yes       | Executes orders received from                          | No        | Yes       |

| IF1           | IF1 K-AUM | IF1 K-COH | IF2               | IF2 K-AUM | IF2 K-COH |
|---------------|-----------|-----------|-------------------|-----------|-----------|
| for execution |           |           | IF1 for execution |           |           |



K-NPR requirement - provisions on closely correlated currencies

|  |  |   |               |   |  |  |               |   |  |  |               |   |   |  |               |   |  |  |               |  |
|--|--|---|---------------|---|--|--|---------------|---|--|--|---------------|---|---|--|---------------|---|--|--|---------------|--|
| Application and purpose  |  |   |               |   |  |  |               |   |  |  |               |   |   |  |               |   |  |  |               |  |
| 13.1   | R  | This annex specifies currency pairs that may be treated as closely correlated for the purposes of article 354(1) of the <i>UK CRR</i> (as applied by <a href="#">MIFIDPRU 4.12.2R</a> ) when a <i>MIFIDPRU investment firm</i> or <i>UK parent entity</i> is calculating its <i>K-NPR requirement</i> .   |               |   |  |  |               |   |  |  |               |   |   |  |               |   |  |  |               |  |
| 13.2   | R  | <p>The following table lists closely correlated currencies for the purposes of <a href="#">MIFIDPRU 4 Annex 13.1R</a>:</p> <table><tr><td><b>Part 1</b></td><td><b>List of closely correlated currencies against the euro (EUR)</b></td></tr><tr><td colspan="2">Albanian lek (ALL), Bosnia and Herzegovina mark (BAM), Bulgarian lev (BGN), Czech koruna (CZK), British pound (GBP), Croatian kuna (HRK), Moroccan dirham (MAD), Romanian leu (RON).</td></tr><tr><td><b>Part 2</b></td><td><b>List of closely correlated currencies against the Arab Emirates dirham (AED)</b></td></tr><tr><td colspan="2">Angolan kwanza (AOA), Canadian dollar (CAD), Chinese yuan (CNY), British pound (GBP), Hong Kong dollar (HKD), Lebanese pound (LBP), Macau pataca (MOP), Peruvian nuevo sol (PEN), Philippine peso (PHP), Singapore dollar (SGD), Thai baht (THB), Taiwanese dollar (TWD), US dollar (USD).</td></tr><tr><td><b>Part 3</b></td><td><b>List of closely correlated currencies against the Albanian lek (ALL)</b></td></tr><tr><td colspan="2">Bosnia and Herzegovina mark (BAM), Bulgarian lev (BGN), Czech koruna (CZK), Danish krone (DKK), Croatian kuna (HRK), Moroccan dirham (MAD), Romanian leu (RON), euro (EUR).</td></tr><tr><td><b>Part 4</b></td><td><b>List of closely correlated currencies against the Angolan kwanza (AOA)</b></td></tr><tr><td colspan="2">Arab Emirates dirham (AED), Chinese yuan (CNY), Hong Kong dollar (HKD), Lebanese pound (LBP), Macau pataca (MOP), Peruvian nuevo sol (PEN), Philippine peso (PHP), Singapore dollar (SGD), Thai baht (THB), Taiwanese dollar (TWD), US dollar (USD).</td></tr><tr><td><b>Part 5</b></td><td><b>List of closely correlated currencies against the Bosnia and Herzegovina mark (BAM)</b></td></tr></table> | <b>Part 1</b> | <b>List of closely correlated currencies against the euro (EUR)</b> | Albanian lek (ALL), Bosnia and Herzegovina mark (BAM), Bulgarian lev (BGN), Czech koruna (CZK), British pound (GBP), Croatian kuna (HRK), Moroccan dirham (MAD), Romanian leu (RON). |  | <b>Part 2</b> | <b>List of closely correlated currencies against the Arab Emirates dirham (AED)</b> | Angolan kwanza (AOA), Canadian dollar (CAD), Chinese yuan (CNY), British pound (GBP), Hong Kong dollar (HKD), Lebanese pound (LBP), Macau pataca (MOP), Peruvian nuevo sol (PEN), Philippine peso (PHP), Singapore dollar (SGD), Thai baht (THB), Taiwanese dollar (TWD), US dollar (USD). |  | <b>Part 3</b> | <b>List of closely correlated currencies against the Albanian lek (ALL)</b> | Bosnia and Herzegovina mark (BAM), Bulgarian lev (BGN), Czech koruna (CZK), Danish krone (DKK), Croatian kuna (HRK), Moroccan dirham (MAD), Romanian leu (RON), euro (EUR). |  | <b>Part 4</b> | <b>List of closely correlated currencies against the Angolan kwanza (AOA)</b> | Arab Emirates dirham (AED), Chinese yuan (CNY), Hong Kong dollar (HKD), Lebanese pound (LBP), Macau pataca (MOP), Peruvian nuevo sol (PEN), Philippine peso (PHP), Singapore dollar (SGD), Thai baht (THB), Taiwanese dollar (TWD), US dollar (USD). |  | <b>Part 5</b> | <b>List of closely correlated currencies against the Bosnia and Herzegovina mark (BAM)</b> |
| <b>Part 1</b>  | <b>List of closely correlated currencies against the euro (EUR)</b>                        |   |               |   |  |  |               |   |  |  |               |   |   |  |               |   |  |  |               |  |
| Albanian lek (ALL), Bosnia and Herzegovina mark (BAM), Bulgarian lev (BGN), Czech koruna (CZK), British pound (GBP), Croatian kuna (HRK), Moroccan dirham (MAD), Romanian leu (RON).   |  |   |               |   |  |  |               |   |  |  |               |   |   |  |               |   |  |  |               |  |
| <b>Part 2</b>  | <b>List of closely correlated currencies against the Arab Emirates dirham (AED)</b>        |   |               |   |  |  |               |   |  |  |               |   |   |  |               |   |  |  |               |  |
| Angolan kwanza (AOA), Canadian dollar (CAD), Chinese yuan (CNY), British pound (GBP), Hong Kong dollar (HKD), Lebanese pound (LBP), Macau pataca (MOP), Peruvian nuevo sol (PEN), Philippine peso (PHP), Singapore dollar (SGD), Thai baht (THB), Taiwanese dollar (TWD), US dollar (USD). |  |   |               |   |  |  |               |   |  |  |               |   |   |  |               |   |  |  |               |  |
| <b>Part 3</b>  | <b>List of closely correlated currencies against the Albanian lek (ALL)</b>                |   |               |   |  |  |               |   |  |  |               |   |   |  |               |   |  |  |               |  |
| Bosnia and Herzegovina mark (BAM), Bulgarian lev (BGN), Czech koruna (CZK), Danish krone (DKK), Croatian kuna (HRK), Moroccan dirham (MAD), Romanian leu (RON), euro (EUR).  |  |   |               |   |  |  |               |   |  |  |               |   |   |  |               |   |  |  |               |  |
| <b>Part 4</b>  | <b>List of closely correlated currencies against the Angolan kwanza (AOA)</b>              |   |               |   |  |  |               |   |  |  |               |   |   |  |               |   |  |  |               |  |
| Arab Emirates dirham (AED), Chinese yuan (CNY), Hong Kong dollar (HKD), Lebanese pound (LBP), Macau pataca (MOP), Peruvian nuevo sol (PEN), Philippine peso (PHP), Singapore dollar (SGD), Thai baht (THB), Taiwanese dollar (TWD), US dollar (USD).                                       |  |   |               |   |  |  |               |   |  |  |               |   |   |  |               |   |  |  |               |  |
| <b>Part 5</b>  | <b>List of closely correlated currencies against the Bosnia and Herzegovina mark (BAM)</b> |   |               |   |  |  |               |   |  |  |               |   |   |  |               |   |  |  |               |  |



|  |  |
|--|--|
| Albanian lek (ALL), Bulgarian lev (BGN), Czech koruna (CZK), Danish krone (DKK), British pound (GBP), Croatian kuna (HRK), Moroccan dirham (MAD), Romanian leu (RON), euro (EUR).  |  |
| Part 6   | List of closely correlated currencies against the Bulgarian lev (BGN)    |
| Albanian lek (ALL), Bosnia and Herzegovina mark (BAM), Czech koruna (CZK), Danish krone (DKK), British pound (GBP), Croatian kuna (HRK), Moroccan dirham (MAD), Romanian leu (RON), euro (EUR).  |  |
| Part 7   | List of closely correlated currencies against the Canadian dollar (CAD)  |
| Arab Emirates dirham (AED), Hong Kong dollar (HKD), Macau pataca (MOP), Singapore dollar (SGD), Taiwanese dollar (TWD), US dollar (USD).   |  |
| Part 8   | List of closely correlated currencies against the Chinese yuan (CNY)     |
| Arab Emirates dirham (AED), Angolan kwanza (AOA), British pound (GBP), Hong Kong dollar (HKD), Lebanese pound (LBP), Macau pataca (MOP), Peruvian nuevo sol (PEN), Philippine peso (PHP), Singapore dollar (SGD), Thai baht (THB), Taiwanese dollar (TWD), US dollar (USD).  |  |
| Part 9   | List of closely correlated currencies against the Czech koruna (CZK)     |
| Albanian lek (ALL), Bosnia and Herzegovina mark (BAM), Bulgarian lev (BGN), Danish krone (DKK), Croatian kuna (HRK), Moroccan dirham (MAD), Romanian leu (RON), euro (EUR).  |  |
| Part 10  | List of closely correlated currencies against the Danish krone (DKK)     |
| Albanian lek (ALL), Bosnia and Herzegovina mark (BAM), Bulgarian lev (BGN), Czech koruna (CZK), British pound (GBP), Croatian kuna (HRK), Moroccan dirham (MAD), Romanian leu (RON), Singapore dollar (SGD).   |  |
| Part 11  | List of closely correlated currencies against the British pound (GBP)    |
| Arab Emirates dirham (AED), Bosnia and Herzegovina mark (BAM), Bulgarian lev (BGN), Chinese yuan (CNY), Danish krone (DKK), Hong Kong dollar (HKD), Croatian kuna (HRK), Lebanese pound (LBP), Moroccan dirham (MAD), Macau pataca (MOP), Singapore dollar (SGD), Taiwanese dollar (TWD), US dollar (USD), euro (EUR). |  |
| Part 12  | List of closely correlated currencies against the Hong Kong dollar (HKD) |

|  |   |
|--|---|
| Arab Emirates dirham (AED), Angolan kwanza (AOA), Canadian dollar (CAD), Chinese yuan (CNY), British pound (GBP), Lebanese pound (LBP), Macau pataca (MOP), Peruvian nuevo sol (PEN), Philippine peso (PHP), Singapore dollar (SGD), Thai baht (THB), Taiwanese dollar (TWD), US dollar (USD).     |   |
| <b>Part 13</b>   | <b>List of closely correlated currencies against the Croatian kuna (HRK)</b>      |
| Albanian lek (ALL), Bosnia and Herzegovina mark (BAM), Bulgarian lev (BGN), Czech koruna (CZK), Danish krone (DKK), British pound (GBP), Moroccan dirham (MAD), Romanian leu (RON), Singapore dollar (SGD), euro (EUR).  |   |
| <b>Part 14</b>   | <b>List of closely correlated currencies against the South Korean won (KRW)</b>   |
| Peruvian nuevo sol (PEN), Philippine peso (PHP), Singapore dollar (SGD), Taiwanese dollar (TWD).   |   |
| <b>Part 15</b>   | <b>List of closely correlated currencies against the Lebanese pound (LBP)</b>     |
| Arab Emirates dirham (AED), Angolan kwanza (AOA), Chinese yuan (CNY), British pound (GBP), Hong Kong dollar (HKD), Macau pataca (MOP), Peruvian nuevo sol (PEN), Philippine peso (PHP), Singapore dollar (SGD), Thai baht (THB), Taiwanese dollar (TWD), US dollar (USD).                          |   |
| <b>Part 16</b>   | <b>List of closely correlated currencies against the Moroccan dirham (MAD)</b>    |
| Albanian lek (ALL), Bosnia and Herzegovina mark (BAM), Bulgarian lev (BGN), Czech koruna (CZK), Danish krone (DKK), British pound (GBP), Croatian kuna (HRK), Romanian leu (RON), Singapore dollar (SGD), Thai baht (THB), Taiwanese dollar (TWD), euro (EUR).                                     |   |
| <b>Part 17</b>   | <b>List of closely correlated currencies against the Macau pataca (MOP)</b>       |
| Arab Emirates dirham (AED), Angolan kwanza (AOA), Canadian dollar (CAD), Chinese yuan (CNY), British pound (GBP), Hong Kong dollar (HKD), Lebanese pound (LBP), Peruvian nuevo sol (PEN), Philippine peso (PHP), Singapore dollar (SGD), Thai baht (THB), Taiwanese dollar (TWD), US dollar (USD). |   |
| <b>Part 18</b>   | <b>List of closely correlated currencies against the Peruvian nuevo sol (PEN)</b> |

Arab Emirates dirham (AED), Angolan kwanza (AOA), Chinese yuan (CNY), Hong Kong dollar (HKD), South Korean won (KRW), Lebanese pound (LBP), Macau pataca (MOP), Philippine peso (PHP), Singapore dollar (SGD), Thai baht (THB), Taiwanese dollar (TWD), US dollar (USD).

**Part 19** **List of closely correlated currencies against the Philippine peso (PHP)**

Arab Emirates dirham (AED), Angolan kwanza (AOA), Chinese yuan (CNY), Hong Kong dollar (HKD), South Korean won (KRW), Lebanese pound (LBP), Macau pataca (MOP), Malaysian Ringgit (MYR), Peruvian nuevo sol (PEN), Singapore dollar (SGD), Thai baht (THB), Taiwanese dollar (TWD), US dollar (USD).

**Part 20** **List of closely correlated currencies against the Romanian leu (RON)**

Albanian lek (ALL), Bosnia and Herzegovina mark (BAM), Bulgarian lev (BGN), Czech koruna (CZK), Danish krone (DKK), Croatian kuna (HRK), Moroccan dirham (MAD), euro (EUR).

**Part 21** **List of closely correlated currencies against the Singapore dollar (SGD)**

Arab Emirates dirham (AED), Angolan kwanza (AOA), Canadian dollar (CAD), Chinese yuan (CNY), Danish krone (DKK), British pound (GBP), Hong Kong dollar (HKD), Croatian kuna (HRK), South Korean won (KRW), Lebanese pound (LBP), Moroccan dirham (MAD), Macau pataca (MOP), Malaysian ringgit (MYR), Peruvian nuevo sol (PEN), Philippine peso (PHP), Thai baht (THB), Taiwanese dollar (TWD), US dollar (USD).

**Part 22** **List of closely correlated currencies against the Thai baht (THB)**

Arab Emirates dirham (AED), Angolan kwanza (AOA), Chinese yuan (CNY), Hong Kong dollar (HKD), Lebanese pound (LBP), Moroccan dirham (MAD), Macau pataca (MOP), Peruvian nuevo sol (PEN), Philippine peso (PHP), Singapore dollar (SGD), Taiwanese dollar (TWD), US dollar (USD).

**Part 23** **List of closely correlated currencies against the Taiwanese dollar (TWD)**

Arab Emirates dirham (AED), Angolan kwanza (AOA), Canadian dollar (CAD), Chinese yuan (CNY), British pound (GBP), Hong Kong dollar (HKD), South Korean won (KRW), Lebanese pound (LBP), Moroccan dirham (MAD), Macau pataca (MOP), Malaysian Ringgit (MYR), Peruvian

nuevo sol (PEN), Philippine peso (PHP), Singapore dollar (SGD), Thai baht (THB), US dollar (USD).

**Part 24** **List of closely correlated currencies against the US dollar (USD)**

Arab Emirates dirham (AED), Angolan kwanza (AOA), Canadian dollar (CAD), Chinese yuan (CNY), British pound (GBP), Hong Kong dollar (HKD), Lebanese pound (LBP), Macau pataca (MOP), Peruvian nuevo sol (PEN), Philippine peso (PHP), Singapore dollar (SGD), Thai baht (THB), Taiwanese dollar (TWD).

