Chapter 2

Supervisory processes and governance

2.3 Supervisory review and evaluation process: internal capital adequacy standards

[**Note**: On 19 December 2014, the *EBA* published guidelines on common procedures and methodologies for the supervisory review and evaluation process. The *FCA* has confirmed its intention to make every effort to comply with these guidelines that can be found at: http://www.eba.europa.eu/documents/10180/935249/EBA-GL-2014-13+%28Guidelines+on+SREP+methodologies+and+processes%29.pdf/ .]

Purpose

2.3.1 G

(1) IFPRU 2.3 sets out guidance on IFPRU 2.2 (Adequacy of financial resources) so far as it applies to an *IFPRU investment firm*. In particular, *guidance* on how a *firm* should carry out its *ICAAP*, as well as some factors the *FCA* will take into consideration when undertaking a *SREP*. The terms *ICAAP* and *SREP* are explained in IFPRU 2.3.3 G. IFPRU 2.3.48 G to IFPRU 2.3.52 R are *rules* that apply to a *firm* with an IRB permission.

(2) IFPRU 2.3 is mainly written on the basis that IFPRU 2.2 (Adequacy of financial resources) applies to a *firm* on an individualbasis. However, it is still relevant when IFPRU 2.2 applies on a *consolidated basis*. When IFPRU 2.2 applies on a *consolidated basis*, IFPRU 2.3 should be read with appropriate adjustments.

2.3.1A G

BIPRU 12 contains *rules* and *guidance* relating to the adequacy of a *firm's* liquidity resources and its assessment by the *firm* and the *FCA*.

Meaning of capital

2.3.2 G

For the purpose of IFPRU 2.3, "capital" refers to a *firm*'s financial resources, *own funds* and internal capital, all as referred to in the *overall Pillar 2 rule*.

The ICAAP and the SREP: introduction

2.3.3 G

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

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

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

The ICAAP and the SREP: the ICAAP

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

(1) carry out regularly assessments of the amounts, types and distribution of financial resources, *own funds* and internal capital that it considers adequate to cover the nature and level of the risks to which it is or might be exposed (IFPRU 2.2.1 R to IFPRU 2.2.6 G (the *overall Pillar 2 rule* and related *rules*));

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

(3) conduct stress and scenario tests (the *general stress and scenario testing rule*, – including SYSC 20 (Reverse stress testing) – if it is a *significant IFPRU firm*; or SYSC 20 (Reverse stress testing) if it is not a *significant IFPRU firm*) taking into account, for a *firm* with an IRB permission, the stress test required by the *EU CRR*;

(4) ensure that the processes, strategies and systems required by the *overall Pillar 2 rule* and used in its *ICAAP*, are both comprehensive and proportionate to the nature, scale and complexity of that *firm's* activities (IFPRU 2.2.12 R); and

(5) document its *ICAAP* (IFPRU 2.2.43 R to IFPRU 2.2.44 R (Documentation of risk assessments)).

2.3.5 G (1) Where a *firm* is a member of a group, it should base its *ICAAP* on the consolidated financial position of the group. The group assessment should include information on:

(a) diversification benefits and transferability of resources between members of the group;

(b) the contribution of each member within the group to its overall risk profile; and

(c) an apportionment of the capital required by the group as a whole to the *firm* (IFPRU 2.2.45R to IFPRU 2.2.57G (Application of IFPRU 2.2 on an individual and consolidated basis)).

(2) A *firm* may, instead of preparing the *ICAAP* itself, adopt as its *ICAAP* an assessment prepared by other group members.

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

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

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

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

The ICAAP and the SREP: the SREP

2.3.7 G The *FCA* will review a *firm's ICAAP*, including the results of the *firm's* stress tests carried out under *IFPRU* and the *EU CRR*, as part of its *SREP*. Provided

that the *FCA* is satisfied with the appropriateness of a *firm*'s capital assessment, the *FCA* will take into account that *firm*'s *ICAAP* and stress tests in its *SREP*. More material on stress tests for a *firm* with an IRB permission can be found in IFPRU 2.3.50 R to IFPRU 2.3.54 G.

2.3.8 G The *SREP* is a process under which the *FCA*:

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

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

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

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

2.3.10 G As part of its *SREP*, the *FCA* will consider whether the amount and quality of capital which a *firm* should hold to meet its *own funds requirements* in the *EU CRR* is sufficient for that *firm* to comply with the *overall financial adequacy rule*.

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

2.3.12 G

(1) As part of its *SREP*, the *FCA* will also consider whether a *firm* should hold a *capital planning buffer* and the amount and quality of such *capital planning buffer*.

(2) In making these assessments, the *FCA* will have regard to the nature, scale and complexity of a *firm*'s business and of the major sources of risks relevant to such business as referred to in the *general stress and scenario testing rule* and SYSC 20 (Reverse stress testing), and the extent to which the *firm* has used any of the capital buffers that are required of it under the *CRD*, as applicable.

(3) Accordingly, a *firm's capital planning buffer* should be of sufficient amount and adequate quality to allow the *firm* to continue to meet the *overall financial adequacy rule* in the face of adverse circumstances, after allowing for realistic management actions.

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

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

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

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

2.3.17 G The *FCA* will not give individual capital guidance to the effect that the amount of capital advised in that *guidance* is lower than the amount of capital which a *firm* should hold to meet its *own funds requirements*.

2.3.18 G If, after discussion, the *FCA* and a *firm* still do not agree on an adequate level of capital, the *FCA* may consider using its powers under section55L of the *Act* on its own initiative to require the *firm* to hold capital in line with the *FCA's* view of the capital necessary to comply with the *overall financial adequacy rule*. In deciding whether it should use its powers under section 55L,the *FCA* will take into account the amount and quality of the *capital planning buffer* which the *firm* should hold as referred to in ■ IFPRU 2.3.13 G and ■ IFPRU 2.3.14 G. ■ SUP 7 provides further information about the *FCA's* powers under section 55L.

The drafting of individual capital guidance and capital planning buffer

2.3.19 G If the *FCA* gives individual capital guidance to a *firm*, the *FCA* will state what amount and quality of capital the *FCA* considers the *firm* needs to hold in order to comply with the *overall financial adequacy rule*. It will generally do so by saying that the *firm* should hold *own funds* of an amount which is at

least equal to a specified percentage of that *firm's total risk exposure amount* plus one or more static add-ons for specific risks, in line with the *overall Pillar 2 rule*.

2.3.20 G Individual capital guidance may refer to two types of *own funds*:

(1) General capital. It refers to total *common equity tier 1 capital* and *additional tier 1 capital* after applying deductions and prudential filters under the *EU CRR*.

(2) Total capital. It refers to total *common equity tier 1 capital*, *additional tier 1 capital* and *tier 2 capital* after applying deductions and prudential filters under the *EU CRR*.

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

2.3.22 G For the purposes of IFPRU 2.3.21 G, IFPRU 2.3.20 G applies as it applies to individual capital guidance. References in those provisions to individual capital guidance should be read as if they were references to *capital planning buffer*. In relation to IFPRU 2.2.62 R, where the *general stress and scenario testing rule* or SYSC 20 (Reverse stress testing), as part of the *ICAAP rules*, applies to a *firm* on a *consolidated basis*, the *FCA* may notify the *firm* that it should hold a group *capital planning buffer*. In these cases, the *firm* should ensure that the group holds a *capital planning buffer* of sufficient amount and adequate quality to allow it to continue to meet the *overall financial adequacy rule* in the face of adverse circumstances, after allowing for realistic management actions.

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

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

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

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

2.3.24 G In the circumstance in IFPRU 2.3.23 G, the *FCA* may ask a *firm* for alternative or more detailed proposals and plans or further assessments and analyses of capital adequacy and risks faced by the *firm*. The *FCA* will seek to agree with

the firm appropriate timescales and scope for any such additional work, in the light of the circumstances which have arisen.

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

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

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

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

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

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

2.3.28 G Following discussions with the *firm* on the items listed in ■ IFPRU 2.3.27 G, the *FCA* may put in place additional reporting arrangements to monitor the *firm's* use of its *capital planning buffer* in accordance with the plan referred to in ■ IFPRU 2.3.27 G (3). The *FCA* may also identify specific trigger points as the *capital planning buffer* is being used up by the *firm*, which could lead to additional supervisory actions.

2.3.29 G Where a *firm's capital planning buffer* is being drawn down due to circumstances other than those in ■ IFPRU 2.3.26 G, such as poor planning or mismanagement, the *FCA* may ask the *firm* for more detailed plans for it to restore its *capital planning buffer*. In the light of the relevant circumstances, the *FCA* may consider taking other remedial actions, which may include using its powers under section 55L of the *Act* on its own initiative, to impose a *requirement* on a *firm*.

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

2

2.3.31 G Where a *firm* has started to use its *capital planning buffer* in circumstances where it was not possible to notify in advance, it should notify the *FCA* and provide the information referred to in IFPRU 2.3.27 G as soon as practicable afterwards.

2.3.32 G IFPRU 2.3.23 G to IFPRU 2.3.31 G also apply to individual capital guidance and to *capital planning buffer* on a *consolidated basis*.

Proportionality of an ICAAP

2.3.33 G IFPRU 2.3.34 G to IFPRU 2.3.36G set out what the *FCA* considers to be a proportional approach to preparing an *ICAAP* as referred to in IFPRU 2.2.12 R (The processes, strategies and systems required by the *overall Pillar 2 rule* should be comprehensive and proportionate), according to the relative degree of complexity of a *firm*'s activities. If a *firm* adopts the appropriate approach, it may enable the *FCA* more easily to review a *firm*'s *ICAAP* when the *FCA* undertakes its *SREP*. The *FCA* is also likely to place more reliance on an *ICAAP* which takes the appropriate form described in IFPRU 2.3.34 G to IFPRU 2.3.36 G than would otherwise be the case, although there may also be circumstances in which the *FCA* will be able to rely on an *ICAAP* that is not drawn up in that form.

2.3.34 G

(1) This paragraph applies to a firm that is not a *significant IFPRU firm* (see IFPRU 1.2.3 R) whose activities are simple and primarily not credit-related.

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

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

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

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

(d) consider how that *firm*'s *own funds requirements* might alter under the scenarios in (c) and how its *own funds requirements* might alter in line with its business plans for the next three to five years;

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

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

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

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

(4) A *firm* should conduct stress tests and scenario analyses in accordance with SYSC 20 (Reverse stress testing) to assess how that *firm*'s capital and *own funds requirements* would alter and what that *firm's* reaction might be to a range of adverse scenarios, including operational and market events. Where relevant, a *firm* should also consider the impact of a severe economic or industry downturn on its future earnings, *own funds* and *own funds requirements*, taking into account its business plans. The downturn scenario should be based on forward-looking hypothetical events calibrated against the most adverse movements in individual risk drivers experienced over a long historical period.

2.3.35 G For a *firm* that is a *significant IFPRU firm* (see IFPRU 1.2.3 R) and whose activities are moderately complex, in carrying out its *ICAAP*, IFPRU 2.3.34 G (2) to IFPRU 2.3.34 G (4) apply. In addition, it could:

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

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

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

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

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

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

(7) assume that business does not develop as expected and consider how that *firm*'s capital and *own funds requirements* would alter and what that *firm*'s reaction to a range of adverse economic scenarios might be (see IFPRU 2.2.7 R to IFPRU 2.2.44 R (the *overall Pillar 2 rule* and related *rules* and *guidance*)). Where appropriate, the adverse

scenarios should consider the impact of market events that are instantaneous or occur over an extended period of time but which are nevertheless still co-dependent on movements in economic conditions;

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

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

2.3.36 G

(1) This paragraph applies to a proportional *ICAAP* in the case of a *firm* that is a *significant IFPRU firm* (see IFPRU 1.2.3 R) whose activities are complex.

(2) A proportional approach to that *firm's ICAAP* should cover the matters identified in IFPRU 2.3.34 G and IFPRU 2.3.35 G, but is likely also to involve the use of models, most of which will be integrated into its day-to-day management and operation.

(3) Models of the kind referred to in (2) may be linked to generate an overall estimate of the amount of capital that a *firm* considers appropriate to hold for its business needs. For example, a *firm* is likely to use value-at-risk models for market risk (see Part Three, Title IV, Chapter 5 of the *EU CRR* (Use of internal models to calculate own funds requirements for market risk)), advanced modelling approaches for credit risk (see Part Three, Title II, Chapter 3 of the *EU CRR* (Internal Ratings Based Approach)) and, possibly, advanced measurement approaches for *operational risk* (see Part Three, Title III, Chapter 4 of the *EU CRR* (Advanced measurement approaches)). A *firm* might also use economic scenario generators to model stochastically its business forecasts and risks. A *firm* may also link such models to generate information on the economic capital desirable for that *firm*. A model which a *firm* uses to generate its target amount of economic capital is known as an economic capital model (ECM). Economic capital is the target amount of capital which maximises the return for a *firm*'s stakeholders for a desired level of risk.

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

(5) The more a *firm* integrates into its business such economic capital modelling, the more it is likely to focus on managing risks for the benefit of its stakeholders. Consequently, ECMs may produce capital estimates that differ from the amount of capital needed for regulatory purposes. For the *FCA* to rely on the results of a *firm*'s models, including ECMs, a *firm* should be able to explain the basis and results of its models and how the amount of capital produced reflects the amount of capital needed for regulatory purposes. Where they are not equal, the *FCA* will expect a *firm* to explain any differences. However, it may prove difficult to reconcile the outcome of a *firm's* modelling with the *FCA's* own assessment of the adequacy of that *firm's* capital. For example, when matters of judgment are

involved in arriving at a *firm's* capital assessment or the *FCA* relies on information which cannot be fully disclosed to the *firm* (eg, comparisons with the *firm's* peers). Nevertheless, a *firm* whose ECM produces a different amount of capital to that required for regulatory purposes is still obliged to comply with the *overall Pillar 2 rule*. A *firm* should, therefore, be able to explain to the *FCA* how the outcome of its ECM is adjusted so that it complies with the *overall financial adequacy rule* and the *overall Pillar 2 rule*.

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

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

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

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

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

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

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

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

Guidance on risks to be covered in an ICAAP

2.3.37 G IFPRU 2.3.37 G to IFPRU 2.3.47 G set out *guidance* on some of the sources of risk identified in the *overall Pillar 2 rule*. IFPRU 2.3.50 R to IFPRU 2.3.54 G contain material relating to a *firm* with an IRB permission.

2.3.38 G (1) A *firm* may take into account factors other than those identified in the *overall Pillar 2 rule* when it assesses the level of capital it wishes to hold. These factors might include external rating goals, market reputation and its strategic goals. However, a *firm* should be able to distinguish, for the purpose of its dialogue with the *FCA*, between

capital it holds to comply with the *overall financial adequacy rule*, capital it holds as a *capital planning buffer* and capital held for other purposes.

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

Interest-rate risk arising from non-trading book activities

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

Securitisation risk

2.3.40 G A *firm* should assess its exposure to risks transferred through the *securitisation* of assets should those transfers fail for whatever reason. A *firm* should consider the effect on its financial position of a *securitisation* arrangement failing to operate as anticipated or of the values and risks transferred not emerging as expected.

Residual risk

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

Concentration risk

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

Liquidity risk

2.3.43 G Under the *overall Pillar 2 rule*, a *firm* should consider its exposure to *liquidity risk* and assess its response should that risk materialise.

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

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

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

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

(2) the inability to sell assets quickly;

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

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

Business risk: general

2.3.47 G A *firm's own funds requirements*, being risk-sensitive, may vary as business cycles and economic conditions fluctuate over time. Deterioration in business or economic conditions could require a *firm* to raise capital or, alternatively, to contract its businesses at a time when market conditions are most unfavourable to raising capital. Such an effect is known as procyclicality.

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

2.3.49 G To assess its expected capital requirements over the economic and business cycles, a *firm* may wish to project forward its financial position taking account of its business strategy and expected growth, according to a range of assumptions regarding the economic or business environment which it faces. For example, an *ICAAP* should include an analysis of the impact that the actions of a *firm's* competitors might have on its performance, in order to see what changes in its environment the *firm* could sustain. Projections over a three- to five-year period would be appropriate in most circumstances. A *firm* may then calculate its projected *own funds requirements* and assess whether it could be met from expected financial resources. Additional *guidance* on capital planning over an economic and business cycle can be found in IFPRU 2.2.73 G (Capital planning).

Business risk: stress tests for firms using the IRB approach

2.3.50 R A *firm* with an IRB permission must ensure that there is no significant risk of it being unable to meet its own funds requirements for credit risk under Part Three, Title II of the *EU CRR* (Capital requirements for credit risk) at all times

throughout an economic cycle, including the *own funds requirements* for credit risk indicated by any stress test carried out under article 177 of the *EU CRR* (Stress tests used in assessment of capital adequacy for a *firm* with an IRB permission) as being likely to apply in the scenario tested. To decide what *own funds* are, or will be, available to meet those credit risk requirements, a *firm* must exclude *own funds* that are likely to be required to meet its other capital requirements under the *EU CRR* at the relevant time. A *firm* must also be able to demonstrate to the *FCA*, at any time, that it is complying with this *rule*.

2.3.51 R

IFPRU 2.3.50 R applies to a *firm* on an individual basis if Part Three, Title II, Chapter 3 of the *EU CRR* (IRB approach) applies to it on an individual basis and applies on a *consolidated basis* if the *EU CRR* does.

2.3.52 R

If IFPRU 2.3.50 Rapplies to a *firm* on a *consolidated basis*, the following adjustments are made to IFPRU 2.3.50 R in accordance with the general principles of Part One, Title II, Chapter 2 of the *EU CRR* (Prudential consolidation):

(1) references to *own funds* are to the consolidated *own funds* of the *firm*'s *FCA consolidation group* or, as the case may be, its *non-EEA sub-group*; and

(2) references to the capital requirements in Part Three of the *EU CRR* (Capital requirements) are to the consolidated capital requirements with respect to the *firm*'s *FCA consolidation group* or, as the case may be, its *non-EEA sub-group* under Part One, Title II, Chapter 2 of the *EU CRR* (Prudential consolidation).

2.3.53 G

If a *firm*'s current available *own funds* are less than the own funds requirements indicated by the stress test, that does not necessarily mean there is a breach of IFPRU 2.3.50 R. The *firm* may wish to set out any countervailing effects and off-setting actions that can be demonstrated to the satisfaction of the *FCA* as being likely to reduce that difference. The *FCA* is only likely to consider a demonstration of such actions as credible if those actions are set out in a capital management plan based on the procedures in IFPRU 2.2.73 G (Capital planning) and include a plan of the type referred to in IFPRU 2.2.73 G (7) that has been approved by the *firm*'s *senior management* or *governing body*.

2.3.54 G

The countervailing factors and off-setting actions that a *firm* may rely on as referred to in IFPRU 2.3.53 G include, but are not limited to, projected balance sheet shrinkage, growth in *own funds* resulting from retained profits between the date of the stress test and the projected start of the economic downturn, the possibility of raising new capital in a downturn, the ability to reduce dividend payments or other distributions, and the ability to allocate capital from other risks which can be shown to be negatively correlated with the *firm*'s credit risk profile.

Systems and controls

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

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

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

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

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

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

2.3.57 G (1) IFPRU 2.3.58 G to IFPRU 2.3.67 G set out *guidance* for:

(a) an asset management *firm*; and

(b) a securities *firm*;

(2) IFPRU 2.3.58 G to IFPRU 2.3.67 G provide examples of the sorts of risks which such a *firm* might typically face and of stress tests or scenario analyses which it might carry out as part of its *ICAAP*.

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

An asset management firm

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

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

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

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

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

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

2

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

2.3.61 G In relation to the issues identified in IFPRU 2.3.60 G, an asset manager should consider, for example:

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

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

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

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

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

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

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

A securities firm

2.3.63 G (1) A securities *firm* may consider the impact of the following situations on its capital levels when assessing its exposure to concentration risk:

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

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

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

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

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

(1) credit risk; and

(2) market risk.

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

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

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

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

2.3.66 G A securities *firm* should also consider the impact of external factors on the levels of capital it needs to hold. Scenarios covering such external factors should relate to its strategy and business plan. A securities *firm* might wish to consider the following factors:

(1) whether it plans to participate in a one-off transaction that might strain temporarily or permanently its capital;

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

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

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

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

(6) whether it anticipates expanding its activities (eg, by offering clearing services) and, if so, the impact on its capital.

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

Capital models

2.3.68 G A *firm* may approach its assessment of adequate capital by developing a model, including an ECM (see IFPRU 2.3.36 G), for some or all of its business risks. The assumptions required to aggregate risks modelled and the confidence levels adopted should be considered by a *firm's senior management*. A *firm* should also consider whether any relevant risks, including systems and control risks, are not captured by the model.

2.3.69 G A *firm* should not expect the *FCA* to accept as adequate any particular model that it develops, or automatically to reflect the results from the model in any individual capital guidance or *capital planning buffer*. However, the *FCA* will take into account the results of a sound and prudent model when giving individual capital guidance or when dealing with the *firm* in relation to its *capital planning buffer*.

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

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

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

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

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

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

2.3.71 G In relation to the use of an ECM (see IFPRU 2.3.36 G), the *FCA* is likely to place more reliance on a *firm's ICAAP* if the *firm* provides the following information:

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

(2) evidence that the *guidance* in IFPRU 2.3.68 G to IFPRU 2.3.75 G has been followed.

2.3.72 G If a *firm* adopts a top-down approach to developing its internal model, it should be able to allocate the outcome of the internal model to risks it has previously identified in relation to each separate legal entity, business unit or business activity, as appropriate. For a *firm* which is a member of a group, IFPRU 2.2.54 R (Application of IFPRU 2.2 on an individual basis and consolidated basis) sets out how internal capital identified as necessary by that *firm's ICAAP* should be allocated.

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

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

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