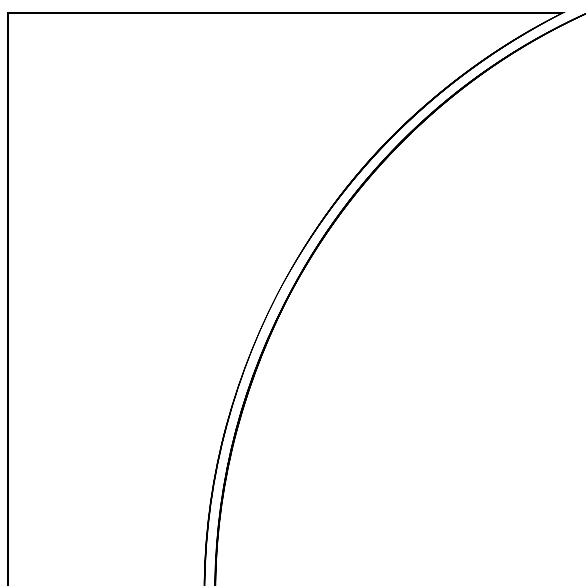
Basel Committee
on Banking Supervision



Consultative Document

# Pillar 3 (Market Discipline)

Supporting Document
to the New Basel Capital Accord

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BANK FOR INTERNATIONAL SETTLEMENTS

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# Pillar 3 (Market Discipline)

## Part I: General Considerations

### 1. Introduction

1. The New Basel Capital Accord is based around three complementary elements or "pillars". Pillar 3 recognises that market discipline has the potential to reinforce capital regulation and other supervisory efforts to promote safety and soundness in banks and financial systems. Market discipline imposes strong incentives on banks to conduct their business in a safe, sound and efficient manner. It can also provide a bank with an incentive to maintain a strong capital base as a cushion against potential future losses arising from its risk exposures. The Committee believes that supervisors have a strong interest in facilitating effective market discipline as a lever to strengthen the safety and soundness of the banking system.

2. In the June 1999 Consultative paper, the Committee outlined its intention to incorporate market discipline as a fundamental element of the New Basel Capital Accord. The Consultative paper suggested some general types of public disclosure that should be released by banks on a timely basis. These included the key features of the capital held as a cushion against losses, and the risk exposures that may give rise to such losses. These would enable market participants to assess the bank's ability to remain solvent. The June Consultative paper was supplemented by a more detailed paper, issued for consultation in January 2000, on the types of disclosure on capital, risk exposure and capital adequacy a bank should make. The feedback from both these consultative exercises has been positive and has led us to conclude that transparency and the market discipline it can generate should form an integral part of the New Basel Capital Accord. The Committee has widened its analysis to consider other elements of the New Basel Capital Accord where disclosure may make an important contribution. Where appropriate, the Committee has outlined templates to provide a suggested format in which disclosure could be made.

**3. The Committee's guiding principles in developing this paper are as follows: the purpose of Pillar 3 – market discipline - is to complement the operation of minimum capital requirements (Pillar 1) and the supervisory review process (Pillar 2). The Committee aims to encourage market discipline by developing a set of disclosure recommendations (and requirements)[1] which will allow market participants to assess key pieces of information on the scope of application, capital, risk exposures, risk assessment and management processes, and hence the capital adequacy of the institution. The Committee believes that such disclosures have particular relevance under the New Basel Capital Accord, where reliance on internal methodologies gives banks more discretion in assessing capital requirements, and therefore set out separate disclosures where internal methodologies are used. The Committee does not expect that the incremental costs of making such information public to be high, since banks will be collecting this data for internal purposes and they will be benefiting from the more risk sensitive capital requirements that result from the use of bank specific inputs.**

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[1] In certain specific instances, disclosures will form part of the qualifying criteria to use particular capital treatments. Here, the disclosures are requirements, and in each case they are clearly marked as such in the following text.

4. The proposals draw on earlier recommendations by the Committee, which have been streamlined and focussed towards the contribution that disclosure can make to the overall functioning of the New Basel Capital Accord. In this regard, the Committee notes that its existing work, and other efforts to enhance transparency, have already contributed to the development of market discipline in banking markets and hence its current proposals should be seen as a further contribution to this process, rather than an initial development.

5. The paper is organised as follows: section 2 outlines the rationale for disclosure whilst section 3 reviews the issues surrounding the implementation of disclosure recommendations. Section 4 describes the general principles underlying the disclosures, whilst sections 5 (scope of application), 6 (capital), 7 (risk exposures and assessment techniques) and 8 (capital adequacy) describe specific recommendations and requirements. The appendices to the paper contain detailed requirements/recommendations in each of the main areas of disclosure and, in a number of instances, outline suggested templates which banks could use to present the information. The majority of the disclosure recommendations and requirements in the New Basel Capital Accord are contained in this document, but a number of specific disclosures appear in other parts of the Consultative Package. Table 1 summarises where disclosures are set out.

**Table 1: Disclosures in the New Basel Capital Accord**

| Subject | Type | Location in Supporting Document |
|---|---|---|
| Scope of Application | Strong recommendations | Pillar 3 |
| Capital | Strong recommendations | Pillar 3 |
| Credit Risk - general | Strong recommendations | Pillar 3 |
| Credit Risk – Standardised Approach | Requirements and strong recommendations | Pillar 3 |
| Credit Risk Mitigation Techniques | Requirements and strong recommendations | Pillar 3 |
| Credit Risk – IRB Approaches | Requirements | Pillar 3 |
| Market Risk | Strong recommendations | Pillar 3 |
| Operational Risk | Strong recommendations and, in future, requirements | Pillar 3 |
| Interest Rate Risk in the Banking Book | Strong recommendations | Pillar 3 |
| Capital Adequacy | Strong recommendations | Pillar 3 |
| Asset Securitisation | Requirements | Asset Securitisation |
| ECAI Recognition | Requirements | Standardised Approach |
| Supervisory Transparency | Strong recommendations | Standardised Approach and Pillar 2 |

## 2. The Rationale for Disclosure

6. In its paper *"Enhancing Bank Transparency",*[2] the Committee discussed in some detail the arguments surrounding the encouragement of market discipline through disclosure.

[2] *Enhancing Bank Transparency*, Basel Committee on Banking Supervision, September 1998

The paper discusses the costs and benefits of disclosure and concludes that an appropriate level of timely disclosure will have benefits for well-run institutions, investors and depositors, for financial stability more generally, and will help support the effective and efficient operation of the capital markets. The Committee remains convinced of the pertinence of these conclusions and does not intend to rehearse them in this paper.

7. The Committee believes that market discipline, supported by an appropriate public disclosure regime, can be an effective complement to supervisory efforts to encourage banks to assess risk, maintain capital and develop and maintain sound risk management systems and practices. The disclosures under this pillar serve as an important tool to bolster the minimum capital requirements under Pillar 1 and the enhanced supervisory review process in Pillar 2. The Pillar 3 forms an integral part of the New Basel Capital Accord and enhances the operation of its other components.

8. The Committee does, however, recognise that differences in banks' reliance on financial markets and in their capital structure and risk exposure mean that the potential for market discipline varies both within and across countries. While an effective supervisory framework and adequate public disclosure are essential, bank supervisors do not have the power to ensure that all incentives for market discipline are in place. For example, a bank may not be subject to market discipline from a fully insured depositor who has nothing at risk and, therefore, has no motive to impose discipline. No internationally active bank could, however, expect to insulate itself entirely from the judgements of markets.

## 3. Implementation of Pillar 3

9. The Committee believes that the rationale for Pillar 3 is sufficiently strong to warrant the introduction of binding disclosure requirements, with clear remedial actions in the case of non-disclosure. This argument is further strengthened by the need to have complementary pillars in the New Basel Capital Accord which are mutually reinforcing.

10. The Committee notes, however, that there are differences in the legal authority of bank supervisors to set disclosure standards across countries. While a number of supervisors have the power to implement general disclosure requirements[3] directly through binding regulations, others may only be able to use more indirect approaches, including issuing sound practice recommendations. Supervisors have also adopted different responses in the case of non-disclosure. For these reasons, the Committee intends to introduce “strong recommendations” or “principles” and will continue to investigate various ways through which the application of these recommendations or principles can be achieved[4]. There are two processes by which this may be encouraged: strengthening the status of the recommendations, and ensuring that non-disclosure attracts an appropriate supervisory response.

### *Strengthening the status of disclosure recommendations*

11. An important step in enhancing the recommendations under Pillar 3, and to embed them in an adequate bank management process, will be the introduction of an explicit

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[3] Supervisors are expected to be able to implement disclosure requirements when attached to an enhanced methodology or specific capital treatment.

[4] In certain specific instances, disclosures will form part of the qualifying criteria to use particular capital treatments.

principle according to which **"Banks should have a formal disclosure policy approved by the board of directors. This policy should describe the bank's objective and strategy for the public disclosure of information on its financial condition and performance[5]. In addition, banks should implement a process for assessing the appropriateness of their disclosure, including the frequency of disclosure"**. Pillar 2 provides for a similar explicit principle with regard to the assessment of risk and capital, and such a principle will serve to strengthen the status of the recommendations and encourage complementarity between the pillars. Furthermore, it is envisaged that an important part of Pillar 2 will consist of a review of on-going compliance with requirements to use particular capital treatments, including disclosures, and a more general review of disclosure by the institution.

12. The Committee also believes that supervisors should evaluate a bank's disclosure regime and take appropriate action. Such an approach is fully in line with the Committee's existing regulatory guidance. Principle 21 of the Core Principles for Effective Banking Supervision[6] explicitly requires that **"banking supervisors must be satisfied that … the bank publishes on a regular basis financial statements that fairly reflect its condition".** With regard to this principle, the following additional comment is made: "In order for market forces to work effectively, thereby fostering a stable and efficient financial system, market participants need access to correct and timely information. Disclosure, therefore, is a complement to supervision. For this reason, banks should be required to disclose to the public information regarding their activities and financial position that is comprehensive and not misleading. This information should be timely and sufficient for market participants to assess the risk inherent in any individual banking organisation." Therefore, supervisors should already embed the principle and guidance in their supervisory processes.

13. An important dimension to the issue of implementation is the relationship between disclosures and accounting requirements. **The Committee intends to work with the accounting authorities, including the IASC, to promote consistency between disclosure frameworks. The IASC is reviewing its disclosure standard for banks, IAS 30[7].**

### *Enforcement*

14. Where banks do not comply with the disclosure recommendations under Pillar 3, the Committee expects some kind of supervisory response aimed at remedying this situation. The strength of this response should depend on the severity of the non-compliance (what relevant information is not disclosed and how essential is it) and the time it lasts. With regard to the measures that supervisors should have at their disposal, there are both general intervention measures and specific enforcement measures.

15. With general intervention measures, there is a "spectrum" of responses. These range from "moral suasion" through dialogue with the bank's management in order to change

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[5] The specific information for disclosure is contained in sections 5-8 of this paper.

[6] *Core Principles for Effective Banking Supervision*, Basel Committee on Banking Supervision*, September 1997.*

[7] Disclosures in the Financial Statements of Banks and Similar Financial Institutions, International Accounting Standards Committee, 1990 (reformatted 1994)

the latter's behaviour to reprimands or financial penalties[8]. Given that many supervisors do not have any direct legal authority with regard to accounting and disclosure, measures in this area would, at least initially, often have to be confined to pressure through suasion. However, to the extent that certain disclosure recommendations are recognised in International Accounting Standards, the enforceability of the standards will be very much enhanced.

16. In addition to general intervention measures, the New Basel Capital Accord will also recognise a role for specific measures. Where disclosure is an explicit requirement under Pillar 1 in order to obtain lower risk weightings and/or to apply specific methodologies, there would be a direct sanction (not being allowed to apply the lower weighting or the specific methodology). An example is internal ratings methodologies, the acceptance of which will be conditional upon the disclosure of minimum information on their key characteristics and their reliability. Accordingly, institutions would not be permitted to use the internal ratings based approach for credit risk unless the disclosures set out in Part II section 7.2.4 are made.

## 4. Characteristics of the Disclosures

17. The specific disclosures outlined below are intended to be consistent with the general criteria described in the *Enhancing Bank Transparency*[9] paper, i.e. comprehensiveness, relevance and timeliness, reliability, comparability and materiality. This section of the paper outlines our intention to develop core and supplementary disclosures, each category including both quantitative and qualitative aspects. The section then discusses the issues of materiality and proprietary information and considers the frequency and comparability of disclosure. In addition to these issues the timeliness of disclosures is important, in the sense that the lag between the end of reporting periods and the disclosure of information should be minimised.

### *Core and supplementary disclosures*

18. In response to the Committee's previous recommendations on disclosure and the earlier consultative papers on Pillar 3, it was often pointed out that if too much information is made available, the key signals that should be clear to the market may become blurred. It was also questioned whether all disclosures were applicable to all institutions, or whether there should be some degree of differentiation for smaller or less complex institutions. The proposals contained in this document reflect these concerns by focussing on the effectiveness of the disclosures. To help address these issues, the Committee distinguishes between core and supplementary disclosures.

19. Core disclosures are those which convey vital information for all institutions and are important to the basic operation of market discipline. The Committee expects all institutions to disclose this basic information. The Committee also defines categories of supplementary disclosures[10]. These disclosures are important for some, but not all, institutions, depending on the nature of their risk exposure, capital adequacy and methods adopted to calculate the

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[8] The nature of the measures will depend on the legal powers of the supervisor, the seriousness of the deficiency and the risk posed to the bank's financial stability and solvency as a result. It is not intended that additional capital requirements would be a response to non-disclosure.

[9] *Enhancing Bank Transparency,* Basel Committee on Banking Supervision, September 1998.

[10] Where banks make supplementary disclosures, or additional disclosures resulting from the use of more advanced methodologies they are not expected to duplicate information disclosed elsewhere.

capital requirement. The supplementary disclosures may convey information which is of great significance for the operation of market discipline with respect to a particular institution, and as such should not be regarded as "secondary" or "optional" disclosures. The Committee recommends that sophisticated internationally active banks make the full range of core and supplementary information publicly available. Generally, the concept of materiality discussed below will guide the necessity for core and supplementary disclosures to be made.

### *Materiality*

20. The concept of materiality warrants special mention in this context as the Committee expects this criteria to drive the decision on which disclosures are made. Information would be regarded as material if its omission or misstatement could change or influence the assessment or decision of a user relying on that information. This definition is in accordance with IASC and helpful in the context of market discipline, as it conveys clearly that the purpose of the disclosure is to allow market participants to reach a view on the risk profile of the organisation. However, it is not always easy to determine "materiality" in respect to any particular item. There are limitations in using value or percentage thresholds in determining materiality and the need for a qualitative judgement of whether, in the light of the particular circumstances, a "reasonable investor" would consider the item to be important is a guide to materiality. The Committee does not intend to set thresholds for disclosure as these can be open to manipulation and are difficult to determine, but equally it does not expect banks to use the materiality concept to "manage" their disclosures. The Committee believes that the "reasonable investor" test is a useful benchmark for ensuring that sufficient disclosure is made.

### *Proprietary information*

21. In response to our previous consultations, the need to protect proprietary information has been raised by several respondents. The Committee recognises that it is important to determine the right level of detail for disclosure, in the light of the proprietary nature of information held by banks. Proprietary information encompasses information (for example on customers, products or systems), the sharing of which with competitors would render a bank's investment in these products/systems less valuable, and hence would undermine its competitive position. This has an impact on what banks should reveal in terms of information about their customer base, as well as details on their internal arrangements, for instance methodologies used, parameter estimates, data etc. The Committee believes that the recommendations and requirements set out in this paper strike the right balance between the need for meaningful disclosure to allow the operation of market discipline and the protection of proprietary information.

### *Frequency*

22. The question of the frequency of disclosure takes on particular relevance when the objective of the disclosure is to allow the operation of market discipline. It may be the case that annual disclosure is insufficiently frequent to allow market discipline to operate with its full effect, since the participants would be responding to information which could be many months old and which may no longer reflect the true risk profile of the institution. **The Committee believes that the disclosures set out in this paper should be made on a semi-annual basis,** although information on the overall framework of the institution, for

instance its risk management function, could be provided annually. The Committee expects information to be subject to a suitable verification process on at least an annual basis, probably in the context of the annual report.[11] In certain categories of disclosure that are subject to rapid time decay, for instance risk exposure, and in particular for internationally active banks, the Committee recommends quarterly disclosures. This is likely to be especially relevant in the area of market risk exposure, where positions can move rapidly, and the Committee would expect any general material changes to be disclosed as soon as possible after the event.

23. The Committee notes that there are certain practical difficulties with these recommendations in some regimes. For example, some countries may lack a suitable vehicle for semi-annual disclosures and it will therefore not be possible to require that the information in all semi-annual disclosures be audited, although this is desirable. Furthermore, for some smaller institutions where the risk profile does not change rapidly, annual disclosure may be sufficient to meet materiality and frequency requirements. Where banks make less frequent disclosures, the Committee believes it is important that they publish a justification for this. Nevertheless, it recommends banks to make the disclosures on a semi-annual basis. The Committee encourages banks, particularly sophisticated institutions, to make as frequent disclosure as possible within the confines of their national accounting and listing conventions, not least because well run institutions should benefit as a result. Where there are impediments to full and frequent disclosure, be they legal, supervisory or convention, the basis of these should be assessed by supervisors and, where possible, addressed. Related to the question of frequency is the question of the mechanism by which the disclosure is made. In many instances annual and half-yearly reports and accounts could be used, but there may be cases, especially with more frequent disclosures, where an alternative method is needed. The Committee encourages institutions to be flexible in this regard, and to consider the opportunities offered by electronic media to make relevant disclosures on a frequent basis.

### *Comparability*

24. An important consideration in the formulation of our proposals is that the disclosure should make a meaningful contribution to transparency, and hence market discipline. Conditions for transparency include not only materiality of disclosure, but also the extent to which it can be properly interpreted and compared among institutions. In order to contribute to the latter, the Committee has included in a number of our proposals suggested templates that can be used when providing the information concerned. Nevertheless, banks may choose to provide information in a different format.

## Part II: Disclosure recommendations

25. In its January 2000 consultative paper[12] the Committee proposed 6 disclosures in 3 broad areas: capital, risk exposure and capital adequacy. The recommendations were as follows:

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[11] In some jurisdictions, disclosures may be included in financial statements.

[12] *A New Capital Adequacy Framework: Pillar 3 Market Discipline*, Basel Committee on Banking Supervision*, January 2000.*

*Capital*

- ***A bank should, at least annually and more frequently where possible and appropriate, publicly disclose summary information about: (a) its capital structure and components of capital and (b) the terms and conditions of the main features of capital instruments.***
- ***A bank should disclose information on its accounting policies for the valuation of assets and liabilities, provisioning and income recognition.***

*Risk Exposures*

- ***A bank should publicly disclose qualitative and quantitative information about its risk exposures, including its strategies for managing risk.***

*Capital Adequacy*

- ***(a) A bank should, at least annually, publicly disclose its capital ratio and other relevant information on its capital adequacy on a consolidated basis. (b) A bank should disclose measures of risk exposures calculated in accordance with the methodology set out in the Basel Capital Accord.***
- ***A bank should provide an analysis of factors impacting on its capital adequacy position. This would include: (a) changes in capital structure and the impact on key ratios and overall capital position; (b) its contingency planning, should it need to access the capital markets in times of stress; (c) its capital management strategy and consideration of future capital plans (where appropriate); (d) the impact of any non-deduction of participations in banks and other financial institutions, where applicable.***
- ***A bank is encouraged to disclose its structure and process of allocating economic capital to its business activities.***

26. In the light of the responses received to that consultation, the Committee remains convinced that such disclosures will form the basis of an effective market discipline in the banking sector. However, the Committee's ongoing work has identified the need for market participants to understand how the New Basel Capital Accord applies to banking organisations and how corporate entities within a banking organisation are captured. Accordingly, an additional category setting out disclosure recommendations on the scope of application of the New Basel Capital Accord has been added. In the following sections, and associated appendices, the Committee specifies a set of core and supplementary disclosures which re-state the six broad recommendations from our January paper in more detail. The Committee believes that the rationale for a structure based on these four categories of disclosure is strong: the scope of application disclosures will facilitate a better understanding of how corporate entities within a banking group are treated, the capital element provides information on the buffer the institution has in place to meet potential future losses arising from its risk profile, the risk exposure section will outline both the exposures the institution is facing and the methods by which it assesses those risks and the third element, capital adequacy, places the two previous sections in context, by relating them to one another. This framework gives an overview of the bank and will permit the market to make a reasonable assessment of the institution.

## 5. Disclosures on Scope of Application

27. It is important that banking groups' disclosures include information on how the New Basel Capital Accord applies to a banking group and how the various corporate entities within a banking group are treated for capital adequacy purposes. Banking groups should disclose the top level at which the New Basel Capital Accord requirements apply on a fully consolidated basis and how the requirements are applied on a sub-consolidated basis at lower levels within the group. Further it is important for market participants to understand how certain entities may not be included in a consolidated capital calculation, the approach that is used to capture the risks in those entities, for example insurance subsidiaries, and the impact of different approaches on the banking organisation's capital position. It is also recommended that there be disclosures of the amounts of the deductions from Tier 1 and Tier 2 for unconsolidated subsidiaries.

28. Appendix 1 sets out the disclosures in greater detail.

## 6. Disclosures on Capital

29. Disclosure about the nature, components and features of capital provides market participants with important information about a bank's ability to absorb financial losses. It is important that innovative, complex, and hybrid capital instruments are adequately disclosed, since the characteristics of such instruments may have a significant impact on the market's assessment of the amount and quality of a bank's capital. For this reason, the recommendations make particular reference to the features of hybrid elements, including the residual maturities, step-up agreements and cumulative characteristics.

30. The core disclosures consist of the amount and features of tier 1 capital and the totals of tier 2 and 3, together with associated accounting policies. The supplementary disclosures focus on tier 2 and 3 capital. This division between core and supplementary requirements reduces the burden on institutions with simple capital structures. At the same time, an effective disclosure regime is maintained as the Committee expects (supplementary) information from banks where tier 2 and 3 capital is material.

31. Banks should also disclose qualitative information on their accounting policies for the valuation of assets and liabilities, provisioning and income recognition. Information should also be provided on consistency of accounting principles between years, and the report should state whether – and to what extent – unrealised gains figure in the tier 1 capital, what unrealised losses have been deducted from the tier 1 capital and what influence deferred taxes have on the tier 1 capital. Banks should disclose qualitative information about the nature and the features of innovative tier 1 capital instruments.

32. Appendix 2 sets out the disclosures in greater detail and provides templates suggesting a framework for disclosure.

## 7. Risk Exposure and Assessment

### *7.1. Introduction*

33. The risks to which banks are exposed and the techniques used by banks to measure and control those risks are important factors that market participants will consider in their assessment of the institution.

34. In this section, proposed disclosures for 4 key banking risks - credit, market, operational[13] and interest rate risk in the banking book – are outlined. The structure of the section aims to provide consistency across categories of risk, providing for a full understanding of the institution. For each risk type the Committee outlines the disclosures that all banks should make regarding their exposures. This is followed by recommendations or requirements for banks using (i) simple (standardised) assessment approaches and (ii) more sophisticated (internal) approaches. The nature of the disclosure is thus geared to the particular features of the institution. This will help to avoid overburdening smaller, simpler institutions whilst ensuring that banks with complex exposures and assessment methods provide sufficient information to allow a market assessment. Further, by providing consistency in the information, market participants will be able to judge the exposures and assessment techniques of a bank, relative to other risk types, and to other similar institutions.

*General considerations for information needs under internal methodologies*

35. An important feature of the New Basel Capital Accord is the use of banks' own methodologies for assessing risk in the calculation of regulatory capital requirements. While this allows for greater sensitivity in risk assessment and a closer alignment of regulatory and economic capital allocations, it also raises questions for the meaning and use of disclosures, since such information will be based on a specific set of definitions, criteria and calculations that will not be fully comparable across institutions. In many cases, it is envisaged that use of an internal methodology for regulatory capital purposes will carry additional disclosures, so that market participants can understand, and react to, the basis of the figures derived from the methodology. The information on internal methodologies will fall into three broad categories:

- Qualitative information on methodology and key inputs. Market participants need information on the key characteristics of the internal methodologies, such as the definition of risk and the activities that are covered by the internal methodology. For example, where different definitions of default are allowed for internal ratings (as banks at the moment use different definitions) market participants need to be informed of the choice made by a particular bank. It may not be clear *a priori* which activities are covered by the internal methodology of the bank, especially when different approaches co-exist (e.g. a bank may use an internal ratings based approach for part of the credit portfolio and the standard approach for the remainder of the portfolio). Finally, information on the extent to which an internal methodology is genuinely embedded in the bank's organisation would be valuable. An example is internal ratings. The more these ratings are used internally (for instance, for pricing, provisions, performance, merit pay and allocation of economic capital), the less the probability that a bank adjusts the ratings to obtain a lower capital requirement, or, in fact, maintains two rating systems, one for genuine internal use and one to calculate capital requirements. An important issue in this respect is the nature of involvement of senior management in the rating and risk management process.
- Quantitative information required for an *ex-ante* assessment of the relevant risks. To be able to assess risks, market participants should at least have information on the probability of occurrence of the relevant risks (e.g. the probability of default in the case of credit risk) and the economic loss per incident (e.g. the loss given default in

[13] The Committee's definition is: "Operational Risk is the risk of direct or indirect loss resulting from inadequate or failed internal processes, people and systems or from external events."

the case of credit risk). This information is bank-specific and will be influenced – among other things - by the quality of the bank's control environment.

- Quantitative information on *ex-post* performance as an indication of quality and reliability. Quantitative information on, for example, the actual losses in previous years as compared with the estimated losses predicted by the banks at the time shows how accurate the bank's estimates of relevant risks have been in the past. Such information would help market participants judge the reliability of the bank's current risk assessment.

36. Quantitative *ex ante* information required for risk assessment will always be necessary, whether the bank uses a standard approach or an internal methodology. Qualitative information on the methodology and quantitative *ex post* information serving as a "quality stamp" are more relevant when internal methodologies are used because of the differences that are likely to exist between banks[14].

### *7.2. Credit Risk in the banking book*

#### *7.2.1. Introduction*

37. As was explained in the general introduction, banks are expected to disclose information on the size of their total risk exposures and the approach or combination of approaches used to measure and control these risks (including the approach taken to establish a capital buffer against those risks).

38. Under the New Basel Capital Accord, there will be broadly two categories of approach to credit risk: a standardised approach, and an approach using banks' own internal ratings. Within the internal ratings based (IRB) approach a number of variants will exist, ranging from a foundation to more advanced internal ratings based approaches. The extent and format of the credit risk disclosures will be heavily influenced by the particular regulatory capital regime which the bank is under for the purposes of credit risk. This is for two reasons. First, disclosure becomes increasingly relevant for those approaches that allow greater bank discretion in the calculation of the capital charge. In this situation, disclosure has a greater role in ensuring comparability and consistency in risk and capital adequacy measures across banks and across time. And secondly, regulatory demands for disclosures have to meet a cost/benefit test. Where banks generate additional quantitative information for their own internal purposes (and for the purposes of a more sophisticated regulatory capital regime) the direct costs of disclosure are the incremental costs of making such information public. The Committee does not expect such costs to be prohibitive.

39. Although there will be some significant differences in the amount and types of credit risk information produced by banks under the different approaches, it should be emphasised that a number of the recommended disclosures are common to all banks and are not affected by the regulatory capital framework. This includes qualitative information on credit risk management and internal controls, quantitative information on credit concentrations, information on provisions and provisioning policies, and information on the form that credit risk is taken and transferred (e.g. usage of credit derivatives and securitisation).

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[14] However, to the extent that a standard approach involves contracting out of all internal assessments (e.g. an external credit assessment institution [ECAI]), with discretion both on the part of the ECAI in respect of its methodology and on the bank in respect of its choice of ECAI, then qualitative and ex post quantitative information also become relevant in the standard approach.

40. The following sections address recommended or required disclosures under four headings: credit risk disclosures relevant to all banks; disclosures relevant to banks using the standardised approach; disclosures relevant to banks using the internal ratings based approaches; and disclosures related to credit risk mitigation techniques.

### *7.2.2. Credit Risk: Applicable to all Banks*[15]

41. Broadly, the **core quantitative disclosures** expected in the general area of credit risk relate to the overall risk breakdown of the portfolio (summary statistics – more detail is produced in the standard and IRB templates); geographic breakdown/concentration of banks' credit exposures; the broad on/off balance sheet breakdown; the sectoral breakdown of credit exposures, e.g. by industry; maturity profile of the book; and information on problem loans and provisioning.

42. In addition, institutions would be expected to provide some further **qualitative core disclosures** on:

- the structure, management, and organisation of its credit risk management function;
- its strategies, objectives and practices in managing and controlling its credit risk exposure; and
- information on techniques and methods for managing past due and impaired assets.

43. Recommended **supplementary disclosures** include more detail on the form of credit risk exposures (e.g. loans, commitments, guarantees, tradable securities, counterparty risk in derivatives) and information on transference of credit risk (securitisation, credit derivatives etc).

44. Appendix 3 Section I gives further details.

### *7.2.3. The Standardised Approach*[16]

45. This section requires and recommends a number of disclosures which apply to the use of external credit assessments in the standardised approach under Pillar 1. Further details and suggested templates for disclosure for the standardised approach are set out in Appendix 3 Section II.

46. The objective of disclosures concerning the use of ECAI assessments is to ensure that banks employ external credit assessments in a manner which properly reflects the risk exposure of the underlying asset. Even where such assessments are from reputable agencies it is important that ratings on particular public bond issues are not transferred to bank loans in an inappropriate way. It is also important to ensure that such disclosures facilitate comparison across banks using this method.

47. **Qualitative disclosure requirements** refer to the names of ECAIs used, the types of exposure for which each agency is used and the alignment of different agencies

[15] Where banks produce additional information, such as that outlined in Sections 7.2.3-5, they are not expected to duplicate information already disclosed. The Committee intends that its existing work *'Best Practices for Credit Risk Disclosure' (September 2000)* should form a background to its current initiatives.

[16] Generally, Standard and Poor's credit ratings are used as an example.

alphanumerical scales with risk buckets. The disclosure of this "mapping exercise" should allow market participants to judge that appropriateness of this translation processes.

48. **Quantitative disclosure requirements** specify the percentage of the banks portfolio in each risk bucket which is covered by each agency. These disclosures ensure that banks are using recognised agencies, with relevant expertise and provide the user with an indication of the materiality of the agency's assessment to the bank's capital requirement. It also enables comparison between banks, and facilitates comparison where external ratings are referenced in the IRB approach (see below).

49. **Disclosure recommendations** provide detailed information on default history, to ensure that the ratings used reflect the bank's default experience. It is also recommended that any significant changes in the list of ECAIs employed should be disclosed, and that banks should disclose their policy and procedure for translating public ratings on particular bond issues into "internal" borrower ratings on its loans.

### *7.2.4. Internal Ratings Based Approaches*

50. Under the New Basel Capital Accord, banks will be allowed discretion in estimating the key inputs of their internal ratings-based (IRB) approaches for the calculation of the regulatory capital regarding the credit portfolio. This discretion has two important implications for disclosure. The market should be able to assess whether this discretion has been used in an acceptable way and the assumptions and choices made need to be specified, to provide a context for other pieces of information. For these reasons, disclosure under the IRB approaches should be more extensive than under the more prescriptive standardised approach, where the basis of calculations and assumptions are given. For these same reasons, the Committee has set disclosure **requirements** as opposed to recommendations, as part of the qualifying criteria to use the IRB approaches. And, likewise, disclosure under the advanced IRB approaches, where banks provide their own estimates of loss given default (LGD) and exposure at default (EAD), should be more extensive than under the more restricted IRB foundation approach, where banks use a supervisory vector of LGD and EAD.

51. Banks must disclose sufficient qualitative information with respect to their procedures for determining the key inputs of the IRB approaches, namely probability of default (PD), LGD and EAD, to enable the market to judge the reliability, robustness and integrity of their rating process. Furthermore, banks must disclose enough information on the size and quality of the credit portfolio in a manner that allows markets to assess credit risk. Finally, banks will provide information on the *ex post* performance of its internal ratings system. This enables the markets to assess the historical accuracy and reliability of the IRB approach and its key inputs. The disclosures for the foundation and advanced IRB approaches are summarised in Appendix 3 Section III, together with additional detail and templates.

52. The Committee is aware that it is requiring the disclosure of a significant amount of information, much of which would be used for internal management purposes and to determine regulatory capital ratios. Whilst it believes appropriate disclosures are necessary for the operation of market discipline it does not wish to require disclosure of proprietary information or to place an unnecessary burden on the industry. To help reduce the burden, the Committee would urge the industry to consider carefully the opportunities offered by electronic data dissemination techniques in making information public. Furthermore, while offering suggested templates as examples, the Committee notes it would permit banks to provide the information in a different format.

53. The Committee would welcome feedback, particularly in the IRB area, on how, if necessary, the disclosure can be streamlined. If the industry has specific concerns over the disclosure of proprietary information these should be articulated clearly and should focus on

how the difficulties may be resolved, rather than general comments that material is proprietary or confidential. In this regard, institutions are encouraged to suggest relevant alternative information that could be disclosed without raising proprietary concerns.

54. **Qualitative disclosures** refer to general information on methodology and key inputs into the IRB approach. This will include points of information, such as whether supervisory acceptance has been agreed, and whether the advanced or foundation approach is employed. Information is also required on the methods for estimation and validation of PD, LGD, EAD, the definitions of default and LGD used internally for each portfolio in the IRB framework and the mapping of the internal and reference definitions of default, including the methodology used by the bank. The structure of the system and a description of the relationships between external ratings (where possible) should also be included. Further qualitative disclosures detail the data which is required for estimation of the model, internal use of estimates besides for IRB capital purposes[17] and responsibility for and independence of the rating process.

55. **Quantitative disclosures (Part (i))** refer to *ex ante* information which is necessary to calculate the required capital. This will include information on the percentage of nominal exposure covered by the IRB approach, for each portfolio specific information relating to the PD-LGD buckets and where applicable information relating to EAD (i.e. credits with variable exposures). Data on maturity and granularity for each portfolio would also be required. The distribution of external rated obligors over internal PD rating classes will also be provided where possible.

56. **Quantitative disclosures (Part (ii))** present information on the *ex post* performance as an indication of quality and reliability of the IRB methods used. This is to ensure that banks are employing the IRB methodology in a manner which accurately reflects the credit risk of the portfolio and also that the methodology is in accordance with supervisory guidance. This requires information on the default and loss history for each portfolio and PD-LGD grade (for example – number of facilities that defaulted, actual exposure at default, average LGD), and portfolio specific information such as the number of borrower and rating migrations.

### *7.2.5. Credit Risk Mitigation Techniques (CRMTs)*

57. The New Basel Capital Accord envisages that credit risk mitigation techniques will be recognised for regulatory capital purposes. In order to qualify for regulatory recognition, banks will be **required** to disclose certain basic information about the degree of risk mitigation taking place and the effect on capital requirements. This information should be disaggregated by the two broad types of mitigant – collateral/on balance sheet netting and guarantees/credit derivatives. Banks must also disclose information on its strategy and process for managing and recognising collateral and on their strategy and process for monitoring the continuing credit worthiness of protection providers. In addition, the Committee is setting out a number of recommendations with respect to CRMTs, which

[17] Currently, supervisors only accept VaR models for market risk if these models are adequately embedded in the bank's organisation. A similar precondition will apply with respect to the supervisor's acceptance of banks´ internal ratings models. Hence, the acceptance by the supervisor of an internal model indicates that there is a minimum level of integration within the organisation. Since the issue of integration seems to be even more important for credit risk than for market risk (due to the fewer possibilities for backtesting and the higher potential benefits from a shadow-system) the Committee requires disclosures in the case of credit risk so that market participants can judge extent to which the integration has gone beyond this minimum.

provide a greater breakdown of exposure and mitigation. Appendix 3 Section IV sets out the requirements and recommendations in more detail, along with suggested templates.

### *7.3. Market risk in the trading book*

#### *7.3.1. Introduction*

58. The framework for disclosure of market risk in this section is given by the solvency requirements published in 1996 by the Committee in the "*Amendment to the Capital Accord to incorporate market risks*" (the Amendment hereafter).[18] This framework ensures a minimum degree of transparency and consistency of concepts used in the disclosures. The Amendment describes a standardised method and an internal models approach (IMA). The market risks covered are interest rate risk and equity risk in the trading portfolios and currency risk and commodity risk for the whole bank.

59. For the standardised approach, the Committee proposes to use the capital charge as the risk indicator, to allow comparison between different categories of risk and between institutions. Banks with approval from their supervisor to use internal market risk models for the calculation of the solvency requirement, will also use these models to disclose the level and characteristics of market risk. The internal models are based on the value-at-risk concept, which will be used as the basis of disclosure. Appendix 4 provides greater detail on market risk disclosures, along with suggested templates.

#### *7.3.2. The Standardised Approach*

60. The standardised approach in the Amendment offers a useful framework for the disclosure of market risks. Banks using the standardised approach for the calculation of capital requirements will disclose their market risks.

61. The main **qualitative core disclosure** is the specification of the portfolios covered by the standardised approach and which of the available measurement methodologies within the standardised approach is chosen by the bank. For instance, whether the bank has applied the maturity or the duration method for the measurement of interest rate risk in the trading book.

62. The **quantitative core disclosure** gives information about the capital requirements for interest rate risk, equity position risk, foreign exchange risk and commodity risk. In addition, the capital charge for option positions is disclosed.

63. **Supplementary quantitative disclosures** give the capital charges specified for different risk categories and portfolios. For interest rate risk in the trading book the risk categories are the distinction between general and specific market risk and the different points on the yield curve. The different components of the capital charge for interest rate risk make use of these distinctions and disclosure of these components can be useful supplementary information. For equity positions the standardised approach gives risk weights for general and specific market risk and makes a further distinction between index and arbitrage positions. Supplementary quantitative disclosure of equity positions can give

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[18] It is also consistent with the supervisory information framework presented in 'A Framework for Supervisory Information about Derivatives and Trading Activities' published jointly by the Basel Committee and IOSCO in 1998.

additional information using these concepts and definitions. In a similar way, positions in foreign exchange and commodities can be disaggregated.

64. An additional risk concept is the daily variability of profits and losses on the trading positions concerned. Especially for positions for which the standardised approach is not a very precise risk indicator, disclosure of the daily variability of profits and losses gives important additional information.

65. The movement of portfolios between the standardised approach and the IMA may also be disclosed.

### *7.3.3. Internal Models Approach (IMA)*

66. The Amendment introduced the possibility for banks, after supervisory approval, to use their internal models for the assessment of the capital requirements for market risk as an alternative for the standardised approach.

67. Since the IMA offers a consistent framework for value-at-risk calculation, the risk profiles of banks using IMA are, to a large extent, comparable, although banks have some discretion with respect to certain characteristics (e.g. the observation period).

68. The **core qualitative disclosures** give information about the coverage of the IMA, the characteristics of the models used and the stress test program. Banks disclose the (partial) acceptance given by the supervisor.

69. The **core quantitative disclosures** concern value-at-risk data and the back test results on an aggregated level. The value-at-risk measure provides a first indication of the level of market risk. The IMA uses back test results as an indication of the performance of bank's model during the review period. The supervisor may increase the multiplication factor, and thus the capital requirement, if the number of "outliers" or breaches is greater than four, and the model can be rejected if the number of outliers is greater than nine. The back test may use hypothetical or real data[19]. Both back tests are described in the Market Risk Amendment. The core disclosure is the result for the total IMA portfolio.

70. The purpose of the **supplementary** disclosures is to provide the market with more details about the coverage of the IMA, the characteristics of the risk models used, the most important aspects of the risk profiles and the components of back test results.

## ***7.4. Operational risk***

### *7.4.1. Introduction*

71. The Committee is proposing three approaches to capital allocation for operational risk. The simplest approach, is the ***basic indicator approach***, which links the capital charge for operational risk to a single risk indicator (e.g. gross income) for the whole bank. A ***standardised approach*** based on business lines is also being developed, in which a risk indicator per business line is used to assess a capital charge. The third approach, the ***internal measurement approach***, requires the institution to collect data on loss indicators

[19] Other terms used to express whether the backtesting is based on a static portfolio or a changing composition during the holding period are 'buy and hold P&L' for hypothetical and 'business P&L' for real data.

and actual losses to feed into the calculation of a capital charge. In line with credit risk supervisory procedure, the more discretion an institution has in determining the parameters and inputs of an approach, the higher is the level of disclosure and the more rigorous the demands on the information disclosed. Ultimately, disclosure requirements will be a pre-condition for the use of internal measurements approaches. Further detail and a template is provided in Appendix 5.

*7.4.2. Disclosure Elements Applicable to all Banks*

*Qualitative Disclosures (Core Disclosures)*

72. Banks must meet qualifying criteria in order to be allowed to apply higher-ranking approaches. Individual banks should therefore disclose which approach(es) they are qualified to use.

73. All banks should disclose key elements of their operational risk management framework. A framework for the effective management of operational risk will contain a number of components. Several elements are set out in the appendix.

*Quantitative Disclosures (core and supplementary)*

74. All banks should place a figure on the operational risk they face. The choice of these figure(s) and the sophistication with which these figure(s) are determined will depend on the approach the bank is using.

### *7.5. Interest rate risk in the banking book*

75. In this section the core objective of disclosure is to facilitate market participants' assessment of the banks' interest rate risk profile for the banking book. Since banks will employ a standardised rate shock for each currency, risk measures across banks should be fairly comparable. These recommendations apply to all banks, even if they are not required to hold additional capital under the Pillar 2 guidance.

76. Appendix 6 gives the proposed core and supplementary disclosures for interest rate risk.

77. The disclosures are formulated in the context of the paper *"Principles for the Management and* Supervision *of Interest Rate Risk",* issued as part of the Consultative Package. The core disclosures are sufficient for an overall assessment of the level and management of interest rate risk in the banking book.

78. The **core qualitative disclosures** give information about the bank's risk management process, characteristics of the models used, the rate scenario chosen and key assumptions on judgmental aspects of asset and liability portfolios that drive the resulting risk measure.

79. The **core quantitative disclosures** concern the absolute change in earnings and economic value in response to the standardised upward and downward rate shocks and the magnitude of those changes relative to earnings and regulatory capital. In order to assess the risk appetite of the bank, the level of interest rate risk relative to the institution's internally set limits should also be disclosed.

80. The **supplementary disclosures** are intended to provide additional information on stress tests other than the supervisory rate scenario, and information about the sensitivity of these results of stress tests to variation in key behavioural assumptions.

## 8. Capital Adequacy

### *Regulatory capital*

81. In order to provide a link between the disclosure of capital and risk exposure and assessment set out in sections 6 and 7, the Committee believes it is important that a bank should publish information about its capital adequacy, and should, therefore, **disclose its actual capital ratio and other relevant information on its capital adequacy on a consolidated basis. The Committee regards this as a core disclosure.** This data would be provided on the basis of the methodology prescribed in the Basel Capital Accord as implemented by its home country supervisor, along with any other relevant information. It would cover all minimum capital requirements i.e. for credit, market and operational risk. Detailed recommendations are contained in Appendix 7.

82. A bank should also provide an analysis of factors impacting on its capital adequacy position. This would include: changes in capital structure and the impact on key ratios[20] and overall capital position, its contingency planning (should it need to access the capital markets in times of stress), its capital management strategy and consideration of future capital plans (where appropriate), and the impact of any non-deduction of participations in banks and other financial institutions, where applicable.[21] This information will serve an important context for the numerical disclosures and will allow market participants to understand the meaning of a level of reported capital adequacy.

### *Economic capital*

83. Under Pillar 2, the Committee recommends that all banks have an internal process for assessing their capital adequacy and for setting appropriate levels of capital. This process should be objective and overseen by senior management and all banks should be able to demonstrate that the results of their internal processes are credible and reliable. One method used by some banks is economic capital allocation. Capital allocation, the process of assigning economic capital to an institution's business activities, has become a useful tool for some banks in determining the adequacy of their capital and ensuring the efficient use of that capital. Specifically, capital allocation allows banks to compare the risk-adjusted profitability of diverse products and evaluate whether capital is sufficient on an individual business line basis as well as for the institution on an aggregate basis. As a supplementary disclosure, banks should disclose the amount of capital allocated to different transactions, products, customers, business lines, or organisational units (depending on the bank's methodology) so that information users may gain a better understanding of the risks and rewards inherent in the bank's activities. The failure to make such disclosures may lead market participants to conclude that an appropriate capital allocation process is not taking place at the institution. This in itself is a useful piece of information for the operation of market discipline. A template for disclosure of economic capital is contained in Appendix 7. A summary comparison/analysis of internal estimates of *aggregate* economic capital requirements versus reported capital amounts versus regulatory requirements is also a useful disclosure.

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[20] Particular ratios which should be considered will vary depending upon the circumstances of individual institutions and the specific changes in their capital structure. However, examples of relevant ratios which should be considered might include tier 2 capital /tier 1 capital, tier 1 capital/total capital and deductions from tier 1 and tier 2 capital/ total capital.

[21] This would apply mainly to significant minority interests, with deductions for majority participations available only in some exceptional circumstances.

# Appendix 1

## Scope of application

### 1. Core disclosures

Banks should disclose:

- the top corporate entity in the group to which regulatory capital requirements apply;
- the entity(ies) to which regulatory capital requirements apply on a sub-consolidated basis;
- the entities within the group, e.g. securities, insurance and other financial subsidiaries, that are not included within the consolidated approach (and the banking group's percentage interest in the voting shares in those entities);
- the particularities of how entities that are not included within the consolidated approach are captured within the capital adequacy calculations, e.g. deduction of the banking group's equity and other regulatory capital investments in such entities;
- in the event a method other than the deduction method is used, the impact of the application of such other method as compared to the deduction method;
- in the event surplus capital, that is capital in excess of the regulatory capital required for entities that are excluded from the consolidated group, is recognised (given credit for), the impact on the group's capital adequacy position;
- the entities within the group (and the banking group's percentage interest in the voting shares in those entities) that are (a) pro-rata consolidated, or (b) given a deduction treatment;
- deductions from each of Tier 1 and Tier 2 capital for unconsolidated entities;
- the aggregate amount deducted from capital for commercial entities that exceed materiality limits; and
- deductions from each of Tier 1 and Tier 2 capital for such commercial entities.

### 2. Supplementary disclosures

Banks should disclose:

- whether any subsidiaries that are not included in the consolidation, i.e. that are deducted, meet their regulatory capital requirements.

# Appendix 2

## Capital

### 1. Core disclosures

Banks should disclose the amounts of the components and structure of capital based on the definitions contained within the Basel Capital Accord (quantitative disclosure):

- the amount of tier 1 capital, with separate disclosure of:
  - (i) paid-up share capital/common stock;
  - (ii) disclosed reserves;
  - (iii) minority interests in the equity of subsidiaries;
  - (iv) innovative tier 1 capital instruments grandfathered (according to the Committee Press Release October 1998);
  - (v) innovative tier 1 capital instruments not grandfathered (according to the Committee Press Release October 1998); and
  - (vi) goodwill and other amounts deducted from tier 1.
- the total amount of tier 2 and 3 capital;
- deductions from tier 1 and tier 2 capital; and
- overall eligible capital.

### 2. Supplementary disclosures

Bank should disclose the amounts of the components and structure of capital based on the definitions contained within the Basel Capital Accord:

- the amount of tier 2 capital (split between upper and lower tier two), with separate disclosure of material components; and
- the amount of tier 3 capital.

**For both sets of disclosures**, banks should disclose summary information about the terms and conditions of the main features of all capital instruments, especially in the case of innovative, complex or hybrid capital instruments. Information disclosed should provide a clear picture of the loss-absorbing capacity of capital instruments and include any conditions that may affect the analysis of a bank's capital adequacy. This would include information on:

- maturity (including call features);
- level of seniority;
- step-up provisions;
- interest or dividend deferrals and any cumulative characteristics;

- use of Special Purpose Vehicles (SPVs);
- discussion of key “trigger” events (i.e. events which may cause the activation of significant clauses or penalties which may affect the nature or cost of capital instruments); and
- fair value and terms of derivatives embedded in hybrid capital instruments.

The following templates outline a format for the presentation of the quantitative information, split between core and supplementary.

## Quantitative Core Disclosures

### Template 2.1: Capital elements

| **Capital elements** | **Total amount** | |
|---|---|---|
| | t 0 | t-1 |
| Paid-up share capital/common stock | | |
| Disclosed reserves | | |
| Minority interests in the equity of subsidiaries | | |
| Innovative tier 1 capital instruments **not** grandfathered[22] | | |
| Innovative tier 1 capital instruments grandfathered | | |
| Goodwill to be deducted from tier 1 | | |
| ***Total amount of tier 1 capital*** | | |
| ***Total amount of tier 2 capital*** | | |
| *Deductions from tier 1 and 2 capital* | | |
| ***Total amount of eligible tier 3capital*** | | |
| ***Overall eligible capital*** | | |

[22] For eligibility and grandfathering see Committee Press Release October 1998.

**Template 2.2: Innovative tier 1 capital**

| Innovative tier 1 capital elements | Total amount | | Residual maturity eligible for inclusion in capital concerned ≤ 1 year | | Residual maturity eligible for inclusion in capital concerned ≤ 2 years | | Elements subject to step-up provisions | | Elements subject to interest or dividend deferrals and any cumulative characteristics | |
|---|---|---|---|---|---|---|---|---|---|---|
| | t 0 | t-1 | t 0 | t-1 | t 0 | t-1 | t 0 | t-1 | t 0 | t-1 |
| Innovative tier 1 capital instruments **not** grandfathered[23] | | | | | | | | | | |
| Innovative tier 1 capital instruments grandfathered | | | | | | | | | | |
| *Total amount of innovative tier 1 capital* | | | | | | | | | | |

[23] For eligibility and grandfathering see Committee Press Release October 1998.

## Quantitative Supplementary Disclosure

**Template 2.3: Tier 2 and 3 capital elements**

| Capital elements | Total amount | |
|---|---|---|
| | t 0 | t-1 |
| **Upper tier 2 capital** | | |
| Undisclosed reserves | | |
| Asset revaluation reserves | | |
| General provisions / general loan loss reserves | | |
| Hybrid (debt/equity) capital instruments (**not** eligible for tier one) | | |
| *Total amount of upper tier 2 capital* | | |
| **Lower tier 2 capital** | | |
| Subordinated debt | | |
| **Tier 3 capital** | | |
| Subordinated debt | | |

**Template 2.4: Hybrid and subordinated capital elements**

| Capital elements | Total amount | | Residual maturity eligible for inclusion in capital concerned ≤ 1 year | | Residual maturity eligible for inclusion in capital concerned ≤ 2 years | | Elements subject to step-up provisions | | Elements subject to interest or dividend deferrals and any cumulative characteristics | |
|---|---|---|---|---|---|---|---|---|---|---|
| | t 0 | t-1 | t 0 | t-1 | t 0 | t-1 | t 0 | t-1 | t 0 | t-1 |
| Hybrid (debt/equity) capital instruments (not eligible for tier one) | | | | | | | | | | |
| Tier 2 Subordinated debt | | | | | | | | | | |
| Tier 3 Subordinated debt | | | | | | | | | | |

# Appendix 3

## Credit risk disclosures

## Section I: Disclosures applicable to all institutions

**Table 3.1: Credit Risk: general disclosures – summary**

| | Core | Supplementary |
|---|---|---|
| Quantitative | (i) Total unweighted credit exposures, before and after recognised credit risk mitigation, plus total risk weighted assets, in current and previous period. Broken down by (a) Loans, Commitments and other non derivative off balance sheet exposures (b) securities and (c) OTC derivatives (this breakdown applies under categories (i)-(iv))<br>(ii) Geographic distribution of exposures<br>(iii) Industry/counterparty type distribution of exposures<br>(iv) Maturity breakdown of whole portfolio<br>(v) Volumes of past due/impaired loans, broken down by counterparty type/industry sector<br>Allowance for credit losses, including information on provisions, recoveries and charge offs | Average of exposure over period<br>More detailed breakdown of type of exposures – e.g. into loans, investments, contingent items, repos, types of derivative<br>More detailed breakdowns under (ii) and (iii)<br>More information about lumpiness of portfolio or significant concentrations of credit risk<br>Information about results from credit scoring or portfolio credit risk measurement models<br>Maturity breakdown for particular types of portfolio<br>More detail on number of days overdue<br>Volumes of credit risk transferred into securitisation vehicles or by credit derivatives |
| Qualitative | (i) Structure, management and organisation of its credit risk management function<br>(ii) Strategies, objectives and practices in managing and controlling its credit risk exposure<br>(iii) Information on techniques and methods for managing past due and impaired assets<br>(iv) Definitions of non performing, past due, impaired and default<br>(v) Definitions of specific and general provisions – triggering events, statistical methods etc. | Description of credit scoring, or portfolio credit risk models |

**Quantitative core disclosures**

For **core disclosure on credit risk**, loans and commitments should be given as shown after specific provisions for accounting purposes. In the case of derivatives, gross positive replacement costs / positive market values should be used. The figure for risk weighted assets (RWA) derives, for standard banks, from the regulatory risk weights. For IRB banks, or for those using IRB for some portfolios, the RWA figure is obtained by converting the capital charge to the notional underlying value. Classification of credit portfolios e.g. by regional areas, industry sectors or counterpart types require clear definitions and a well balanced degree of grouping. Overall credit exposures should be shown both before and after the effect of Credit Risk Mitigation Techniques (CRMT) recognised for regulatory capital purposes.

For a **Geographic Breakdown** a bank should provide quantitative information on the cross-border distribution of its credit exposure using the same geographic breakdown that the bank uses to manage its cross-border exposures and/or for accounting purposes (e.g. by geographic region, by country, etc.). This data would provide users with information on potential concentrations of country/regional risk, as well as information on the potential build-up of risk in certain countries or regions. This information would be particularly helpful in times of market stress in particular regions or countries.

To provide information on **Industry Sector/Type of Counterpart** a bank should provide quantitative information on its level of exposure to various industry sectors or counterpart types (e.g. financial services firms, manufacturing, technology, etc.), consistent with its own internal classifications and/or accounting purposes. This data would provide users with information on potential sector/counterpart concentrations and would be particularly helpful during periods of market stress.

Concerning **Maturity Breakdown** a bank should provide information on the maturity of its credit exposures. This breakdown would provide users with information on the ageing of the bank’s credit exposures and insights into the maturity structure of its assets.

To provide a picture on **Past Due/Impaired Loans** a bank should provide quantitative information on the amount of past due/impaired loans it is carrying, broken down by counterpart type or industry sector. This data would allow users to assess the bank’s exposure to non-earning assets, to assess any adverse impacts on earnings and capital from potential losses, and to assess the sufficiency of the allowance for credit losses. In addition, this data would provide information for the user to evaluate the success of the bank’s credit risk management practices.

For **Allowance for Credit Losses** a bank should provide quantitative information on the amount of its allowance for credit losses, including information on provisions (specific distinguished from general), recoveries and charge-offs. This data would provide users with information on the availability of reserves to absorb current charge-offs, as well as the additional capacity to absorb further charge-offs of bad assets in the future.

**Qualitative core disclosures**

Banks should disclose:

- the structure, management and organisation of its credit risk management function;
- its strategies, objectives and practices in managing and controlling its credit risk exposure; and

- information on techniques and methods for managing past due and impaired assets.

This information would provide users with an appropriate context in which to evaluate the quantitative information.

- A bank should provide qualitative information on the definition of non performing, past due, and impaired loans, and definitions of default.
- The definitions of specific and general provisions used should be provided – including, if applicable, trigger events, and statistical methods used in the estimation process.

**Supplementary disclosures**

As supplementary disclosure banks should provide the following:

In relation to **Overall Credit Risk Exposure** a bank should disclose information on average exposures over the period.

Information providing a more detailed **breakdown of exposures by type** – e.g. loans, investments, contingent items, repos, and types of derivative, should be disclosed.

**Concentrations of Credit Risk**: A bank should disclose information about significant concentrations of credit risk, or any further information about the lumpiness of its portfolios. This disclosure is deemed supplementary because much of the information on concentrations of credit risk can be extrapolated from the core disclosures on counterpart, industry and geographic breakdowns. More detailed breakdowns of the **Geographic, Industry/Counterparty distributions** should also be disclosed.

Concerning **Maturity Breakdown** a bank should provide quantitative information on the maturity breakdown for particular types of portfolio.

More detail on the number of days overdue should be provided with respect to **Past Due/Impaired Loans.**

Volumes of credit risk transferred into **Securitisation** vehicles or by **Credit Derivatives** and information on the amount of credit risk retained by the institution.

**Portfolio Credit Risk Measurement Models/Credit Scoring:** A bank that uses credit scoring or portfolio credit risk measurement models to manage credit risk should provide qualitative and quantitative information about its approaches. This would include any counterparty grading systems that banks use (or ECAI ratings where applicable).

# Templates

## Template 3.I.1: Credit Risk Exposure

| **Overall Credit Exposure** | **Loans, Commitments, and other non-derivative off balance sheet items** | | | | **Securities** | | | | **OTC Derivatives** | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **t 0** | | **t - 1** | | **t 0** | | **t - 1** | | **t 0** | | **t - 1** | |
| **Core** | Amount | % | Amount | % | Amount | % | Amount | % | Amount | % | Amount | % |
| Total unweighted exposures, before recognised CRMTs[24] | | | | | | | | | | | | |
| Total unweighted exposures, after recognised CRMTs | | | | | | | | | | | | |
| Total risk weighted assets | | | | | | | | | | | | |
| **Supplementary** | | | | | | | | | | | | |
| Averages of above figures during the year | | | | | | | | | | | | |

[24] The total of this line would equate with the first line of the CRMT template.

**Template 3.I.2 Geographic Breakdown**[25]

| Geographic Breakdown | Loans, Commitments, and other non-derivative off balance sheet items | | | | Securities | | | | OTC Derivatives | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | t 0 | | t - 1 | | t 0 | | t - 1 | | t 0 | | t -1 | |
| Region 1 | Amount | % | Amount | % | Amount | % | Amount | % | Amount | % | Amount | % |
| Region 2 | | | | | | | | | | | | |
| Region n | | | | | | | | | | | | |

**Template 3.I.3: Industry Sector or Type of Counterparty Breakdown**[26]

| Industry Sector or Type of Counterparty Breakdown | Loans, Commitments, and other non-derivative off balance sheet items | | | | Securities | | | | OTC Derivatives | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | t 0 | | t - 1 | | t 0 | | t - 1 | | t 0 | | t-1 | |
| Industry Sector / Counterparty Type | Amount | % | Amount | % | Amount | % | Amount | % | Amount | % | Amount | % |
| Sector/Type 1 | | | | | | | | | | | | |
| Sector/Type 2 | | | | | | | | | | | | |
| Sector/Type n | | | | | | | | | | | | |

[25] More detailed information regarding geographic breakdown, including definitions, should be provided as supplementary information.

[26] More detailed information regarding industry sector/type of counterparty breakdown should be provided as supplementary information.

**Template 3.I.4 Maturity Breakdown**[27]

| Maturity Breakdown | Loans, Commitments, and other non-derivative off balance sheet items | Securities | OTC Derivatives | Gross Exposure | Net Exposure (after recognised credit risk mitigation techniques) |
|---|---|---|---|---|---|
| Up to one year | | | | | |
| Over one year and up to five years | | | | | |
| Over five years and up to ten years | | | | | |
| Over ten years | | | | | |
| Total | | | | | |

**Template 3.I.5 Past Due/Impaired Loans (by counterparty type or industry sector)**[28]

| Past Due/Impaired Loans[29] (by counterparty type or industry sector) | t 0 | t - 1 |
|---|---|---|
| Type/Sector 1 | | |
| Type/Sector 2 | | |
| Type/Sector n | | |

---

[27] More detailed information regarding maturity breakdown for particular types of portfolio should be provided as supplementary information.

[28] A qualitative description of how these are defined is also recommended. In addition more detail on number of days overdue should be provided as supplementary information.

[29] Shown either gross with allowances or net.

**Template 3.I.6 Allowance for credit losses**

| Allowance for Credit Losses | t 0 | t -1 |
|---|---|---|
| Balance, beginning of year | | |
| Specific Provisions for credit losses<br>• Provide industry sector or counterparty breakdown | | |
| General Provisions for credit losses | | |
| Recoveries | | |
| Charge-offs:<br>• Provide industry sector or counterparty breakdown | | |
| Balance, end of year | | |

## Section II: Credit risk disclosures under the standardised approach

### Table 3.2: Credit Risk: Standardised Approach disclosures– summary

| | Requirements | Recommendations |
|---|---|---|
| **Qualitative** | (i) Names of all ECAI used<br>(ii) Types of exposure for which each rating agency is used<br>(iii) The alignment of different alphanumerical scales with risk buckets | (i) Changes in the list of rating agencies used by the bank (with reasons for such changes)<br>(ii) The bank's policy for translating public ratings on particular bond issues into borrower ratings on its loans<br>(iii)A comprehensive set of guidelines concerning the procedure to be used in transferring public issue ratings onto comparable assets in the banking book |
| **Quantitative** | (i) Percentage of a bank's outstandings in each risk bucket which is covered by each agency's ratings | (i) The average default rates experienced by individual banks on rated credits in each rating category (including unrated), together with the bank's definition of default |

**Requirements: Qualitative**

The names of all rating agencies or other sources of external assessments used for risk weighting purposes. To ensure that reputable agencies (those with market credibility) are employed (Template 3.II.1).

The types of exposure for which each rating agency is used (e.g. some rating agencies might be used only for certain geographic or sectoral exposures). To ensure that agencies are used for risk weights in those areas where they are recognised to have relevant expertise (Template 3.II.1).

The alignment of different alphanumerical scales with risk buckets[30] (Template 3.II.2).

**Requirements: Quantitative**

The percentage of a bank's outstandings in each risk bucket which is covered by each agency's ratings. The disclosure of the percentage of a bank's credit portfolio which a particular agency covers indicates the materiality of an agency's assessment to the calculation of capital at a bank (Template 3.II.1).

---

[30] With the broadening of the scope of institutions used for credit assessment purposes the complexity of this task increases, thereby enlarging the role for transparency.

**Recommendations**

Any significant changes in the list of rating agencies used by the bank for portfolio outstandings (not otherwise disclosed) since the previous period's disclosures (and the reasons for such changes). Switching agencies in an effort to attain higher ratings should be discouraged. By disclosing where a change occurs market discipline should increase the likelihood that changes occur for valid reasons (Template 3.II.1).

The bank's policy for translating public ratings on particular bond issues into borrower ratings on its loans. In applying external bond ratings to the banking book it is essential that like is being compared with like (e.g. the bank does not apply a senior bond rating to a subordinated bank loan). Disclosure of the bank's individual process helps ensure that a bank is doing this in an appropriate manner.

A comprehensive set of guidelines concerning the procedure to be used in transferring public issue ratings onto comparable assets in the banking book. This needs to include the maturity of both assets in question, the seniority of each, any collateralisation provisions, warrants, covenants or other features of the instruments.

The average default rates experienced by individual banks on rated credits in each rating category, together with the bank's definition of default. (Template 3.II.3). When a bank is applying bond ratings to loans, by disclosing realised default rates any inconsistencies (between default rates on the publicly rated bonds and on bank loans) should become more transparent[31]. The disclosure of default rates will also force banks to track their default histories on rated credits thereby promoting the efficiency and effectiveness of their internal risk management processes. However, the item is recommended rather than required on the grounds that (a) strict guidelines on the application of bond ratings to bank loans should anyway minimise the discrepancies between overall default rates on bonds and loans and (b) since individual banks are unlikely to have statistically significant pools of rated credits, it may be difficult for investors to interpret the information. Furthermore, it may be necessary to allow banks considerable judgement as to what is meaningful to disclose, including for example the time frame.

The default rates experienced by individual banks on non-rated loans. If the default rate experienced on non-rated loans is higher than, for example, those rated B- and below, this may suggest that there are significant risks in the non-rated category which are not being captured by capital (Template 3.II.3).

[31] Structured financings could be exempted from this, as no mapping from issues to loans is in question.

## Templates

**Template 3.II.1: Names of ECAIs employed and % of (total unweighted) banking book exposure covered by each**

| Name of Agency | Risk Exposure [32] | % of total (unweighted) outstandings accounted for by each agency | | | | |
|---|---|---|---|---|---|---|
| | | 0% | 20% | 50% | 100% | 150% |
| Agency A | | | | | | |
| Agency B | | | | | | |

[32] Certain agencies specialise in particular risk exposures – for example geographic, sectoral, financial instrument type. Where an agency is used for a specific risk exposure this should be specified.

**Template 3.II.2: Allocation of alphanumerical rating scales to risk buckets**

| Risk Weighting | Agency Risk Categories | | |
|---|---|---|---|
| | Agency A | Agency B | Agency C |
| **0%** | AAA to AA-<br>(Sovereigns) | Aaa to Aa3<br>(Sovereigns) | |
| **20%** | A+ to A-<br>(Sovereigns)<br>AAA to AA-<br>(Banks (2), Corporates) | A1 to A3<br>(Sovereigns)<br>Aaa to Aa3<br>(Banks (2), Corporates) | |
| **50%** | BBB+ to BBB-<br>(Sovereigns)<br>A+ to BBB -<br>(Banks (2))<br>A+ to A-<br>(Corporates) | Baa1 to Baa3<br>(Sovereigns)<br>A1 to Baa3<br>(Banks (2))<br>A1 to A3<br>(Corporates) | |
| **100%** | BB+ to B-<br>(Sovereigns, Banks(2))<br>BBB+ to BB-<br>(Corporates) | Ba1 to B3<br>(Sovereigns, Banks(2))<br>Baa1 to Ba3<br>(Corporates) | |
| **150%** | Below B-<br>(Sovereigns, Banks (2),<br>Below B+<br>(Corporates) | Below B3<br>(Sovereigns, Banks (2),<br>Below B1<br>( Corporates) | |

**Template 3.II.3: Cumulative default rates experienced by individual banks in each rating category[33] (%)**

| Rating Category | AAA to AA- | A+ to A- | BBB+ to BBB- | BB+ to BB- | B+ to B- | Below B- | Non-rated |
|---|---|---|---|---|---|---|---|
| Default rate (%) | | | | | | | |

## Section III: Credit risk disclosures for the IRB approach[34]

This section presents detailed information on the disclosures outlined in section 7.2.4 above for banks using the IRB approach. A discussion of the disclosures is provided, with an explanation of the purpose and objectives of these disclosures. Disclosures for the foundation and advanced approach are both discussed. Banks using the IRB approach will

[33] The time frame over which banks would be expected to disclose this information has yet to be decided.

[34] In this section, items in brackets apply only to the advanced IRB approaches

be required to meet certain qualifying criteria. These include disclosure, so the items set out in this section are **requirements** and not recommendations. The rationale for this is that if the inputs into a capital requirement are bank specific, the market will need additional information to reach a judgement on the soundness of the institution.

**Table 3.3: Credit risk: IRB Approach disclosure requirements – summary**

| | |
|---|---|
| **1. Qualitative disclosures: general information on methodology and key inputs** | (i) Supervisor's acceptance of approach<br>(ii) For each portfolio indicate whether an own estimation or a supervisory vector for LGD and/or EAD are used<br>(iii) For each portfolio describe methods for estimation and validation of PD, (LGD and EAD)<br>(iv) Required data for estimation of the model, internal use of estimates besides for IRB capital purposes, responsibility for and independence of rating process<br>(v) Explanation of structure of internal rating system and relation between internal and external ratings<br>(vi) The process for managing and recognising credit risk mitigation;<br>(vii) For each portfolio, with subdivision as necessary (a) employed definitions of PD, (LGD, and EAD), (b) mapping of internal and reference definitions of default<br>(viii) Information on supervisory approved transition |
| **2. Quantitative disclosures part (I): required information for risk assessment** | (i) Percentage of nominal exposure covered by IRB approach<br>(ii) For each portfolio,<br>- PD (and LGD) assumptions related to each PD (and LGD) grade<br>- for each PD(-LGD) bucket, (or by segment in the retail portfolio) nominal exposure amount before and after CRMT<br>- (for credits with variable exposure, EAD assumptions used for estimation, nominal exposure amounts and EAD estimates, both before and after recognised CRMT for each PD-LGD bucket (by risk segment in retail))<br>(iii) For each portfolio, (a) weighted average maturity or maturity breakdowns and (b) appropriate granularity adjustment<br>(iv) Distribution of external rated obligors over internal PD rating classes |
| **3. Quantitative disclosures part (II): *ex post* performance as an indication of quality and reliability** | (i) For each portfolio and each PD(-LGD grade) (or segment in retail),<br>- number of defaults<br>- (actual exposure amount at default)<br>- (actual average LGD and other summary statistics of distribution of (actual) LGD, such as standard deviation and 10th, 50th and 90th percentile at default, at 1, 2 and 3 year intervals and weighted with exposure)<br>- number of defaults as slotted 1 year prior to default<br>- details on status of default i.e. worked out/ under workout |
| | (ii) For each portfolio, for each PD(-LGD) grade (or retail segment),<br>- number of facilities that defaulted<br>- nominal and drawn amount at default |

| | |
|---|---|
| | (iii) In advanced approach, for each portfolio, summary statistics of distribution of EAD, also weighted with exposure |
| | (iv) For each portfolio,<br>- number of borrowers, and<br>- distribution of borrowers across rating grades for the last 1, 2 and 3 years<br>- distribution of rating migrations for the last 1, 2 and 3 years<br>- in the advanced approach, distribution of rating migrations weighted with (a) nominal exposure and (b) EAD, both after 1,2 and 3 years |
| | (v) Where banks use their own LGD estimates,<br>- a comparison between economic capital, actual capital held and minimum capital requirements<br>- summary indicators of economic capital attributed to major lines of business. |

## 1. Qualitative disclosures: general information on methodology and key inputs

The qualitative disclosures are of a descriptive nature and do not need templates:

- supervisor's acceptance of approach;
- for each portfolio,[35] whether an own estimation or a supervisory vector for LGD and/or EAD are used;
- for each portfolio, methods for estimation and validation of PD (as well as LGD and EAD);
- required data for estimation of the model, internal use by bank of estimates besides for IRB capital purposes, responsibility for and independence of rating process;
- relation between internal and external ratings;
- the process for managing and recognising credit risk mitigation;
- for each portfolio, employed definitions of default (as well as EAD & LGD) used internally for each portfolio in the IRB framework, and mapping of internal and reference definitions of default (as well as EAD & LGD) including the methodology used by the bank, if the employed definition deviates from the reference definition; and
- banks in supervisory approved transition between internal ratings based approaches must disclose: the specific minimum requirements to which the transition applies, the areas and the degree of missing compliance, and the progress made towards compliance with the full set of minimum requirements.

[35] A portfolio is a set of exposures or business lines recognised separately in the IRB approach, and which are associated with a separate risk weight schedule.

## 2. Quantitative disclosures part (i): required information for risk assessment

The percentage of nominal exposure covered by IRB approach must be disclosed. For each portfolio, PD (and LGD) assumptions related to each PD (and LGD) grade must be shown. This is mainly of a descriptive nature, but could include templates with information on each PD grade (and each LGD) grade, respectively, or for the various types of recognised credit risk mitigant.

For each portfolio, for each PD (-LGD) bucket, nominal exposure amount, before and after recognised credit risk mitigation, must be shown, as well as weighted average maturity and the granularity adjustment for the whole portfolio. Templates 3.III.1 and 3.III.2 may be used.

**Template 3.III.1: Commercial and industrial portfolio: nominal exposure amount by PD grades in the foundation approach, after recognised credit risk mitigation and before credit risk mitigation**

| | Performing grades | | | | | | | | Non-performing grades | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | grade 1 | grade 2 | grade 3 | grade n | | | | | grade x | etc. | |
| PD | | | | | | | | | | | |
| Nominal exposure | | | | | | | | | | | |
| weighted maturity | | | | | | | | | | | |
| granularity adjustment | | | | | | | | | | | |

**Template 3.III.2: Commercial and industrial portfolio: nominal exposure amount by PD and LGD grades in the advanced approach, after recognised credit risk mitigation and before recognised credit risk mitigation**

| | Performing grades PD | | | | | | | | Non-performing grades PD | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **LGD** | **grade 1** | **grade 2** | **grade 3** | **Grade n** | | | | | **grade x** | **etc** | |
| **interval 1** | | | | | | | | | | | |
| **interval 2** | | | | | | | | | | | |
| **interval n** | | | | | | | | | | | |
| **weighted maturity** | | | | | | | | | | | |
| **granularity adjustment** | | | | | | | | | | | |

*Explanatory note:* The LGD grades or intervals indicate classes of LGD values, for instance, losses from 0-20%, etc.

The templates could also include banks and sovereigns, unless they are treated differently from commercial and industrials, in which case separate templates must be presented.[36] For the retail portfolio, for which there is no foundation approach, as far as nominal amounts are concerned,[37] values for PD and LGD or EL are shown for each risk segment.

In the advanced approach, for credits with variable exposure, EAD assumptions, used for estimation, should be provided. These are of a descriptive nature. Also, nominal exposure amounts and EAD estimates should be shown for credits with variable exposure, both net and gross of recognised credit risk mitigation according to the following template:

[36] Corporates includes claims on large corporates & mid-market corporates. Retail includes credit cards, overdraft and other revolving credit facilities, other personal loans and small business facilities. Banks should provide their definition of what constitutes a claim on a large corporate, a claim on a mid-market corporate and a claim on a small business facility (e.g. by size of claim).

[37] For credits with variable exposure, see below.

**Template 3.III.3: Commercial and industrial portfolio, credits with variable exposure: nominal exposure amount (and Exposure at Default estimates) for all PD and LGD grades in the advanced approach, after recognised credit risk mitigation and before recognised credit risk mitigation**

| | Performing grades PD | | | | | | | | Non-performing grades PD | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| LGD | grade 1 | grade 2 | Grade 3 | Grade n | | | | | grade x | etc | |
| interval 1 | | | | | | | | | | | |
| interval 2 | | | | | | | | | | | |
| interval n | | | | | | | | | | | |
| weighted maturity | | | | | | | | | | | |
| granularity adjustment | | | | | | | | | | | |

For the retail portfolio, for credits with variable exposure, nominal exposure amounts and values for PD, LGD and EAD or EL are shown for each risk segment.

The distribution of external rated obligors over internal PD rating classes must be disclosed. The following template provides a possible framework.

**Template 3.III.4: Distribution of externally rated obligors over internal PD rating classes - nominal exposures before credit risk mitigation**

| External ratings | | Internal PD rating classes | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Performing loans | | | | | | | Non-performing loans | | |
| rating class | PD | grade 1 | grade 2 | grade 3 | | | | | grade x | etc. | |
| AAA | | | | | | | | | | | |
| AAA- | | | | | | | | | | | |
| AA+ | | | | | | | | | | | |
| AA | | | | | | | | | | | |
| AA- | | | | | | | | | | | |
| A+ | | | | | | | | | | | |
| etc. | | | | | | | | | | | |
| CCC | | | | | | | | | | | |
| CCC- | | | | | | | | | | | |
| unrated | | | | | | | | | | | |

*Explanatory note:* Rating classes external ratings according to the respective external rating agency.

## 3. Quantitative disclosures part (ii): ex post performance as an indication of quality and reliability

For each portfolio and each PD (-LGD) grade, (i) the number of defaults, (and, in the advanced approach, (ii) the actual exposure amount at default and (iii) the actual average LGD and other summary statistics of distribution of LGD, such as standard deviation and 10th, 50th and 90th percentile) could be shown using the following templates:

**Template 3.III.5 : Commercial and industrial portfolio: number of defaults for all PD grades at the time of default in the foundation approach for period t[38]**

| | Performing grades PD | | | | | | | Non-performing grades PD | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | grade 1 | grade 2 | grade 3 | grade n | | | | grade x | etc | |
| Estimated PD | | | | | | | | | | |
| Actual PD | | | | | | | | | | |

**Template 3.III.6: Commercial and industrial portfolio: number of defaults (plus actual exposure amount at default and actual average LGD) for all PD and LGD grades at the time of default in the advanced approach for period t[39]**

| | *Performing grades PD* | | | | | *Non-performing grades PD* | | |
|---|---|---|---|---|---|---|---|---|
| *LGD* | *grade 1* | *grade 2* | *grade 3* | *grade n* | | *grade x* | *etc* | |
| **interval 1** | | | | | | | | |
| **% of losses worked out fully** | | | | | | | | |
| **interval 2** | | | | | | | | |
| **% of losses worked out fully** | | | | | | | | |
| **interval n** | | | | | | | | |
| **% of losses worked out fully** | | | | | | | | |

Actual values for LGD in Template 3.III.6 can only be given as far as losses are fully worked out. Therefore, templates for period t, t-1, t-2, etc., are needed, as well as the percentage of losses in each cell in each template which are fully worked out.

Similar templates must also be provided for the number of defaults for all PD (and LGD) grades exposures as slotted in at some predetermined historical reference point, say 1 year ago (instead of *at the time of default).*

In the advanced approach, similar templates with other summary statistics of distribution of actual LGD, such as standard deviation and 10th, 50th and 90th percentile, also weighted with exposure, should be disclosed by similar templates. For the retail portfolio, values for

[38] Also for previous periods, t-1 to t-3.

[39] Also for previous periods, t-1 to t-3

PD, LGD and EAD[40] or EL should be disclosed for each risk segment. Also, for each portfolio, for each PD-LGD grade, (i) the number of facilities that defaulted and (ii) facilities and drawn amount at default must be disclosed (using templates similar to Template 3.III.2). For the retail portfolio, values for number of facilities that defaulted and facilities and drawn amount at default must be shown for each homogenous group of products. For each portfolio, as far as relevant, summary statistics of distribution of EAD, also weighted with exposure, must be disclosed, along with the number of borrowers (no templates given).

For each portfolio, distribution of borrowers across rating grades for the last 1, 2 and 3 years must be disclosed. This could be presented in the next template:

**Template 3.III.7: Commercial and industrial portfolio: distribution of borrowers across PD grades**

| Number of | Performing grades PD | | | | | | | | Non-performing grades PD | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| borrowers | grade 1 | grade 2 | grade 3 | grade n | | | | | grade x | etc | |
| period t | | | | | | | | | | | |
| period t-1 | | | | | | | | | | | |
| period t-2 | | | | | | | | | | | |
| period t-3 | | | | | | | | | | | |

Results from earlier years would significantly increase the value of disclosure (unless these results can be taken from earlier disclosure reports). For each portfolio, the distribution of rating migrations for the last 1, 2 and 3 years should be revealed by the following template:

**Template 3.III.8 : Commercial and industrial portfolio: distribution of rating migrations across PD rating grades for period t[41]**

| | *Closing rating* | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| *Opening rating* | *grade 1* | *grade 2* | *grade 3* | | | | | | *grade n* | *liquidated* |
| grade 1 | | | | | | | | | | |
| grade 2 | | | | | | | | | | |
| grade 3 | | | | | | | | | | |
| grade n | | | | | | | | | | |

*Explanatory note:* Loans, which are expired during the year without any occurrence of default, are not included in this table. Defaulted loans, which are or will be liquidated and lost their grade permanently during the year, end in the last column.

[40] As far as variable exposures are concerned.

[41] Also for previous periods t-1 to t-3

In the advanced approach, distribution of rating migrations such as in Template 3.III.8 but weighted with nominal exposure and EAD, respectively, both after, say, 1, 2 and 3 years, must also be presented.

Where banks use their own LGD estimates, they must disclose a comparison between economic capital, actual capital held and minimum capital requirements and summary indicators of economic capital attributed to major lines of business. Template 3.III.9 outlines a method for providing this information.

**Template 3.III.9: Comparison of Economic, Minimum Regulatory and Actual Capital (total) and allocation of economic capital by business line**

| | Economic capital allocation | Minimum Regulatory Capital | Actual Capital |
|---|---|---|---|
| **Business line 1** | | | |
| **Business line 2** | | | |
| **Business line n** | | | |
| **Total** | | | |

## Section IV: Credit Risk Mitigation

### 1. Requirements

All these requirements apply to banks taking advantage of risk mitigation in the standardised and foundation IRB approaches, and also have relevance for banks on the advanced approach. Where a bank on the advanced approach is already required to provide comparable information under Section III, it need not replicate the disclosures in this section.

***Qualitative disclosures***

- Disclosure information must describe the institution's overall strategy and process for managing collateral including, in particular, the monitoring of collateral value over time. Key internal policies for the recognition of collateral, for example, the ratio of underlying exposure to collateral (i.e. LTV ratio) and maturity mismatches, must also be broadly described.
- Banks must also provide information on their strategy and process for monitoring the continuing credit worthiness of protection providers and administering the guarantees and credit derivatives as required for collateralised transactions.

***Quantitative disclosures***

- Banks must disclose total exposures, the amount of exposure secured by collateral and on-balance sheet netting contracts, and risk weighted assets excluding and including the effects for collateral/on-balance sheet netting. These values must be disclosed by risk weight bucket/internal risk grade. (Template 3.IV.1)
- Banks must also disclose the amount of exposure covered by guarantees/credit derivatives, risk weighted assets excluding and including the effects of guarantees/credit derivatives. These values must be disclosed by risk weight

bucket/internal risk grade (Template 3.IV.1) and by type of guarantor/protection provider. (Template 3.IV.2)

- Banks must disclose the type of regulatory calculation methodologies they select.

**Template 3.IV.1: Mitigation of exposure: effects on regulatory capital by risk weight/bucket**

| | Risk weight | | | |
|---|---|---|---|---|
| **EXPOSURE/RWA** | **Risk weight/ Bucket 1** | **Risk weight/ Bucket 2** | **Risk weight/ Bucket n** | **TOTAL** |
| Total exposure[42] | | | | |
| Amount of exposure secured by collateral and on-balance sheet netting contracts | | | | |
| Risk weighted assets **before** effect of collateral/netting | | | | |
| Risk weighted assets required **after** effect of collateral/netting | | | | |
| Amount of exposure covered by guarantees/credit derivatives | | | | |
| Risk weighted assets **before** effect of guarantees/credit derivatives | | | | |
| Risk weighted assets **after** effect of guarantees/credit derivatives | | | | |
| Risk weighted assets **after** effect of all recognised credit risk mitigation | | | | |

**Template 3.IV.2: Exposure and mitigation by type of guarantee/derivative**

| | Type of guarantee/derivative | | | |
|---|---|---|---|---|
| **EXPOSURE/RWA** | **Type 1** | **Type 2** | **Type n** | **TOTAL** |
| Amount of exposure covered by guarantees/credit derivatives | | | | |
| Risk weighted assets **before** effect of guarantees/credit derivatives | | | | |
| Risk weighted assets **after** effect of guarantees/credit derivatives | | | | |

[42] This line of template equates to the ‘total exposure’ shown in template 3.I.1 (Credit Risk Exposure).

## II. Recommendations

***Qualitative disclosures***

- If effects of on-balance sheet netting are material, banks should disclose the institution's overall strategy and process for managing on-balance sheet netting contracts.

***Quantitative disclosures***

- Net exposure amounts (after effects for collateral/on-balance sheet netting) used for internal risk management purposes by risk weight bucket/internal risk grade. (Template 3.IV.3) Total annual recovery amounts from collateralised transactions should also be disclosed.
- Exposure amounts (total, risk weighted assets excluding/including collateral) by types of eligible collateral, by geographical grouping used by the bank for internal management purposes. (template 3.IV.4)
- Information (total, net, risk weighted assets excluding/including on-balance sheet netting) on on-balance sheet netting covering loans and deposits should be disclosed separately along risk weight buckets/internal risk grade. The types of counterparty should also be disclosed. (template 3.IV.5)
- Banks should disclose total exposures covered by guarantees/credit derivatives, risk weighted assets excluding and including the effects for guarantees/credit derivatives by geographical and industrial sector. (template 3.IV.6)
- Banks are recommended to disclose their main guarantors/protection providers.

**Template 3.IV.3: Net Exposure (for internal purposes) by risk weight/bucket**

| | **Risk Weight** | | |
|---|---|---|---|
| | **Risk weight/bucket 1** | **Risk weight/bucket 2** | **Risk weight/bucket n** |
| **Net Exposure** | | | |

**Template 3.IV.4: Eligible collateral by Region and/or Sector (to be published for each region/sector)**

| | **Eligible Collateral** | | |
|---|---|---|---|
| | **Type 1** | **Type 2** | **Type n** |
| Total Exposure | | | |
| Risk weighted assets **before** effect of collateral/netting | | | |
| Risk weighted assets **after** effect of collateral/netting | | | |

**Template 3.IV.5: On balance sheet netting covering loans and deposits by risk weight (to be published for each type of counterparty)**

| | **Risk Weight** | | |
|---|---|---|---|
| | **Risk weight/bucket 1** | **Risk weight/bucket 2** | **Risk weight/bucket n** |
| **Total Exposure** | | | |
| Net Exposure | | | |
| Risk weighted assets **before** effect of netting | | | |
| Risk weighted assets **after** effect of netting | | | |

**Template 3.IV.6: Guarantees/Credit Derivatives by region and or/sector (to be repeated for each sector)**

| | **Region** | | |
|---|---|---|---|
| | **Region 1** | **Region 2** | **Region n** |
| **Total Exposure** | | | |
| Risk weighted assets **before** effect of guarantees/credit derivatives | | | |
| Risk weighted assets **after** effect of guarantees/credit derivatives | | | |

# Appendix 4

## Market Risk

## The Standardised Approach

**Table 4.1: Market Risk: Standardised Approach disclosures - summary**

| | Core | Supplementary |
|---|---|---|
| **1. Qualitative Disclosures** | (i) Specify which portfolios are covered by the standardised approach. | Movement of portfolios between the standardised approach and the IMA |
| | (ii) Specify for which portfolios which of the methods from the standardised approach is used. | |
| **2. Quantitative disclosures : required information for risk assessment** | (i) The levels of market risks in terms of capital requirements for interest rate risk, equity position risk, foreign exchange risk and commodity risk. | If applicable, specified for different risk categories and portfolios.<br>The level and variability of profits and losses on positions covered by the disclosures. |
| | (ii) The capital charge for positions in options. | Specified for different risk categories and portfolios. |

## The Internal Models Approach

**Table 4.2: Market Risk: Internal Models Approach[43] disclosures – summary**

| | Core | Supplementary |
|---|---|---|
| **1. Qualitative disclosures: general information on methodology and key inputs** | (i) (Partial) acceptance of the IMA by the supervisor | |
| | (ii) Specify which portfolios are covered by the IMA. | Movement of portfolios between the IMA and the standardised approach. |
| | (iii) General overview of (changes in) the characteristics of the internal models used | If applicable, special attention for the treatment of non-linear risks, specific risk and event risk |
| | (iv) Description of the stress test program | The (potential) application of stress test results |

[43] Some banks already present the information set out in the templates in this section in the form of a graph, which is also acceptable.

| **2. Quantitative disclosures part (i): required information for risk assessment** | (i) The level and variability of market risks in terms of value at risk specified in IMA. | If applicable, specified for different risk categories and portfolios |
|---|---|---|
| | | The level and variability of profits and losses on the "IMA" positions |
| **3. Quantitative disclosures part (ii): *ex post* performance as an indication of quality and reliability** | (i) Back tests results on an aggregated level | If applicable, specified for different regions and/or portfolios |
| | | Description and quantification of important "outliers" in the back test |

## 1. Quantitative disclosures part (i): information for risk assessment

The level and variability of market risk are disclosed. The risk measure used is the value at risk specified in the internal models approach. The templates are specified for the total IMA portfolios (core disclosures) and, if applicable, for different risk categories and portfolios (supplementary disclosures). For instance, banks may do risk assessments for regions, products and/or risk categories (interest rates, currencies, equity prices, commodity prices). Differentiation of risks along these lines is supplementary disclosure.

### Template 4.1: Level and variability of market risk in terms of value at risk

| | **Value at risk** | | | | | **Variability (max/min/median/standard deviation) of value at risk** | |
|---|---|---|---|---|---|---|---|
| | **t** | **t-1** | **t-2** | **…** | | **period 1** | **period 2 …** |
| **Portfolio1/risk category a** | | | | | | | |
| **Portfolio1/risk category b** | | | | | | | |
| | | | | | | | |
| **Portfolio2/risk category a** | | | | | | | |
| **Portfolio2/risk category b** | | | | | | | |
| | | | | | | | |
| **Total IMA portfolios** | | | | | | | |

Template 4.2 gives an additional measure of risk: the variability of profits and losses during a certain observation period. In IMA the profits and losses can be measured on a real and/or on a hypothetical basis.

**Template 4.2: Level of market risk in terms of variability of profits and losses**

| | Variability of profits and losses | | | | |
|---|---|---|---|---|---|
| | **period 1** | **period 2** | **…** | | |
| **Portfolio1/risk category a** | | | | | |
| **Portfolio1/risk category b** | | | | | |
| | | | | | |
| **Portfolio2/risk category a** | | | | | |
| **Portfolio2/risk category b** | | | | | |
| | | | | | |
| **Total IMA portfolios** | | | | | |

## 2. Quantitative disclosures part (ii): ex post performance as an indication of quality and reliability

The **core quantitative disclosures** concern value-at-risk data and the back test results on an aggregated level. The value-at-risk measure provides a first indication of the level of market risk. The IMA uses back test results as an indication of the performance of bank's model during the review period. The supervisor may increase the multiplication factor, and thus the capital requirement, if the number of "outliers" or breaches is greater than four, and the model can be rejected if the number of outliers is greater than nine. The back test may use hypothetical or real data. Both back tests are described in the Market Risk Amendment. The core disclosure is the result for the total IMA portfolio.

## Template 4.3: Back test results

| | day 1 | day 2 | … | day 250 | |
|---|---|---|---|---|---|
| **Portfolio/risk category 1** | | | | | |
| **Value at risk** | | | | | |
| **Real profit and loss**[44] | | | | | |
| **Hypothetical profit and loss**[45] | | | | | |
| **Outlier real test** | | | | | |
| **Outlier hypothetical test** | | | | | |
| **Portfolio/risk category 2** | | | | | |
| **Value at risk** | | | | | |
| **Real profit and loss** | | | | | |
| **Hypothetical profit and loss** | | | | | |
| **Outlier real test** | | | | | |
| **Outlier hypothetical test** | | | | | |
| | | | | | |
| | | | | | |
| **Total IMA portfolios** | | | | | |
| **Value at risk** | | | | | |
| **Real profit and loss** | | | | | |
| **Hypothetical profit and loss** | | | | | |
| **Outlier real test** | | | | | |
| **Outlier hypothetical test** | | | | | |

[44] In some jurisdictions, the Real profit and loss and outlier test is known as the ‘business P&L’ and outlier test.

[45] In some jurisdictions, the Hypothetical profit and loss and outlier test is known as the ‘buy and hold P&L’ and outlier test

# Appendix 5

## Operational Risk

**Table 5.1: Operational Risk: disclosures - summary**

| | Core | Supplementary |
|---|---|---|
| **1. Qualitative Disclosures** | (i) Approach(es) the Bank qualifies for<br>(ii) Risk Management Framework | |
| **2. Quantitative Disclosures** | (i) Risk exposure (by business line if available)<br>(ii) The operational risk capital charge as a % of minimum regulatory capital | Operational losses (in total or by business line if available) |

## 1. Qualitative disclosures (Core)

**Approach(es) Bank Qualifies for (per Business Line)**

Banks can apply the standardised and internal measurement approach to different business lines at the same time. Therefore, they should disclose the approach used for each business line, and a bank using the basic indicator approach should disclose this fact. This does not need a template. Nevertheless, this information is important because a level of risk management and internal control is attached to the use of each methodology.

**Risk Management Framework**

Banks should provide information about its framework for managing operational risk. Such information could include discussions of operational risk policies and measurement methodologies, organisational roles and responsibilities for managing operational risk, and operational risk mitigation techniques employed.

## 2. Quantitative Disclosures (Core and Supplementary)

Banks should publish information on their operational risk exposures. In many cases banks will not be measuring their exposure directly, and a proxy will be used. A proxy that is comparable across all capital assessment techniques is that of the operational risk capital charge. To further facilitate comparison, the operational risk capital charge as a percentage of minimum regulatory capital should also be disclosed. An alternative would be the indictor used. However, in many instances this figure will not be particularly helpful, since for the first two approaches it will be a broad financial indicator. The publication of total operational losses is another possibility, but this would only apply to banks using the Internal

Measurement Approach (although some banks in the standardised approach may have such data). As more work is conducted on the internal measurement approach, then a more useful indicator may be available. This is likely to include loss data. At this stage, the Committee is concerned that a requirement to publish loss data might serve as a disincentive to develop more sophisticated approached to operational risk. It is therefore, recommending that loss data be a supplementary disclosure. It may be possible for banks to disclose losses in the context of a fuller review of operational risk measurement and management, and in the longer term such disclosures will form part of the qualifying criteria to use internal approaches.

## Template 5.1: Operational Risk Exposures

| Business Line[46] | Risk Exposure / Total Annual Operational Losses |
|---|---|
| Corporate Finance | |
| Trading & Sales | |
| Commercial Banking | |
| Retail Banking | |
| Payment & Settlement | |
| Retail Brokerage | |
| Asset Management | |
| Total | |

46 A business line for agency services (custody, corporate agency and corporate trust) is intended to be included in the final proposal. A business line for insurance may also be inserted, where insurance is included in a consolidated group for regulatory capital purposes.

# Appendix 6

## Interest Rate Risk in the Banking Book

### Table 6.1: Interest Rate Risk in the Banking Book: disclosures - summary

| | Core | Supplementary |
|---|---|---|
| **1. Qualitative disclosures: general information on methodology and key inputs** | (i) Describe the risk management structure for overseeing IRR including lines of responsibility, risk measurement systems utilised, policies and strategies for managing IRR, including limits and frequency of IRR measurement.<br>(ii) Identify nature of IRR in the banking book and key assumptions employed in its measurement. In particular, identify size of portfolios with embedded optionality and the empirical or judgmental assumptions employed to model them, such as assumptions regarding loan prepayments and behaviour of non-maturity deposits. Further, identify use of hedging programs including their characteristics, rationale and effectiveness.<br>(iii) General overview of the characteristics of the internal measurement systems used. Discussion of how the measurement systems are used to establish the risk measure. | Specify any sensitivity analysis employed with regard to key assumptions and their effect on results. |
| | (iv) Description of methodology chosen to incorporate the supervisory rate scenario: the standardised parallel rate shock or actual rate moves over the past 6 years. Also, identify the number of separate rate scenarios that were incorporated to account for material currency exposures. | The use of other stress test scenarios including twists in the yield curve, larger rate moves, etc. |
| **2. Quantitative disclosures (i): required information for risk assessment** | (i) The size of the standardised interest rate shock by currency.<br>(ii) The absolute increase (decrease) in economic value for the upward and downward rate shocks.<br>(iii) The absolute increase (decrease) in earnings for the upward and downward rate shocks.<br>(iv) Increase (decrease) in economic value as a percent of both economic value and actual regulatory capital<br>(v) Increase (decrease) in earnings as a percent of earnings.<br>(vi) The bank's internal limits on IRR exposure in terms of both economic value and earnings.<br>(vii) Notional value of derivatives used for hedging banking book assets or liabilities. | If applicable, these same metrics for alternative stress test scenarios with regard to the rate scenario and behavioural assumptions. |
| **3. Quantitative disclosures part (ii): *ex post* performance as an indication of quality and reliability** | (i) If applicable, goodness of fit of the models and/or validation of assumptions used. | If applicable, specified for different currencies and/or portfolios |

## Quantitative disclosures (core)

Core quantitative disclosures consist of:

The size of the standardised rate shock by currency

The increase or decrease in economic value for the upward and downward rate shocks:

(a) In absolute terms; and

(b) As a percentage of economic value and actual regulatory capital.

The increase or decrease in earnings over a one-year horizon for the upward and downward rate shocks in absolute terms and as a percentage of earnings.

The level of internal interest rate risk exposure limits on both economic value and earnings.

The templates are specified for the total banking book. If sub-division by currency or region is available, banks are encouraged to disclose this breakdown. Banks should also report the size of the upward and downward rate shocks on a currency by currency basis.

If applicable, goodness of fit of the models and/or validation of assumptions used.

## Quantitative disclosures (Supplementary)

In addition to the effects of a parallel interest rate shock, banks can disclose the effects of non-parallel shocks and otherwise specified interest rate movements. The same format should be used for disclosure. If model testing or validation by portfolio or currency is conducted, then this should also be disclosed.

**Template 6.1: Level of interest rate risk**

| | Change in economic value | | | | | | Change in earnings (one year horizon) | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Absolute amount and as % of economic value | | % of actual regulatory capital | | Internal limit | | Absolute amount | | % of earnings | | Internal limit | |
| | +[47] | - | + | - | + | - | + | - | + | - | + | - |
| Total risk | | | | | | | | | | | | |

[47] + = upward rate shock, - = downward rate shock.

# Appendix 7

## Capital Adequacy

Banks should disclose measures of capital requirements calculated in accordance with the methodology set out in the New Basel Capital Accord, based on the 8% minimum ratio, as illustrated below:

(i) Calculation of New Basel Capital Accord requirements for credit risk

- Balance sheet assets; and
- Off-balance-sheet instruments.

(ii) Calculation of New Basel Capital Accord requirements for market risk

(a) Standardised approach (if appropriate)

Banks should disclose their New Basel Capital Accord requirement for market risk under the standardised approach, including disclosure of capital charges for component risk elements, as appropriate.

(b) Internal models approach (if appropriate)

Banks under the internal models approach should disclose their individual capital requirements for component elements of market risk.

(iii) Calculation of New Basel Capital Accord requirements for operational risk

## Template 7.1: Capital Adequacy Ratios

| Types of risks | t 0 | t - 1 |
|---|---|---|
| **Credit Risk Capital Requirements** | | |
| (a) On balance-sheet (banking book) | | |
| (b) Off-balance-sheet | | |
| **Credit Risk**<br>**Total amount (A)** | | |
| **Market risk capital requirement** | | |
| (a) Interest rate risk | | |
| (b) Equity position risk | | |
| (c) Foreign exchange risk | | |
| (d) Commodities risk | | |
| (e) Options (if carved-out) | | |
| (f) Models approach (partial model) | | |
| (g) Models approach (comprehensive model) | | |
| **Market risk capital requirement Total amount (B)** | | |
| **Total operational risk requirement (C)** | | |
| **Total overall requirement (A + B + C)** | | |
| **Total amount of overall eligible capital** | | |
| **Percentage of total capital to total capital requirements** | | |

**Template 7.2: Structure and process of allocating economic capital to risk categories and business activities**

| | **Total amount** | | **Allocated to risk categories** | | | | | | | | | | | | **Allocated to transactions, products, customers, business lines, organisational units** | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | **Credit risk** | | **Market risk** | | | | | | | | **Operational risk** | | **A** | | **B** | | **C** | | **D** | | **E** | | **F** | |
| | | | | | Interest | | Equity | | FX | | Others | | | | | | | | | | | | | | | |
| | t 0 | t-1 | t 0 | t-1 | t 0 | t-1 | t 0 | t-1 | t 0 | t-1 | t 0 | t-1 | t 0 | t-1 | t | t-1 | t 0 | t-1 | t 0 | t-1 | t 0 | t-1 | t 0 | t-1 | t 0 | t-1 |
| Capital elements | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Capital ratios | | | | | | | | | | | | | | | | | | | | | | | | | | |