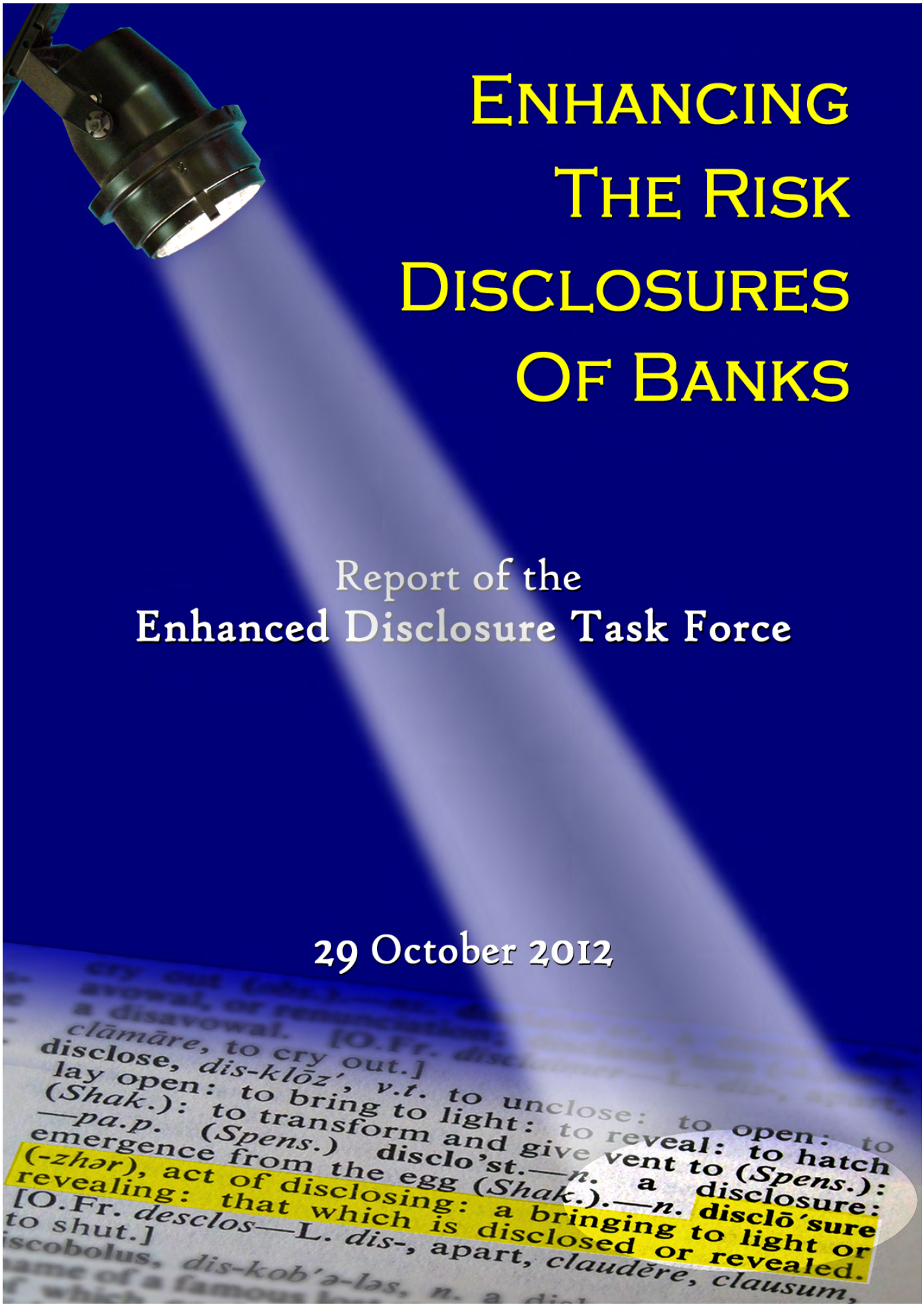

Enhancing The Risk Disclosures Of Banks

Report of the
Enhanced Disclosure Task Force

29 October 2012

ENHANCED DISCLOSURE TASK FORCE

29 October 2012

Mr. Mark Carney, Chairman
Financial Stability Board
Bank for International Settlements
Centralbahnplatz 2
CH-4002 Basel
Switzerland

Dear Mr. Carney,

On behalf of the Enhanced Disclosure Task Force (EDTF), we are pleased to present you with our report, *Enhancing the Risk Disclosures of Banks*.

The EDTF was established at a critical time for the global financial system. Investors' faith in banks and their business models has yet to be restored in the wake of the global financial crisis. Rebuilding investors' confidence and trust in the banking industry is vital to the future health of the financial system – and responding to their demands for better risk disclosures is an important step in achieving that goal.

International regulators and standard setters, as well as individual banks and groups thereof, have made efforts to improve banks' risk disclosures. Our report is different because it is the product of a unique collaboration between users and preparers of financial reports. It has benefited greatly from the collective expertise of asset management firms, investors and analysts, global banks, credit rating agencies and external auditors and, as a result, it focuses on areas where investors seek better information about banks' risks and the banks agree that improvements to their risk disclosures are needed.

Our report identifies seven fundamental principles for enhancing the risk disclosures of banks. These principles provide a firm foundation for developing high-quality, transparent disclosures that clearly communicate banks' business models and the key risks that arise from them. As well as underpinning the recommendations in our report, we believe that the principles provide an enduring framework for future work on risk disclosures and a benchmark by which banks can judge the quality of their current and future disclosures.

The recommendations in our report arise from the collaborative efforts of the diverse EDTF membership and are the result of significant discussion, deliberation and debate. Our recommendations are not meant to suggest that current disclosure requirements are inadequate or that banks are not applying such requirements properly. Rather, they enhance existing requirements to better meet users' needs. While the recommendations cover all areas of risk, we highlight those areas where users have expressed particular concern and where enhanced risk disclosures could be especially helpful. Specifically, our recommendations should enable users to better understand the following key areas:

- a bank's business models, the key risks that arise from them and how those risks are measured;
- a bank's liquidity position, its sources of funding and the extent to which its assets are not available for potential funding needs;
- the calculation of a bank's risk-weighted assets (RWAs) and the drivers of changes in both RWAs and the bank's regulatory capital;

- the relationship between a bank's market risk measures and its balance sheet, as well as risks that may be outside those measures; and
- the nature and extent of a bank's loan forbearance and modification practices and how they may affect the reported level of impaired or non-performing loans.

We also highlight a number of examples of leading or best practice disclosures to assist banks in adopting the recommendations in this report, and provide illustrations of particular instances where investors have suggested that consistency of presentation would improve their understanding of the disclosed information and facilitate comparability among banks.

The fundamental principles are applicable to all banks. However, we have developed the recommendations for enhanced risk disclosures with large international banks in mind, although they should be equally applicable to banks that actively access the major public equity or debt markets. We believe that many of the recommendations may be adopted in 2012 or 2013. However, some recommendations, especially those affected by the timing of regulatory pronouncements, will take longer to develop and implement so we envisage enhancements to risk disclosures continuing after 2013. We would expect that smaller banks and the subsidiaries of listed banks will adopt only those aspects of the recommendations that are relevant to them.

We believe that the adoption of the recommendations in this report can make a significant and enduring contribution to restoring investors' confidence and trust in the risk disclosures of banks. However, the ultimate success of this report will be judged on the willingness of large international banks to enhance their risk disclosures proactively by implementing our recommendations.

We understand that the Basel Committee on Banking Supervision is reviewing its Pillar 3 disclosure requirements for banks and that other standard setting bodies are undertaking work related to the risk areas discussed in this report. We hope that our report will inform their processes in a practical manner.

We would like to express our gratitude to all EDTF members and the secretariat, Del Anderson, Liz Figgie and Sondra Tarshis, for their extraordinary contribution and commitment to this report. In addition to those directly involved with the EDTF work, we wish to thank Gerald A. Edwards, Jr. and Hirotaka Inoue of the FSB Secretariat for their participation in the EDTF meetings and their involvement in bringing the report to completion. We would also like to thank the Financial Stability Board for its encouragement and support of the EDTF's work.

Sincerely,

Hugo Bänziger Russell Picot Christian Stracke

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Appendices

1. Background

It has been five years since the beginning of the financial crisis and the public's trust in financial institutions has yet to be fully restored. Investors today are more sensitive to the complexity and opacity of banks' business models and credit spreads for financials remain persistently higher than for similarly-rated corporates. Moreover, in some markets, banks still need significant liquidity support from the public sector. Many banks are now trading at market values below their book values, which is in marked contrast to the past. Investors and other public stakeholders are demanding better access to risk information from banks; information that is more transparent, timely and comparable across institutions.

In response, international regulators and standard setters have taken a range of steps to improve the quality and content of the financial disclosures of banks, including initiatives by the Financial Stability Board (FSB)[1] in 2011 and the Senior Supervisors Group[2] in 2008. Banks have also made efforts to improve disclosures, both individually and collectively.[3] This report differs in one crucial respect: it has been developed among private sector stakeholders as a joint initiative representing both users and preparers of financial reports. By bringing together the perspectives of leading global banks, investors, analysts and external auditors, this report seeks to establish a benchmark for high-quality risk disclosures, with specific emphasis on enhancements that can be implemented in the short term, particularly in 2012 and 2013 annual reports.

High-quality risk disclosures should be viewed as a collective public good given the systemic importance of banks and the contingent liability they represent for taxpayers. Poor quality disclosures can result in higher uncertainty premiums, and this can undermine the extension of credit needed to support employment and productive investments in struggling economies, and affect its price.

Disclosures that describe risks and risk management practices transparently help to build confidence in the firm's management, which is particularly important in attracting debt and equity investors and may in turn support higher equity valuations. By enhancing investors' understanding of banks' risk exposures and risk management practices, high-quality risk disclosures may reduce uncertainty premiums and contribute to broader financial stability. For well-managed firms, the benefits of proactively enhancing risk disclosures are clear.

[1] Financial Stability Board, *Thematic Review on Risk Disclosure Practices: Peer Review Report,* March 2011.
[2] Senior Supervisors Group, *Report on Leading-Practice Disclosures for Selected Exposures*, April 2008.
[3] For example, *Industry Good Practice Guidelines on Pillar 3 Disclosure Requirements for Securitisation* published in December 2008 by the European Banking Federation, the London Investment Banking Association, the European Savings Banks Group and the European Association of Public Banks and Funding Agencies or *Risk disclosure: Principles and Case Studies* published by Eurofi in March 2012.

2. Objectives and process

The Enhanced Disclosure Task Force (EDTF) was established by the FSB in May 2012 following an FSB roundtable in December 2011 of eighty-two senior officials and experts from around the world. The roundtable outlined broad goals for improving the quality, comparability and transparency of risk disclosures, while reducing redundant information and streamlining the process for bringing relevant disclosures to the market quickly.

With the goal of improving the risk disclosures of banks and other financial institutions, the primary objectives of the EDTF were to:

i. develop fundamental principles for enhanced risk disclosures;
ii. recommend improvements to current risk disclosures, including ways to enhance their comparability; and
iii. identify examples of best or leading practice risk disclosures presented by global financial institutions.

Membership of the EDTF had wide geographical representation and included senior executives from leading asset management firms, investors and analysts, global banks, credit rating agencies and external auditors. To organise its work and the resulting recommendations, the EDTF established six workstreams reflecting banks' primary risk areas, and each task force member was allocated to a workstream so that they comprised both users and preparers of financial reports. The workstreams were as follows:

i. risk governance and risk management strategies/business model;
ii. capital adequacy and risk-weighted assets;
iii. liquidity and funding;
iv. market risk;
v. credit risk; and
vi. other risks.

Each workstream analysed current disclosures in its risk area by reviewing a sample of banks' recent annual and interim reports, Pillar 3 reports and other publicly available information, such as media releases and presentations to investors.[4] On the basis of that analysis, and following extensive discussion among its members, each workstream developed recommendations for enhancing disclosures in its respective risk area, and presented them to the EDTF plenary for further consideration.

The task force had plenary meetings in London, New York, Singapore and Frankfurt, and held two additional meetings by telephone. During those meetings, the EDTF thoroughly debated and challenged each recommendation proposed by the workstreams. As a result, the recommendations in this report represent the collective views and expertise of the EDTF membership.

Also, at key stages in its work, the Co-chairs of the EDTF engaged in dialogue with securities and banking regulators and supervisors, accounting standard-setters, banking associations and other stakeholder organisations located in Europe, North America, Latin America, the Middle East and Asia. Minutes of these meetings were circulated to EDTF members and, during the plenary meetings, the Co-chairs gave oral accounts of these stakeholder

[4] For example, each workstream reviewed between 12 and 25 annual or interim reports from 2011 and 2012.

organisations' views on risk disclosure issues, including any initiatives underway to address risk disclosure issues.

Prior to its finalisation, a draft of the report was circulated by the EDTF to key stakeholder organisations, including the International Banking Federation and the Institute of International Finance, and feedback was solicited on its content. Working within the EDTF's compressed timetable for providing comments, these international organisations expeditiously distributed the document to their respective memberships and provided the EDTF with invaluable feedback. The task force considered the input received from its extensive outreach programme as well as the views of the EDTF membership in the development and finalisation of this report.

3. Scope and other considerations

Scope of the recommendations in this report

The fundamental principles are applicable to all banks. However, the EDTF has developed the recommendations for enhanced risk disclosures with large international banks in mind, although they should be equally applicable to banks that actively access the major public equity or debt markets. Some of the recommendations, therefore, are likely to be less applicable to smaller banks and subsidiaries of listed banks and the EDTF would expect such entities to adopt only those aspects of the recommendations that are relevant to them. This report was not specifically developed for other types of financial services organisations, such as insurance companies, though the fundamental principles and recommendations contained herein may provide some appropriate guidance.

Banks will need to continue to comply with the relevant securities laws and reporting requirements applicable to their activities, and will also need to assess any relevant confidentiality and other jurisdictional legal issues. In addition, all banks, including the large international ones, will need to assess factors specific to their circumstances such as the materiality, costs and benefits of each recommendation in this report. In making these assessments, banks should consider their users' needs and expectations and may wish to speak directly to their key stakeholders as they begin to implement changes. The EDTF acknowledges that existing jurisdictional differences in accounting and regulatory requirements may affect how banks implement the recommendations, and may make it difficult to achieve full comparability between banks across jurisdictions.

Timing of implementation

The EDTF believes that many of the recommendations can be adopted in 2012 or 2013, for example, those that involve only the re-ordering or aggregation of existing disclosures in banks' reports to enable users to find and assimilate information more quickly, or those that are based on information that is already reported to management. However, other recommendations may take longer to develop and implement, particularly where banks need to create new systems and processes to ensure that the information required to support the enhanced disclosure is of high quality, and thus the EDTF envisages enhancements of the risk disclosures of banks continuing after 2013. The EDTF also recognises that banks have other commitments with similar timelines, such as implementing Basel II or Basel III and the Globally Systemically Important Banks (G-SIB) data template. Some of the recommendations are dependent on the finalisation or implementation of particular regulatory rules and, thus, cannot be adopted until then.

Frequency of disclosures

This report has been produced in the context of the existing legal and regulatory requirements for banks' public reporting. Banks produce annual reports, which contain audited financial statements and management commentary (including risk commentary), and interim reports. Some banks also produce preliminary announcements before their annual or interim reports are available. Interim reports and preliminary announcements are intended to provide users with timely updates on the bank's last annual report. The recommendations do not suggest changing the requirements for interim reporting, which vary from market to market. However, the EDTF thinks that several areas in the report should be disclosed more frequently than in annual reports, and thus that more risk disclosures would be included in interim reports than is currently the case. Banks should consider whether their interim reports contain relevant risk information to support the financial information presented and whether such reports provide a sufficient update on top and emerging risks.

Location of disclosures

In making its recommendations, the EDTF generally does not specify where any new disclosure should be made, nor does it suggest that banks change the current location of their reported information when adopting the enhancements. Banks should retain flexibility in what they choose to disclose in their annual reports and other filings, such as their Pillar 3 reports. However, the EDTF expects many of the detailed regulatory capital disclosures will remain in or will be added to the Pillar 3 report. Consistent with the FSB's recommendation in 2011[5], the task force advocates, as part of the fundamental principles, that annual reports and Pillar 3 reports should be published at the same time, and believes that this would provide users with complete and timely reporting across the key areas of interest.

It is not the intention of this report to create a checklist of all possible risk disclosures or to reproduce existing disclosure requirements set forth in accounting and regulatory standards.[6] Banks will need to assess the recommendations in this report in the light of how they apply the existing disclosure requirements in their jurisdictions. Indeed, those extensive existing requirements may contribute to both preparers' views that financial reporting is a compliance exercise and users' difficulties in navigating long annual reports. This can be a particular concern for international banks that must meet varying and sometimes overlapping disclosure requirements in different jurisdictions. As a result, some banks may question whether the benefits of increased transparency justify the additional investment in resources, management attention and the potential risks involved in making forward-looking statements. This report addresses these concerns by recommending ways for banks to communicate important disclosures to users more effectively and efficiently.

[5] Financial Stability Board, *Thematic Review on Risk Disclosure Practices: Peer Review Report,* March 2011.

[6] For example, existing disclosure requirements can be found in IFRS 7 '*Financial Instruments: Disclosures*'; Basel Pillar 3 requirements as brought in, for example, by FSA BIPRU 11 in the UK; SEC Industry Guide 3; EU Accounting Directives as brought in, for example, by UK Companies Act 2006 section 417 and 7 Schedule; and Hong Kong listing rules appendix 16. In addition, there are other disclosure recommendations such as those set out in the Senior Supervisors Group April 2008 report.

4. Fundamental principles for risk disclosure

The EDTF has collectively identified seven principles for enhancing risk disclosures, which both underpin the recommendations set out in this report and provide an enduring framework for future work on risk disclosures. These principles provide a firm foundation from which to achieve transparent, high-quality risk disclosures that enable users to understand in an integrated manner a bank's[7] business and its risks, and the resultant effects on its performance and financial position.

The seven fundamental principles for enhanced risk disclosures are:

1. Disclosures should be clear, balanced and understandable.
2. Disclosures should be comprehensive and include all of the bank's key activities and risks.
3. Disclosures should present relevant information.
4. Disclosures should reflect how the bank manages its risks.
5. Disclosures should be consistent over time.
6. Disclosures should be comparable among banks.
7. Disclosures should be provided on a timely basis.

Principle 1: Disclosures should be clear, balanced and understandable.

- Disclosures should be written with the objective of communicating information to a range of users (i.e. investors, analysts and other stakeholders) rather than simply complying with minimum requirements. The disclosures should be sufficiently granular to benefit sophisticated users but should also provide summarised information for those who are less specialised, along with clear signposting to enable navigation through the information. Disclosures should be organised so that key information and messages are prioritised and easy to find.

- There should be an appropriate balance between qualitative and quantitative disclosures, using text, numbers and graphical presentations. Fair and balanced narrative explanations should provide insight into the implications of the quantitative disclosures and any changes or developments that they portray.

- Disclosures should provide straightforward explanations for more complex issues. Descriptions and terms should fairly represent the substance of the bank's activities. Terms used in the disclosures should be explained or defined.

Principle 2: Disclosures should be comprehensive and include all of the bank's key activities and risks.

- Disclosures should provide an overview of the bank's activities and its key risks. They should include a description of how the bank identifies, measures, manages and reports each risk, highlighting any significant internal or external changes during the reporting period and the key actions taken by management in response.

- Disclosures should include informative explanations of important processes and procedures – as well as underlying cultures and behaviours – that affect the bank's business and its risk generation or risk management. Disclosures of such items should

[7] In this report, the term 'bank' refers to the consolidated group, unless otherwise specified.

enable users to obtain an understanding of the bank's risk management operations and the related governance by the bank's board and senior management.

- When appropriate and meaningful, disclosures should be complemented with information about key underlying assumptions and sensitivity or scenario analysis. Such analysis should demonstrate the effect on selected risk metrics or exposures of changes in the key underlying assumptions, both in qualitative and quantitative terms.

Principle 3: Disclosures should present relevant information.

- The bank should provide disclosures only if they are material and reflect its activities and risks – and can be prepared without unreasonable cost. Accordingly, disclosures should be eliminated if they are immaterial or redundant. Disclosing immaterial information or information on situations that do not apply to the bank reduces the relevance of its disclosures and undermines the ability of users to understand them. However, when exposures receiving significant current market attention are either immaterial or non-existent, the bank should acknowledge this fact to reduce uncertainty among users. Moreover, banks should avoid generic or boilerplate disclosures that do not add value or do not communicate useful information.

- Disclosures should be presented in sufficient detail to enable users to understand the nature and extent of the bank's risks. Where period-end information may not be representative of the risks, consideration should be given to providing averages and high and low balances during the period. The type of information, the way in which it is presented and the accompanying explanatory notes will differ between banks and will change over time, but information should be reported at the level of detail that users need in order to understand the bank, its risk appetite, its exposures and the manner in which it manages its business and risks, including in stress conditions.

- The bank should explain its business model to provide context for its business and risk disclosures. In many cases, disclosures will focus on the consolidated group. However, understanding the risks relative to returns embedded in key operating subsidiaries and business divisions – and the way that risks are shared or assets, liabilities, income and costs are allocated across the group – can be key to users' understanding of the risks to which the group is exposed.

Principle 4: Disclosures should reflect how the bank manages its risks.

- Disclosures should be based on the information that is used for internal strategic decision-making and risk management by key management, the board and the board's risk committee. Approaches to disclosure should be sufficiently flexible to allow banks to reflect their particular circumstances in both narrative and quantitative terms.

- The bank should explain the risk and reward profile of its activities. Disclosures should be representative of risk exposures during the period, as well as at the end of the period.

- If disclosure of particularly commercially sensitive or otherwise confidential information would unduly expose the bank to litigation or other risks, the level of information provided will need to balance confidentiality and materiality. If material, a bank should assess what information should be provided to ensure users are aware of important issues without disclosing potentially damaging confidential details.[8]

[8] Please also see the considerations on scope set out in Section 3.

Principle 5: Disclosures should be consistent over time.

- Disclosures should be consistent over time to enable users to understand the evolution of the bank's business, risk profile and management practices. Core disclosures should not change dramatically but should evolve over time, allowing for inter-period comparisons.

- Changes in disclosures and related approaches or formats (e.g. due to changes in risk practices, emerging risks, measurement methodologies or accounting or regulatory requirements) should be clearly highlighted and explained. Presenting comparative information is helpful; however, in some situations it may be preferable to include a new disclosure even if comparative information cannot be prepared or restated.

Principle 6: Disclosures should be comparable among banks.

- Disclosures should be sufficiently detailed to enable users to perform meaningful comparisons of businesses and risks between different banks, including across various national regulatory regimes. Disclosures that facilitate users' understanding of the bank's exposures compared with its competitors are of particular importance in building users' understanding and confidence as well as reducing the risk of inappropriate comparisons.

Principle 7: Disclosures should be provided on a timely basis.

- Information should be delivered to users in a timely manner using appropriate media (e.g. annual and interim reports, websites, news releases, or regulatory reports). The bank should seek to release to the market all relevant and important risk-based information at the same time (e.g. the annual report and Pillar 3 disclosures). Equally important are regular updates of financial information; users need more frequent updates than just the annual report. This can be accomplished through various means and media; thus banks should endeavour to provide frequent updates to their users to ensure financial information remains up to date.

The EDTF acknowledges that in some cases there will be tension between two or more fundamental principles. For example, under Principles 4 and 5, disclosures are most useful if they provide information that reflects how the bank manages its risks and are consistent over time while, under Principle 6, disclosures should enable users to perform meaningful comparisons between banks. Similarly, there can be tension within a single principle. For example, Principle 1 states that disclosures should be clear, balanced and understandable, but users have differing views on the level of detail that is needed to achieve that objective. Even sophisticated users find that some granular disclosures, which may be provided to comply with particular regulatory or accounting requirements, are difficult to use or understand unless they are accompanied by summarised information. Tension may also arise if investors seek information that is too commercially sensitive for banks to disclose.

The EDTF believes that these tensions do not reflect a fault or weakness in the fundamental principles but are inevitable given the varying, and sometimes competing, needs of users, preparers and regulators. Banks should endeavour, both individually and collectively, to find an appropriate balance among the principles, and indeed within particular principles, without creating excessive disclosures that will overwhelm users. Users should provide ongoing feedback to banks about whether they are achieving an appropriate balance. Section 6 of this report discusses these inherent tensions more fully in the context of particular risk areas. It is acknowledged that the applications of the principles will differ between risk areas and may change over time.

The aim of the fundamental principles, and the recommendations that follow from them, is to address investors' concerns about the quality and transparency of banks' disclosures. However, users already have considerable knowledge of topics such as general business risks, finance and current economic conditions, and a bank's disclosures are not the sole source of information available to them. This report builds on that existing knowledge and information, and seeks to avoid developing disclosures that would duplicate information that should already be known, apparent or readily accessible from other sources.

5. Recommendations for enhancing risk disclosures

The EDTF has identified the following recommendations for enhancing risk disclosures.

Additionally, there are eight examples in the appendix to this section that illustrate how particular recommendations could be adopted to produce clear and understandable disclosures.

Section 6 provides additional commentary that expands on these recommendations.

General

1: Present all related risk information together in any particular report. Where this is not practicable, provide an index or an aid to navigation to help users locate risk disclosures within the bank's reports.

2: Define the bank's risk terminology and risk measures and present key parameter values used.

3: Describe and discuss top and emerging risks, incorporating relevant information in the bank's external reports on a timely basis. This should include quantitative disclosures, if possible, and a discussion of any changes in those risk exposures during the reporting period.

4: Once the applicable rules are finalised, outline plans to meet each new key regulatory ratio, e.g. the net stable funding ratio, liquidity coverage ratio and leverage ratio and, once the applicable rules are in force, provide such key ratios.

Risk governance and risk management strategies/business model

5: Summarise prominently the bank's risk management organisation, processes and key functions.

6: Provide a description of the bank's risk culture, and how procedures and strategies are applied to support the culture.

7: Describe the key risks that arise from the bank's business models and activities, the bank's risk appetite in the context of its business models and how the bank manages such risks. This is to enable users to understand how business activities are reflected in the bank's risk measures and how those risk measures relate to line items in the balance sheet and income statement. See **Figure 1** in the appendix to this section.

8: Describe the use of stress testing within the bank's risk governance and capital frameworks. Stress testing disclosures should provide a narrative overview of the bank's internal stress testing process and governance.

Capital adequacy and risk-weighted assets

9: Provide minimum Pillar 1 capital requirements, including capital surcharges for G-SIBs and the application of counter-cyclical and capital conservation buffers or the minimum internal ratio established by management.

10: Summarise information contained in the composition of capital templates adopted by the Basel Committee to provide an overview of the main components of capital, including capital instruments and regulatory adjustments. A reconciliation of the accounting balance sheet to the regulatory balance sheet should be disclosed.

11: Present a flow statement of movements since the prior reporting date in regulatory capital, including changes in common equity tier 1, tier 1 and tier 2 capital. See **Figure 2** in the appendix to this section.

12: Qualitatively and quantitatively discuss capital planning within a more general discussion of management's strategic planning, including a description of management's view of the required or targeted level of capital and how this will be established.

13: Provide granular information to explain how risk-weighted assets (RWAs) relate to business activities and related risks.

14: Present a table showing the capital requirements for each method used for calculating RWAs for credit risk, including counterparty credit risk, for each Basel asset class as well as for major portfolios within those classes. For market risk and operational risk, present a table showing the capital requirements for each method used for calculating them. Disclosures should be accompanied by additional information about significant models used, e.g. data periods, downturn parameter thresholds and methodology for calculating loss given default (LGD).

15: Tabulate credit risk in the banking book showing average probability of default (PD) and LGD as well as exposure at default (EAD), total RWAs and RWA density[9] for Basel asset classes and major portfolios within the Basel asset classes at a suitable level of granularity based on internal ratings grades. For non-retail banking book credit portfolios, internal ratings grades and PD bands should be mapped against external credit ratings and the number of PD bands presented should match the number of notch-specific ratings used by credit rating agencies. See **Figure 3** in the appendix to this section.

16: Present a flow statement that reconciles movements in RWAs for the period for each RWA risk type. See **Figure 4** in the appendix to this section.

17: Provide a narrative putting Basel Pillar 3 back-testing requirements into context, including how the bank has assessed model performance and validated its models against default and loss.

Liquidity

18: Describe how the bank manages its potential liquidity needs and provide a quantitative analysis of the components of the liquidity reserve held to meet these needs, ideally by providing averages as well as period-end balances. The description should be complemented by an explanation of possible limitations on the use of the liquidity reserve maintained in any material subsidiary or currency.

Funding

19: Summarise encumbered[10] and unencumbered assets in a tabular format by balance sheet categories, including collateral received that can be rehypothecated or otherwise redeployed. This is to facilitate an understanding of available and unrestricted assets to support potential funding and collateral needs. See **Figure 5** in the appendix to this section.

[9] Computed as RWAs as a percentage of EAD.
[10] For the purposes of this disclosure, 'encumbered assets' are defined as assets that have been pledged as collateral or that the entity believes it is restricted from using to secure funding, for legal or other reasons.

20: Tabulate consolidated total assets, liabilities and off-balance sheet commitments by remaining contractual maturity at the balance sheet date. Present separately (i) senior unsecured borrowing (ii) senior secured borrowing (separately for covered bonds and repos) and (iii) subordinated borrowing. Banks should provide a narrative discussion of management's approach to determining the behavioural characteristics of financial assets and liabilities. See **Figure 6** in the appendix to this section.

21: Discuss the bank's funding strategy, including key sources and any funding concentrations, to enable effective insight into available funding sources, reliance on wholesale funding, any geographical or currency risks and changes in those sources over time.

Market risk

22: Provide information that facilitates users' understanding of the linkages between line items in the balance sheet and the income statement with positions included in the traded market risk disclosures (using the bank's primary risk management measures such as Value at Risk (VaR)) and non-traded market risk disclosures such as risk factor sensitivities, economic value and earnings scenarios and/or sensitivities. See **Figure 7** in the appendix to this section.

23: Provide further qualitative and quantitative breakdowns of significant trading and non-trading market risk factors that may be relevant to the bank's portfolios beyond interest rates, foreign exchange, commodity and equity measures.

24: Provide qualitative and quantitative disclosures that describe significant market risk measurement model limitations, assumptions, validation procedures, use of proxies, changes in risk measures and models through time and descriptions of the reasons for back-testing exceptions, and how these results are used to enhance the parameters of the model.

25: Provide a description of the primary risk management techniques employed by the bank to measure and assess the risk of loss beyond reported risk measures and parameters, such as VaR, earnings or economic value scenario results, through methods such as stress tests, expected shortfall, economic capital, scenario analysis, stressed VaR or other alternative approaches. The disclosure should discuss how market liquidity horizons are considered and applied within such measures.

Credit risk

26: Provide information that facilitates users' understanding of the bank's credit risk profile, including any significant credit risk concentrations. This should include a quantitative summary of aggregate credit risk exposures that reconciles to the balance sheet, including detailed tables for both retail and corporate portfolios that segments them by relevant factors. The disclosure should also incorporate credit risk likely to arise from off-balance sheet commitments by type.

27: Describe the policies for identifying impaired or non-performing loans, including how the bank defines impaired or non-performing, restructured and returned-to-performing (cured) loans as well as explanations of loan forbearance policies.

28: Provide a reconciliation of the opening and closing balances of non-performing or impaired loans in the period and the allowance for loan losses. See **Figure 8** in the appendix to this section. Disclosures should include an explanation of the effects of loan acquisitions on ratio trends, and qualitative and quantitative information about restructured loans.

29: Provide a quantitative and qualitative analysis of the bank's counterparty credit risk that arises from its derivatives transactions. This should quantify notional derivatives exposure, including whether derivatives are over-the-counter (OTC) or traded on recognised exchanges. Where the derivatives are OTC, the disclosure should quantify how much is settled by central counterparties and how much is not, as well as provide a description of collateral agreements.

30: Provide qualitative information on credit risk mitigation, including collateral held for all sources of credit risk and quantitative information where meaningful. Collateral disclosures should be sufficiently detailed to allow an assessment of the quality of collateral. Disclosures should also discuss the use of mitigants to manage credit risk arising from market risk exposures (i.e. the management of the impact of market risk on derivatives counterparty risk) and single name concentrations.

Other risks

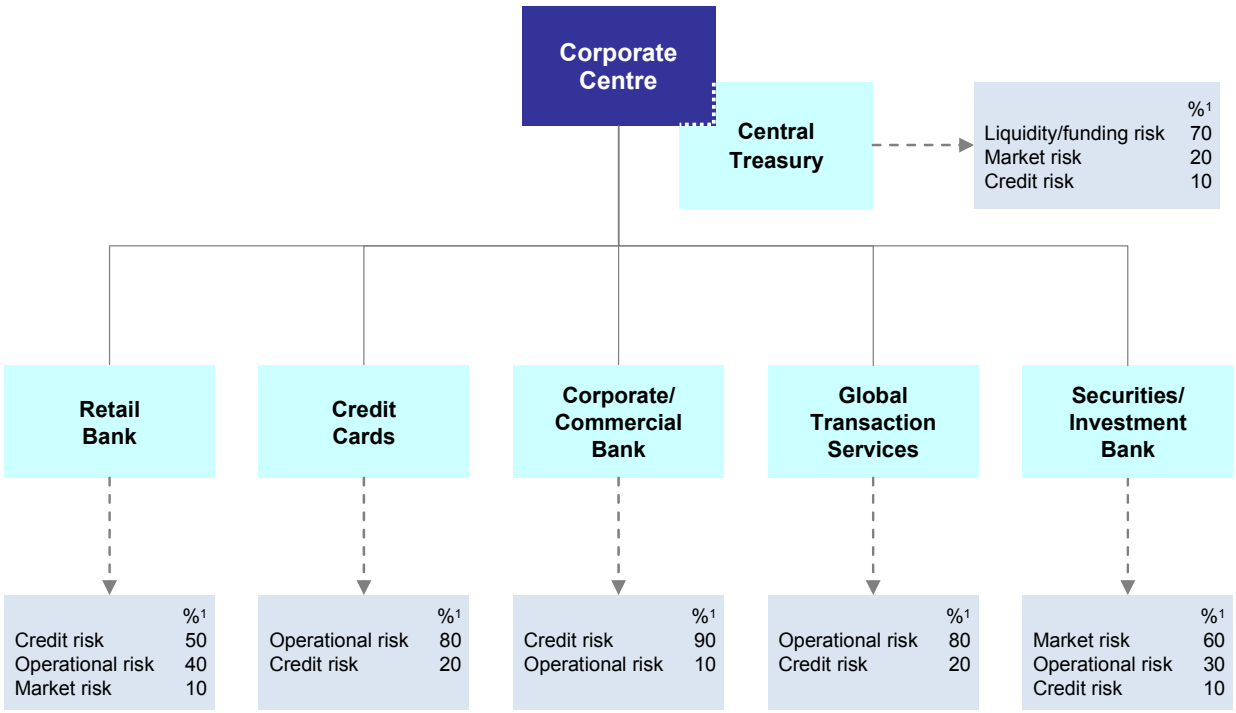
31: Describe 'other risk' types based on management's classifications and discuss how each one is identified, governed, measured and managed. In addition to risks such as operational risk, reputational risk, fraud risk and legal risk, it may be relevant to include topical risks such as business continuity, regulatory compliance, technology, and outsourcing.

32: Discuss publicly known risk events related to other risks, including operational, regulatory compliance and legal risks, where material or potentially material loss events have occurred. Such disclosures should concentrate on the effect on the business, the lessons learned and the resulting changes to risk processes already implemented or in progress.

Appendix to Section 5

The following appendix includes eight examples of possible disclosure formats to assist banks in adopting the recommendations in this report. These examples reflect instances where investors have suggested that consistent tabular presentation is particularly important to improving their understanding of the disclosed information and facilitating comparability among banks. All numbers included in the Figures are for illustrative purposes. It is understood that differing business models, reporting regimes and materiality will affect how banks provide such information.

Figure 1. *Example of a business model and the key risks*



This example reflects a bank that addresses all funding and hedging needs in the Central Treasury.

Note:

1 *The aim is to provide an indication or relative measure of each key risk for each major element of the business model based on management's view of the risk profile of the business area. Therefore, this indication will vary for each bank. Possible ways of providing the indication or relative measure are based on an allocation of RWAs, regulatory or economic capital.*

Figure 2. *Example of a flow statement for regulatory capital*

	2012 US$m	2011 US$m
Core tier 1 (CET1) capital[1]		
Opening amount	1,000	931
New capital issues	20	10
Redeemed capital	(10)	(15)
Gross dividends (deduction)	(21)	(16)
Shares issued in lieu of dividends (add back)	1	1
Profit for the year (attributable to shareholders of the parent company)[2]	100	80
Removal of own credit spread (net of tax)	(40)	(14)
Movements in other comprehensive income[3]	30	20
– Currency translation differences	10	10
– Available-for-sale investments	10	4
– Other	10	6
Goodwill and other intangible assets (deduction, net of related tax liability)	(5)	(5)
Other, including regulatory adjustments and transitional arrangements[4]	25	8
– Deferred tax assets that rely on future profitability (excluding those arising from temporary differences)	10	2
– Prudential valuation adjustments	10	4
– Other	5	2
Closing amount	1,100	1,000
Other 'non-core' tier 1 (additional tier 1) capital		
Opening amount	295	300
New non-core tier 1 (Additional tier 1) eligible capital issues	5	30
Redeemed capital	(15)	(35)
Other, including regulatory adjustments and transitional arrangements[4]	–	–
Closing amount	285	295
Total tier 1 capital	1,385	1,295
Tier 2 capital		
Opening amount	500	440
New tier 2 eligible capital issues	100	120
Redeemed capital	(20)	(15)
Amortisation adjustments	(15)	(35)
Other, including regulatory adjustments and transitional arrangements[4]	(15)	(10)
Closing amount	550	500
Total regulatory capital	1,935	1,795

Notes:

1 *The statement is intended to be based on the applicable regulatory rules in force at the period end.*
2 *Profit for the year (attributable to shareholders of the parent company) is intended to reconcile to the income statement.*
3 *Movements in other comprehensive income: all material movements would be disclosed as separate line items.*
4 *Other, including regulatory adjustments and transitional arrangements: all material movements, as per applicable regime, should be disclosed as separate line items. A non-exhaustive list of possible adjustments is set out on the next page.*

Core Tier 1 (CET1) Capital
In addition to those items illustrated on the previous page, the line item 'other, including regulatory adjustments and transitional arrangements' may include (as per applicable regime):

- common share capital issued by subsidiaries and held by third parties;
- other movements in shareholders' equity;
- reserves arising from property revaluation;
- defined benefit pension fund adjustment;
- cash flow hedging reserve;
- shortfall of provisions to expected losses;
- securitisation positions;
- investments in own CET1;
- reciprocal cross-holdings in CET1;
- investments in the capital of unconsolidated entities (less than 10%);
- significant investments in the capital of unconsolidated entities (amount above 10% threshold);
- mortgage servicing rights (amount above 10% threshold);
- deferred tax assets arising from temporary differences (amount above 10% threshold);
- amounts exceeding 15% threshold; and
- regulatory adjustments applied due to insufficient additional tier 1.

Other 'non-core' tier 1 (additional tier 1) capital
The line item 'other, including regulatory adjustments and transitional arrangements' may include (as per applicable regime):

- other 'non-core' tier 1 capital (additional tier 1) instruments issued by subsidiaries and held by third parties;
- unconsolidated investments deductions;
- investments in own additional tier 1 instruments;
- reciprocal cross-holdings;
- significant investments in the capital of unconsolidated entities;
- other investments in the capital of unconsolidated entities;
- grandfathering adjustments;
- regulatory adjustments applied due to insufficient tier 2 capital; and
- currency translation differences.

Tier 2 Capital
The line item 'other, including regulatory adjustments and transitional arrangements' may include (as per applicable regime):

- tier 2 capital instruments issued by subsidiaries and held by third parties;
- unconsolidated investments deductions;
- investments in own tier 2 instruments;
- reciprocal cross-holdings;
- significant investments in the capital of unconsolidated entities;
- other investments in the capital of unconsolidated entities;
- collective impairment allowances;
- grandfathering adjustments; and
- currency translation differences.

Figure 3. *Example of advanced IRB credit exposures by internal PD grade*

Internal ratings grade (or band of grades)	PD range	Exposure at default	Average PD	Average LGD	RWAs	Average risk weighting	External rating equivalent
	0.000%	US$m	%	%	US$m	%	
1	0.000 to 0.010	500	0.010	21	25	5	AAA
2	0.011 to 0.020	1,000	0.018	22	90	9	AA+
3	0.021 to 0.030	500	0.029	21	55	11	AA
4	0.031 to 0.040	2,000	0.035	26	300	15	AA
5	0.041 to 0.050	100	0.047	28	18	18	A+
6	0.051 to 0.070	500	0.061	33	100	24	A
7	0.071 to 0.110	800	0.078	41	200	25	A–
8	0.111 to 0.180	750	0.122	38	210	28	BBB+
9	0.181 to 0.300	1,000	0.292	45	310	31	BBB
10	0.301 to 0.500	1,250	0.400	48	475	38	BBB–
11	0.501 to 0.830	1,500	0.650	47	780	52	BB–
12	0.831 to 1.370	1,750	1.112	46	1,033	59	BB
13	1.371 to 2.270	500	2.001	51	370	74	BB–
14	2.271 to 3.750	100	2.500	57	94	94	B+
15	3.751 to 6.190	250	4.011	42	280	112	B
16	6.191 to 10.220	150	7.020	47	204	136	B–
17	10.221 to 16.870	750	12.999	55	1,312	175	CCC+
18	16.871 to 27.840	500	20.020	49	1,560	312	CCC
19	27.841 to 99.999	200	75.020	75	1,282	641	CCC–
20	100.000	200	100.000	75	100	50	Default
Total		14,300			8,798		

Note:

The above is for illustrative purpose only, as the number of internal rating grades, the PD range for each grade and the respective external rating equivalent will differ for each institution.

Figure 4. *Example of a flow statement for risk-weighted assets*

Disclosure for non-counterparty credit risk and counterparty credit risk.

Risk-weighted assets movement by key driver	Non-counterparty credit risk US$bn	Counterparty credit risk US$bn
RWAs at 1 January	600	40
Book size	(20)	(2)
Book quality	23	1
Model updates	(36)	(3)
Methodology and policy	(25)	1
Acquisitions and disposals	21	–
Foreign exchange movements	(1)	(1)
Other	–	–
RWAs at 31 December	562	36

High level definitions

Book size	organic changes in book size and composition (including new business and maturing loans).
Book quality	quality of book changes caused by experience such as underlying customer behaviour or demographics, including changes through model calibrations/realignments.
Model updates	Model implementation, change in model scope or any change to address model malfunctions.
Methodology and policy	methodology changes to the calculations driven by regulatory policy changes, such as new regulation (e.g. CRD4).

Disclosure for market risk

Risk-weighted assets movement by key driver	Market risk US$bn
RWAs at 1 January	45
Movement in risk levels	(10)
Model updates	(2)
Methodology and policy	1
Acquisitions and disposals	–
Foreign exchange movements and other	(2)
RWAs at 31 December	32

High level definitions

Movement in risks levels	changes in risk due to position changes and market movements.
Model updates	updates to the model to reflect recent experience, change in model scope.
Methodology and policy	methodology changes to the calculations driven by regulatory policy changes.

Figure 5. *Example of an asset encumbrance table*[1]

Asset type	Encumbered		Unencumbered		
	Pledged as collateral[2]	Other[3]	Available as collateral[4]	Other[5]	Total
	US$m	US$m	US$m	US$m	US$m
Cash and other liquid assets	18	–	89	15	122
Other investment securities	21	10	52	28	111
Loans	81	–	105	41	227
Other financial assets	–	–	–	10	10
Non-financial assets	–	2	8	3	13
Total assets	120	12	254	97	483

Notes:

1 *The objective of this disclosure is to differentiate assets which were used to support funding or collateral needs at the balance sheet date from those assets which were available for potential funding needs. The disclosure is not designed to identify assets which would be available to meet the claims of creditors or to predict assets that would be available to creditors in the event of a resolution or bankruptcy.*

Encumbered assets are:

2 *assets which have been pledged as collateral (for example, which are required to be separately disclosed under IFRS 7), or*

3 *assets which an entity believes it was restricted from using to secure funding, for legal or other reasons. These other reasons may include market practice or sound risk management. Restrictions related to the legal position of certain assets, for example assets held by consolidated securitisation vehicles or in pools for covered bond issuances, may vary in different jurisdictions or interpretations. Therefore it would be helpful if banks described the nature of the Other assets which are considered to be encumbered and unencumbered where such assets are material to the bank.*

Unencumbered assets are the remaining assets that an entity owns. These comprise:

4 *assets that are readily available in the normal course of business to secure funding or meet collateral needs. Banks need to evaluate their own circumstances as to what assets are considered to be readily available, for example banks may define 'readily available' as based on assets that are accepted by central banks or in the in repo markets at the balance sheet date;*

5 *other unencumbered assets are not subject to any restrictions on their use to secure funding or as collateral, but the bank would not consider them to be 'readily available' to secure funding or as collateral in the normal course of business. This category may include wider classes of unencumbered assets not readily accepted as collateral by central banks or other lenders in the provision of support outside the normal course of business. It would also include non-financial assets such as property that is not mortgaged.*

Figure 6. *Example of a maturity table of assets, liabilities and off-balance sheet commitments*

Assets by type *(contractual dates of maturity)*									
	No more than 1 month[1]	**Over 1 month but no more than 3 months**	**Over 3 months but no more than 6 months**	**Over 6 months but no more than 9 months**	**Over 9 months but no more than 1 year**	**Over 1 year but no more than 2 years**	**Over 2 years but no more than 5 years**	**Over 5 years**	**Total**
	US$m	**US$m**	**US$m**	**US$m**	**US$m**	**US$m**	**US$m**	**US$m**	**US$m**
Cash and amounts due from central banks	100,250	–	–	–	–	–	–	–	100,250
Financial assets at fair value through profit or loss – trading	154,300	1,491	1,226	1,884	888	5,965	946	866	167,566
Fixed-income securities and loans	1,200	365	124	766	450	405	50	100	3,460
Equities and other variable-income securities	650	250	748	654	321	350	520	210	3,703
Repurchase agreements	450	350	212	10	52	–	30	10	1,114
Derivatives	152,000	526	142	454	65	5,210	346	546	159,289
Financial assets at fair value through profit or loss – FV option	81,110	15,697	11,261	17,322	873	2,347	9,630	4,687	142,927
Fixed-income securities and loans	36,547	1,254	6,684	9,872	423	963	852	147	56,742
Equities and other variable-income securities	44,563	14,443	4,577	7,450	450	1,384	8,778	4,540	86,185
Derivatives used for hedging purposes[2]	55,003	5,254	9,985	6,612	580	4,870	7,870	5,398	95,572
Available-for-sale financial assets	297,733	45,316	38,072	11,523	1,386	45,684	56,507	620	496,841
Fixed-income securities and loans	105,388	19,896	4,546	5,858	960	23,121	–	100	159,869
Equities and other variable-income securities	192,345	25,420	33,526	5,665	426	22,563	56,507	520	336,972
Loans and receivables due from credit institutions	685,230	12,000	8,553	52,863	8,564	1,524	1,102	5,420	775,256
of which: reverse repurchase agreements	*221,120*	*2,323*	*4,873*	*43,252*	*570*	*987*	*450*	*33*	*273,608*
Loans and receivables due from customers	327,763	34,765	11,099	6,985	4,498	6,574	17,873	–	319,557
Retail[3]	125,360	2,342	7,576	6,742	1,998	5,450	8,985	–	158,453
Corporates and other customers[3]	112,403	32,423	3,523	243	2,500	1,124	8,888	–	161,104
Held-to-maturity financial assets	92,000	9,131	3,242	2,123	3,050	477	154	12,563	122,740
Total financial assets	1,703,389	123,654	83,438	99,312	19,839	67,441	94,082	29,554	2,220,709
Other assets[4]	81,000	5,000	3,000	4,000	–	–	–	–	93,000
Total assets[4]	1,784,389	128,654	86,438	103,312	19,839	67,441	94,082	29,554	2,313,709
Off-balance sheet commitments received	180,499	180,686	79,200	28,109	8,213	33,548	41,355	15,185	566,795
Credit institutions	105,214	74,125	14,540	25,465	1,300	24,543	25,832	6,589	277,608
Retail	54,065	94,457	54,798	1,220	5,460	7,465	5,003	–	222,468
Corporates and other customers	21,220	12,104	9,862	1,424	1,453	1,540	10,520	8,596	66,719

Liabilities by type *(contractual dates of maturity)*

	No more than 1 month[1]	Over 1 month but no more than 3 months	Over 3 months but no more than 6 months	Over 6 months but no more than 9 months	Over 9 months but no more than 1 year	Over 1 year but no more than 2 years	Over 2 years but no more than 5 years	Over 5 years	Total
	US$m	US$m	US$m	US$m	US$m	US$m	US$m	US$m	US$m
Financial liabilities at fair value through profit or loss – trading	43,829	4,942	70,321	2,708	1,319	2,668	10,002	2,852	138,641
Borrowed securities and short selling	12,125	2,230	41,545	456	10	2,415	5,655	454	64,890
Repurchase agreements	17,850	1,250	5,550	465	13	123	113	–	25,364
Derivatives	1,520	231	12	1,241	1,200	121	4,234	2,342	10,901
Other	12,334	1,231	23,214	546	96	9	–	56	37,486
Financial liabilities at fair value through profit or loss – F V option	98,103	164,450	29,063	69,161	1,543	62,289	36,287	10,015	470,911
Borrowings	87,980	111,203	2,454	6,565	567	44,689	9,425	250	263,133
Debt securities	118	52,465	24,785	57,800	852	15,400	5,650	4,015	161,085
Subordinated debt	10,005	782	1,824	4,796	124	2,200	21,212	5,750	46,693
Derivatives used for hedging purposes[2]	62,150	5,265	21,150	85,646	300	6,565	9,545	510	191,131
Due to central banks and credit institutions	247,669	106,901	11,378	91,050	5,473	28,354	14,530	5,874	511,229
of which repurchase agreements	185,200	12,500	5,500	25,460	246	15,400	13,654	4,534	262,494
Due to customers	361,201	11,061	56,654	54,261	8,945	4,956	610	90,523	588,211
Retail[3,5]	281,140	5,551	4,111	45,420	8,400	2,100	100	82,000	428,822
Corporates and other customers[3,5]	80,061	5,510	52,543	8,841	545	2,856	510	8,523	159,389
Debt securities	5,111	887	4,520	5,551	513	150	105	81,374	98,211
Subordinated debt	554	25,458	544	5,236	871	211	58,741	7,845	99,460
Total financial liabilities	818,617	318,964	193,630	313,613	18,964	105,193	129,820	198,993	2,097,794
Other liabilities[4]	1,520	4,540	888	8,842	100	4,745	2,154	1,001	23,790
Equity[4]	192,125	–	–	–	–	–	–	–	213,350
Total liabilities and stockholders' equity[4]	1,012,262	323,504	194,518	322,455	19,064	109,938	131,974	199,994	2,313,709
Off-balance sheet commitments given	150,334	22,236	68,963	110,990	23,477	52,476	18,855	28,664	475,995
Credit institutions	120,034	7,870	4,521	55,110	4,593	45,421	8,785	4,540	250,874
Retail	20,415	5,454	54,568	10,220	4,102	1,405	5,520	24,124	125,808
Corporates and other customers	9,885	8,912	9,874	45,660	14,782	5,650	4,550	–	99,313

Notes:

1 *Assets or liabilities with no specified maturities could be listed in the 'No more than one month' category.*
2 *The bank could determine the categorisation of derivative contracts for purposes of the maturity analysis and provide a narrative describing their categorisation approach.*
3 *Could be detailed by product type if relevant.*
4 *Inclusion of these line items would enable a reconciliation with the balance sheet.*
5 *Amounts insured by guarantee schemes should be discussed.*

Figure 7. *Example of cross-referencing market risk disclosures to the balance sheet*

Where a single financial instrument generates market risks that are managed in both VaR and non-VaR measures, the bank could provide qualitative explanations for how that instrument has been presented in the table, amending the format of the table as appropriate to provide the presentation most relevant to the way the risk is managed.

	Balance sheet US$m	Market risk measure		Non-traded risk primary risk sensitivity
		Traded risk[1] US$m	Non-traded risk[2] US$m	
Assets subject to market risk				
Trading assets	348,983	345,550	3,433	Equity, FX, Interest Rate[3]
Financial assets designated at fair value	174,399	170,580	3,819	Interest Rate[4]
Derivatives	240,083	218,986	21,097	Foreign Exchange[5]
Loans and advances to customers	354,004	–	354,004	Interest Rate[4]
Financial investments	23,840	2,048	21,792	Equity, Interest Rate[6]
Assets held for sale	53,894	3,846	50,048	Interest Rate[4]
	1,195,203	741,010	454,193	
Liabilities subject to market risk				
Trading liabilities	257,093	256,589	504	Equity, FX, Interest Rate[3]
Financial liabilities designated at fair value	73,592	70,590	3,002	Interest Rate[4]
Derivatives	358,720	310,642	48,078	Foreign Exchange[5]
Retirement benefit liabilities	4,802	–	4,802	Interest Rate[4]
	694,207	637,821	56,386	

Notes:

1 *Represents traded risk subject to the bank's primary risk management technique disclosed in table VV (e.g. VaR or other technique).*
2 *Represents non-traded risk subject to other risk management techniques disclosed in tables XX, YY and ZZ (risk factor sensitivities, economic value and earnings scenarios).*
3 *See tables XX, YY and ZZ.*
4 *See table ZZ.*
5 *See table YY.*
6 *See XX and ZZ.*

Figure 8. *Example of a reconciliation of non-performing loans disclosures*

The disclosure below could be provided separately for retail and corporate non-performing loans, and expanded to include analysis by business unit, industry and geography (or along other lines) as appropriate.

	2012 US$m	2011 US$m
Impaired loan book movements[1]		
Impaired loans at 1 January	25,400	28,000
Classified as impaired during the year	7,600	6,700
Transferred to not impaired during the period	(3,800)	(4,500)
Net repayments	(2,000)	(1,500)
Amounts written off	(2,700)	(3,100)
Recoveries of loans and advances previously written off	800	1,000
Disposals of loans	(300)	–
Exchange and other movements	(850)	(1,200)
At 31 December	24,150	25,400
Impairment allowances - movements		
Impairment allowances at 1 January	16,450	15,400
Amounts written off	(2,500)	(2,800)
Recoveries of amounts written off in previous years	500	600
Charge to income statement	3,750	4,200
Disposals of loans	(100)	–
Exchange or other movements	(550)	(950)
At 31 December	17,550	16,450

Note:

1 *It may be helpful to explain the treatment of collectively assessed impairment allowances for loans which are not considered to be impaired in the tables, for example, by separately identifying this element of the collectively assessed impairment allowance.*

6. Additional commentary on areas identified for enhanced risk disclosures

This section describes the EDTF's views on current risk disclosure practices, recognising areas of leading practice and those which could be enhanced. The section also reproduces the recommendations and provides additional explanatory guidance designed to place them in context and highlight their importance to users.

Banks will need to continue to comply with securities laws and reporting requirements relevant to their operations to ensure that they are not breached, and assess appropriate confidentiality and other jurisdictional legal issues, particularly where the disclosure of commercially sensitive information would threaten a bank's stability or possess the potential to give rise to systemic risk. They will also wish to consider factors specific to their circumstances such as the materiality, costs and benefits of disclosures.

The additional commentary accords with the fundamental principles and expands on the recommendations set out in Section 5 of this report. The enhanced disclosures emphasise relevance, consistency or comparability, depending on the importance of the principle to a particular area. Users need to understand how the bank manages risk and be able to make comparisons over time and between reporting organisations. The EDTF recognises that differences in regulatory and accounting requirements in different jurisdictions may make it difficult to achieve comparability and it will take time to improve this, but it remains an aim of enhanced disclosures.

The EDTF's recommendations are organised within the following seven broad risk areas, which are the major categories of risk for banks:

- **6.1** risk governance and risk management strategies/business model;
- **6.2** capital adequacy and risk-weighted assets;
- **6.3** liquidity;
- **6.4** funding;
- **6.5** market risk;
- **6.6** credit risk; and
- **6.7** other risks.

Many of these risk areas are inter-related. For example, reputational risk may be addressed as part of 'other risks' but may also be a key driver of risk governance.

General commentary

Scope

This section addresses the structure of banks' reports and issues which are relevant to more than one type of risk.

Current disclosures

Users face a number of challenges in forming a clear and comprehensive understanding of the individual risks faced by banks and their overall risk profiles. It can also be difficult to assess the major risks and whether they have changed during the reporting period. Some of the factors contributing to these challenges are listed below:

- banks currently provide significant quantities of risk information and the volume can, in itself, obscure the clarity of the message;

- risk information is often presented in a disjointed fashion in a variety of places. Different aspects of risk are disclosed separately through sources as diverse as interim and annual reports, investor presentations, Pillar 3 reports and risk reports, and they sometimes appear in different places within these documents. For example, risk is frequently described in both the narrative reporting section of the annual report and the financial statement footnotes on financial instruments, but it also arises in less obvious places such as the financial statement footnotes on pensions;

- limited implementation guidance combined with non-prescriptive disclosure requirements can result in quantitative disclosures that are inadequately supported by meaningful and contextual qualitative information;

- many banks use general language to describe their risk identification and measurement methodologies. This level of detail does not necessarily provide sufficient information for users to understand the quantitative measures that banks disclose;

- it can also be difficult to understand entity-specific terms and determine whether they mean the same thing to different banks if they are not clearly defined;

- risk factor disclosures are sometimes written in a protective, legalistic manner, which can fail to highlight management's key concerns; and

- changes in regulatory requirements, in particular the introduction of new regulatory ratios, sometimes leave users needing help in understanding the bank's plans for implementation and the potential impact on the bank.

Recommendations for enhanced risk disclosures

Enhanced disclosures along the following lines would help users better understand the risks faced by the bank.

Recommendations	
1:	Present all related risk information together in any particular report. Where this is not practicable, provide an index or an aid to navigation to help users locate risk disclosures within the bank's reports.
2:	Define the bank's risk terminology and risk measures and present key parameter values used.
3:	Describe and discuss top and emerging risks, incorporating relevant information in the bank's external reports on a timely basis. This should include quantitative disclosures, if possible, and a discussion of any changes in those risk exposures during the reporting period.
4:	Once the appropriate rules are finalised, outline plans to meet each new key regulatory ratio, e.g. the net stable funding ratio, liquidity coverage ratio and leverage ratio and, once the appropriate rules are in force, provide such key ratios.

Navigation

Banks' financial reports are often long and contain detailed risk commentary and data. To help users navigate and understand this material, it is important for banks to consider carefully the way in which the information is presented. This would include keeping the format and layout of their reports under constant review, ensuring, where possible, that all risk disclosures addressing a particular topic appear together rather than being itemised and scattered throughout the report. If this is not possible, clear indexing of risk information could usefully be provided. Summaries can also help in making risk commentaries more accessible. In addition, disclosures which are immaterial or no longer relevant to current circumstances or which do not meet users' needs could be removed to help ensure that the sheer volume of disclosure does not impair its usefulness.

Terminology

Clear explanations of risk terminology and definitions of risk measures used enhance the understanding of risk reporting and comparability between periods and banks: e.g. without further explanation, the term 'duration' can have several different meanings. It is also helpful to explain the key parameters underpinning the risk reporting. For example, VaR disclosures can be made much more useful by including the confidence intervals or holding periods assumed.

A glossary of terms is helpful and could be provided.

Top and emerging risks

Users may not be able to determine what has changed during the reporting period in respect of the bank's risk profile, control processes or risk models. Banks could help by identifying and providing information about their 'top' or 'emerging' risks and changes in these risks over time. A top risk may be defined as 'a current, emerged risk which has, across a risk category, business area or geographical area, the potential to have a material impact on the financial results, reputation or sustainability or the business and which may crystallise within a short, perhaps one year, time horizon'. An emerging risk may be defined as 'one which has large uncertain outcomes which may become certain in the longer term (perhaps beyond one year)

and which could have a material effect on the business strategy if it were to occur'. Banks could be proactive in disclosing and explaining their exposure to top and emerging risks, such as those recently experienced with the sub-prime debt and Eurozone crises. Banks could also organise their risk disclosures so that top and emerging risks receive due prominence.

There are significant changes to regulatory and accounting requirements expected in the near future which will affect the key regulatory ratios and capital calculations of banks, either directly or indirectly. It could be helpful to disclose the implications of these changes on the organisation, particularly in the context of top and emerging risks, as the requirements are finalised. For example, a discussion of recently issued accounting standards that will become applicable in the future could cover not only the direct changes expected to the financial statements, but the potential consequences for regulatory ratios and capital calculations, if significant.

Regulatory ratios

The Basel Committee is developing a standard template for the disclosure of banks' leverage ratios, which should ensure this information is presented in a consistent manner. The Basel Committee proposed that this disclosure should commence with effect from January 2015 (during the 'parallel running' period from 1 January 2013 to 1 January 2017). The composition of the leverage ratio, as well as its calibration, is subject to change until the end of the parallel run period. The timing of and the requirements for the disclosure of liquidity ratios have not progressed as far and are subject to an observation and calibration period. Banks will comply with disclosure requirements for all these new ratios in accordance with the requirements of their jurisdictions.

As a result, the EDTF does not propose that banks disclose these regulatory ratios while the rules remain uncertain, but rather that they should wait until the requirements are finalised and in force. Nevertheless, banks may wish to consider outlining their plans to meet each new key regulatory ratio once the respective rules are finalised. In addition, comprehensive information to support a consolidated and, where appropriate, a more granular understanding of the bank's leverage, liquidity risk and funding activities could be beneficial.

6.1 Risk governance and risk management strategies/ business model

Scope

This section covers the disclosure of processes by which the bank identifies, monitors and manages risks in order to provide background and context to disclosures by risk type.

The remuneration of banks' executives is a major area in its own right and has been, and continues to be, the subject of extensive consideration in a number of countries. This report does not seek to repeat that work. Instead, it covers the topic of remuneration as part of the discussion of risk culture by addressing the linkage between the bank's risk governance and its compensation policies.

Current disclosures

Although the level of detail varies, banks currently provide substantial amounts of information on their overall risk governance structure, risk management practices, major risk categories and applied risk measures, including descriptions of risk appetite[11] and associated management processes.

In the view of the EDTF, more could be provided on risk culture.[12] Currently, risk disclosures may not be as effective as they could be in helping users to understand how, in earning revenue, a bank takes risks in accordance with its risk appetite and then manages and reports these risks. An emphasis on greater clarity would highlight the most relevant aspects of risk governance and management processes, helping users to understand the risk culture of banks and assess its influence over how they operate. This would help build confidence in the processes by which the disclosures are created as well as in the risk-management processes themselves.

Recommendations for enhanced risk disclosures

In the analysis and implementation of disclosure practices, the concept of business models has been subject to increasing focus, although the term can be used in different ways and is not always clearly defined. A carefully articulated business model can serve as bridge between management's understanding of the business and the market's understanding. This is particularly so where the business models of banks are changing markedly and are under strain in some areas.[13]

In explaining the nature and features of a bank's strategy to its stakeholders, a description of the business model which provides a clear and explicit account of how value is created by the bank, and the interaction between its operational and tactical strategies, would be useful.[14] A good description of a business model can help put the bank's risk management and risk disclosures into context, and frame the subsequent risk disclosures.

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[11] Risk appetite means 'the amount and type of risk that a bank is able and willing to accept in pursuit of its business objectives.' For a further discussion of risk appetite as a process, see: Institute of International Finance, *Implementing Robust Risk Appetite Frameworks to Strengthen Financial Institutions,* June 2011, definition at p. 10. Available at http://iif.com/press/press+1h94.php. While other definitions are available, in this report the term uses this definition.

[12] 'Risk Culture' means, 'the norms and traditions of behaviour of individuals and of groups within an organisation that determine the way in which they identify, understand, discuss, and act on the risks the organisation confronts and the risks it takes.' For a further discussion of development and management of risk culture, see: Institute of International Finance, *Reform in the Financial Services Industry: Strengthening Practices for a More Stable System*, December 2009, at p. 31-2 and Appendix III, Risk Culture. Available at http://www.iif.com/press/press+125.php. While other definitions are available, in this report the term uses this definition.

[13] Centre for European Policy Studies: 'Business Models in European banking. *A pre- and post-crisis screening' – 20 (http://www.ceps.eu/book/business-models-european-banking-pre-and-post-crisis-screening).*

[14] Aalborg University, Department of Business Studies: *'What constitutes a business model: the perception of financial analysts' – Working Paper n. 8 2008 (http://www.business.aau.dk/wp/08-04.pdf).*

The following enhancements to risk disclosures are recommended to improve the reporting of risk governance and culture:

Risk governance and culture

Recommendations	
5:	Summarise prominently the bank's risk management organisation, processes and key functions.
6:	Provide a description of the bank's risk culture, and how procedures and strategies are applied to support the culture.

Risk management organisation

Users will generally expect banks to have in place a governance process that allows them to meet the fundamental principles for disclosure, as defined by this report.

Risk disclosures could describe the responsibilities and accountabilities of the risk organisation along with how its independence from the business is ensured. They could explain the risk mandates granted to specific business units and the extent to which the business units are responsible for their own risk management under the oversight of the risk organisation.

Risk culture

Risk culture is increasingly recognised as a critical factor in the success or failure of a bank's risk management, and issues relating to risk culture are consequently of interest to investors and other users of banks' disclosures.

While the assessment of risk culture is likely to be subjective, the descriptions of risk procedures and strategies could be used to illustrate how risk awareness and management is embedded in the bank's overriding values, and how risk culture is communicated, developed through training and monitored through performance assessment.

Listed below are examples of elements that could be included in descriptions of risk culture:

- the Board's role in the oversight of corporate culture;
- a statement of the organisation's objectives for the risk culture it wishes to develop and nurture;
- the inclusion of risk culture goals in key policies such as the organisation's:
  - code of conduct;
  - code of ethics; and
  - employee manual;
- how risk culture is communicated, through both formal and informal channels and how management defines and communicates its desired 'tone from the top';
- risk training;
- examples of challenge mechanisms used by members of the organisation to raise risk issues such as review processes, committee structures, escalation procedures and interactions between business lines and risk officers;
- a description of how the accountability for risk at all levels is promoted within the organisation;
- the treatment of violations or breaches of risk limits, risk tolerance or risk appetite, or of failures to meet risk-culture expectations, and description of the escalation procedures;
- how risk-based compensation policies are used to reinforce the organisation's risk culture; and

- how risk-based Key Performance Indicators (or personnel evaluation criteria) may be used to measure culture, and which types of employees are covered.

Recommendations	
7:	Describe the key risks that arise from the bank's business models and activities, the bank's risk appetite in the context of its business models and how the bank manages such risks. This is to enable users to understand how business activities are reflected in the bank's risk measures and how those risk measures relate to line items in the balance sheet and income statement. See **Figure 1** in the Appendix to Section 5.
8:	Describe the use of stress testing within the bank's risk governance and capital frameworks. Stress testing disclosures should provide a narrative overview of the bank's internal stress testing process and governance.

Risk management strategies/ Business model

A business model describes how an organisation creates, delivers, and captures value (economic, social, or other forms of value). The essence of a business model is that it defines the manner by which the business enterprise delivers value to customers and converts that value into profit. It describes how an enterprise is organised to best meet customer needs, be paid for doing so and make a profit.

Harvard Business School,[15] for example, has identified six components of the business model which it believes may be relevant in the context of a turbulent and competitive business environment:

- *Value proposition* – a description of the customer's needs, the value the customer places on those needs and the products or services that address them.
- *Market segment* – the group of customers the bank wishes to target, recognising that different market segments have different needs. This would include an account of for whom the bank is creating value and who it considers to be its most important groups of customers.
- *Value chain structure* – the bank's position and activities in the provision of value to the customer and how the bank will capture the value that it creates in the chain. This would include a summary of its key activities, resources, partners and suppliers, and the channels through which the targeted customer segments are reached.
- *Competitive strategy* – how the bank plans to create a sustainable competitive advantage, for example, by means of cost savings and pricing, product differentiation or a market niche strategy. This would include identifying the main competitors.
- *Revenue streams* – how revenue is generated (interest income, fee income, trading revenues, sales, leasing, subscription, etc.) and its link to with the value that customers are willing to pay for.
- *Cost structure* – a description of the most important costs inherent in the business model linked with key resources and key activities.

Regulatory requirements, statutory obligations and, possibly, accounting standards may influence the business model that a bank chooses to adopt. Regulations may create

[15] Harvard Business School (Henry Chesbrough and Richard S. Rosenbloom – *'The Role of the Business Model in Capturing Value from Innovation')* – (http://www.hbs.edu/research/facpubs/workingpapers/papers2/0001/01-002.pdf).

incentives or disincentives which affect one or more components of a business model, such as:

- competitive strategy (if regulatory rules differ between jurisdictions, favour certain activities over others, and encourage or discourage growth and acquisitions);
- market segment (if a complete business activity is run down or demised because it is no longer cost effective);
- revenue generation and margins (the viability of different funding models or the volatility of reported profit and loss or capital may be affected by accounting standards); and
- regulators may consider banks' responses to external factors relevant for disclosure purposes, for example, if business models change or banks' capital allocation is adjusted as a result of changes in regulations or accounting standards.

An important element in this respect is to describe the business model through the eyes of management, explaining how the risks arising from the business model are reflected in the bank's financial statements and other risk disclosures.

The general description could state how the risk organisation and the process of agreeing the bank's risk appetite are embedded in and support the business model. Reference may be made to individual business models for different activities conducted by the bank, depending on its organisational structure, which could include (but are not limited to) retail banking, corporate and commercial banking, securities business and investment banking, private banking and insurance businesses.

By setting out the risks arising from the general business model, the description could provide links into the financial structure and reporting of the bank, including the income statement, balance sheet, and, where appropriate, disclosures of material contingent liabilities. It might refer to material unconsolidated structured entities where necessary to understand the ongoing business of the group. The description could address other elements of the general business model, including the funding mix, asset mix, business mix, geographic span, regulatory requirements and restrictions, to the extent that they generate risks.

The linkage between a business model and how the key risks associated with it are managed might be illustrated as set out in **Figure 1** in the Appendix to Section 5.

When a bank has a central treasury function, users would be interested in understanding the extent to which, for example, funding and liquidity risk, market risk and credit risks are transferred to it, the ways in which transfers are carried out, the nature of financial instruments the central treasury function is permitted to hold and whether the treasury is managed as a profit or a cost centre. They would also be interested in understanding the nature of the risks not transferred but retained within the other business units. The governance framework for risk management both within, and outside, the central treasury function could be described.

The discussion of a bank's risk appetite could be linked to its business model disclosures in order to indicate how the implementation of its business model is influenced by its chosen risk appetite. An explanation might be provided of how the overall risk appetite is allocated to the businesses, for example by describing the allocation of economic capital within the bank.

In summary, the discussion would include, but not be limited to, the following:

- risk strategy in the context of overall business strategy;
- risk appetite and budgeting;
- management oversight and the delegation of authority;
- board, organisation and committee structures, including major events or decisions affecting risk management;
- the organisational independence of risk management;

- the measurement, allocation and usage of risk, economic capital (to the extent it is used by the bank) and/or regulatory capital; and
- limit and control structures, including escalation and remediation practices.

This approach would facilitate clarity and accessibility by allowing users to clearly see the entire landscape of a bank's liquidity, credit and market risk exposures, as well as how risks are identified, managed, and controlled.

Stress testing

Regulators and investors have significantly increased their focus on enterprise-wide stress testing in recent years, both to assess the capital adequacy of individual banks under adverse scenarios and to evaluate the potential systemic impact that such a downturn could have on the banking system. For example, in the United States (US), the Federal Reserve conducts annual stress tests of the largest banks to determine their ability to maintain a target capital level throughout a stress period. Similarly, the European Banking Authority (EBA) has conducted stress tests of major banks throughout the European Union (EU) to assess the resilience of EU banks against an adverse but plausible scenario. In 2011, the results of these stress tests were made available to the public at an institution-specific level by the Federal Reserve in the US and by the EBA in the EU.

In addition to the standardised stress tests conducted by regulators, most global banks also perform regular stress tests of their own portfolios. The quantitative results of these stress tests are generally not published externally and, if they were, it would be challenging for investors to compare the results across banks. Investors have a deep interest in understanding the stress testing process and scenarios adopted by banks and any material vulnerabilities that are identified therein. The EDTF suggests that banks, at a minimum, provide narrative disclosures of aspects of their stress testing programmes, including explanations of aspects such as:

- stress testing methodologies;
- the process for integrating stress testing with the bank's risk governance and capital frameworks;
- scenario selection, including key assumptions related to macroeconomic drivers;
- material portfolios subject to review and portfolio-specific factors subject to stress testing; and
- high level qualitative indication of the results of stress scenarios on the bank's capital ratios (e.g. with a statement such as 'Common equity tier 1 capital levels remained above our regulatory minimum target level in our severe case stress scenario').

The EDTF notes that, as a matter of emerging leading practice, a number of banks have begun to incorporate discussions of stress testing in their annual reports, including high level discussions of regulatory and management scenarios and management frameworks. Some examples of the subject matter for these disclosures are suggested below:

- Banks could describe stress testing scenarios and assumptions across risks, the treatment of large, concentrated exposures, economic value and capital measures, and how these measures are used within the risk governance and economic capital frameworks. Banks could provide such information at a level of detail that is sufficient to convey financial performance under extreme, but plausible events without disclosing commercially sensitive or confidential information.
- Banks could discuss methodologies and the impact of any comprehensive enterprise-wide risk-based stress tests performed simultaneously across all positions (traded, non-traded, pension, other) and interrelated risk categories (funding, liquidity and credit).
- Banks could provide an index or link to the results of the EBA, Federal Reserve or other regulatory stress tests along with their related disclosures under Pillar 3.

6.2 Capital adequacy and risk-weighted assets

Scope

This risk area addresses disclosures of a bank's regulatory capital and RWAs as defined by its lead banking regulator.

Current disclosures

Capital

Existing capital disclosures follow guidance imposed by national regulators based on the definitions of capital under the Basel I and Basel II Capital Accords. Investors and other stakeholders face a number of problems in performing analyses and making comparisons among banks, both within and across jurisdictions, due in part to the fact that national authorities have interpreted and implemented the Basel capital definitions in different ways and require different disclosures. Moreover, many of the world's banks – including those in the US – have not yet adopted Basel II. In addition, it is difficult for users to reconcile regulatory capital to the published financial accounting balance sheet.

The Basel Committee recently published the final version of its templates for capital disclosure ahead of the implementation of Basel III. These templates cover the features of individual capital instruments, the calculation of own funds, and a reconciliation with the published balance sheet. Although the adoption of these templates is not required until the beginning of 2018, there is a transitional template that applies from June 2013. National regulatory authorities are already planning to require their banks to use these templates.

Risk-weighted assets

The current reporting framework for RWAs is governed by national disclosure requirements, based on the Basel Capital Accords. However, similar to regulatory capital, the national guidance differs significantly between jurisdictions and the Internal Ratings Based (IRB) models in Basel II for calculating RWAs have not been adopted globally, which makes it difficult for investors to make meaningful comparisons among banks.

Recommendations for enhanced risk disclosures

Under Basel II, the minimum Pillar 1 requirement for each bank is reasonably clear, being either the minimum 8% total capital ratio or a national variant on this (for example, many emerging market countries require a minimum 12% total capital ratio).

Going forward, the Basel Committee on Banking Supervision (BCBS) has recommended a series of buffers such as those for counter-cyclical and capital conservation under Basel III and bank-specific add-ons for global and domestic systemically important banks under a separate assessment methodology. The counter-cyclical capital buffer for a bank with exposures in more than one jurisdiction will depend on both the distribution of its exposures across jurisdictions and the capital buffers applied by each jurisdiction, so the precise magnitude of the buffer can only be calculated individually by each bank.

Capital

The following recommended disclosures would assist users' understanding of the regulatory capital of banks:

Recommendations

9: Provide minimum Pillar 1 capital requirements, including capital surcharges for G-SIBs and the application of counter-cyclical and capital conservation buffers or the minimum internal ratio established by management.

10: Summarise information contained in the composition of capital templates adopted by the Basel Committee to provide an overview of the main components of capital, including capital instruments and regulatory adjustments. A reconciliation of the accounting balance sheet to the regulatory balance sheet should be disclosed.

11: Present a flow statement of movements since the prior reporting date in regulatory capital, including changes in common equity tier 1, tier 1 and tier 2 capital. See **Figure 2** in the Appendix to Section 5.

12: Qualitatively and quantitatively discuss capital planning within a more general discussion of management's strategic planning, including a description of management's view of the required or targeted level of capital and how this will be established.

If possible, banks should consider providing information about their bank-specific capital surcharges. If, for whatever reason, it is not possible for banks to disclose their total Pillar 1 capital requirements, an alternative would be for them to publish their internal target capital ratios and how their processes ensure regulatory compliance.

Including a high level reconciliation of accounting capital to regulatory capital, a summary of instruments which form part of regulatory capital and a capital 'flow statement' in financial reporting would assist users' understanding of a bank's capital position without having to refer to the very detailed information in the Basel templates. See **Figures 9 and 10** in Appendix A.

Although many of the details of potential regulatory bail-in liabilities remain to be determined (the recent EU Recovery and Resolution Directive is the most advanced set of bail-in proposals to have been issued to date), the presumption is that banks will be required to disclose in due course the volume and characteristics of liabilities subject to bail-in under legislation as it evolves. Requirements may also emerge in certain jurisdictions for banks to hold a minimum amount of bail-in liabilities, in which case banks should disclose the volume of liabilities potentially subject to bail-in and the level of losses expected to trigger bail-in along with any regulatory determinants of the point of non-viability when losses would be taken.

Use of models

Users have significant difficulty in understanding RWA disclosures. This is particularly the case for banks in the scope of Basel II.

Banks use internal and standardised models across their asset portfolios differently, which may reflect:

a) a staged roll-out of Advanced IRB approach models, so that some portfolios may be temporarily subject to less advanced approaches;

b) different approaches to using internal models such as VaR models, stressed VaR models, Incremental Risk Charge models and Comprehensive Risk Measure models;

c) supervisory restrictions on the adoption of internal models until the regulatory conditions are met for their use; or

d) deliberate choices to leave some portfolios on the standardised or Foundation IRB approach.

As a result, investors and other stakeholders can find it difficult to make meaningful comparisons between banks, particularly across jurisdictions.

Banks currently disclose very little information about the details of their internal models for computing RWAs and, as a result, users are unable to ascertain the reasons for differences in the data from the multiplicity of models, and their impact on capital, both within a single bank and among different banks.

Users also find it difficult to understand the extent to which the use of internal models has affected a bank's capital requirements and are not able to make meaningful comparisons between banks and across jurisdictions. The EDTF considered whether disclosure of the Basel III leverage ratio could assist, but decided that it would not. The disclosure of sufficient information to show how internal ratings grades and PD bands map against external credit ratings for significant non-retail banking book credit portfolios could help meet users' needs for better comparability.

Risk-weighted assets

Banks currently provide analysis of their RWAs, but these disclosures do not generally enable users to determine whether differences in banks' RWAs are driven by their particular business models. It is impossible to tell from most bank disclosures where the real differences between models lie, in terms of factors such as data inputs, assumptions, mathematical formulations, manual overrides, and point-in-time versus through-the-cycle assumptions. Expanded disclosures in these areas would help users to understand these differences and could improve market confidence.

Current disclosures provide brief explanations about why RWAs changed over the reporting period. However users find it very difficult to link these to the drivers, such as asset quality, ratings migration and any changes in models, at a sufficiently detailed level.

There is a strong view among investors (and indeed some banks) that enhancing disclosures to explain why RWAs have changed during the reporting period would provide useful information on the effect of using internal models, by linking together the impact on RWAs of changes in portfolio composition, model changes and shifts in the risk environment.

Therefore, the objectives of the following recommendations are to:

- better explain banks' internal models and their calculations;
- enable investors and other stakeholders to better understand the extent to which the use of internal models effects a bank's capital requirements; and
- facilitate comparability across banks and across jurisdictions.

Recommendations

13: Provide granular information to explain how RWAs relate to business activities and related risks.

14: Present a table showing the capital requirements for each method used for calculating RWAs for credit risk, including counterparty credit risk, for each Basel asset class as well as for major portfolios within those classes. For market risk and operational risk, present a table showing the capital requirements for each method used for calculating them. Disclosures should be accompanied by additional information about significant models used, e.g. data periods, downturn parameter thresholds and methodology for calculating LGD.

15: Tabulate credit risk in the banking book showing average PD and LGD as well as EAD, total RWAs and RWA density for Basel asset classes and major portfolios within the Basel asset classes at a suitable level of granularity based on internal ratings grades. For non-retail banking book credit portfolios, internal ratings grades and PD bands should be mapped against external credit ratings and the number of PD bands presented should match the number of notch-specific ratings used by credit rating agencies. See **Figure 3** in the Appendix to Section 5.

16: Present a flow statement that reconciles movements in RWAs for the period for each RWA risk type. See **Figure 4** in the Appendix to Section 5.

17: Provide a focused narrative putting Basel Pillar 3 back-testing requirements into context, including how the bank has assessed model performance and validated its models against default and loss.

Model specification

Banks could disclose, for material portfolios, a description of their approach to internal models, covering at a minimum the data period (through-the-cycle or point-in-time), the use of downturn parameter thresholds, LGD methodology, the use of minimum parameters or other details specified by national regulators, how models are validated, and when they were last updated.

A similar approach could be taken to disclosing the key characteristics of the models that are used to measure counterparty credit risk and market risk in the trading book (VaR, stressed VaR, specific risk and Incremental Risk Charge models).

Portfolio composition

To promote greater comparability of RWA disclosures, banks could provide consistent disclosures on portfolio composition showing:

- average PD, LGD and EAD, total RWAs and RWA density for each exposure class and significant sub-portfolios, at a suitable level of granularity based on internal ratings grades;
- for significant non-retail credit portfolios, internal ratings grades could be mapped against external credit ratings, with the number of PD bands disclosed matching discrete notch-specific ratings used by credit rating agencies. This information could be disclosed for each sub-portfolio by Basel exposure class and for each external grade. The bank could also disclose its average models-based LGD, and the EAD for each grade. Being able to map the bank's own ratings to external credit ratings may facilitate comparison between banks by users; and

- the exposure classes should be based on the standard IRB classes (e.g. sovereign, institutions, corporates, mortgages and revolving credit for credit risk). Where it would help users' understanding, banks would be encouraged to disclose this information in a more detailed analysis of exposure classes, for example by industrial sector classification of corporate exposures and by geography.

Supplementing these disclosures with a discussion of market trends or events which management expect to have a significant impact on RWAs would be beneficial.

Changes in risk-weighted assets over time

An RWA 'flow statement' could be a good way of analysing changes in RWAs by the key drivers, though a prescriptive approach is not recommended because banks may have different key drivers and apply them in different ways. Banks could consider applying a similar approach to counterparty credit risk and market risk in the trading book.

Banks could explain in their narrative reporting the significant drivers for change in the reporting period and describe the nature of each significant driver and how it has affected the RWAs. Where relevant, banks could also provide explanations of why factors that might have been expected to lead to large changes in RWAs have not, in fact, done so. Once again, the impact of the key drivers would form an important part of the disclosure.

Banks are therefore encouraged to provide a narrative explanation of their model-based calculations of RWAs. Here, and elsewhere, narrative reporting would be flexible, and linked as closely as possible to the bank's internal management reporting.

There are examples of banks disclosing information on RWAs within exposure classes, but often users are unable to assess the reasons for the differences including, in some cases, the quality of the underlying assets. If one bank has an RWA density of 6% for residential mortgages while another has 20%, users struggle to know if the difference is driven by asset quality or by the use of a different loss history.

One potential source of information on this is to use loss and accounting impairment data to compare estimated and observed PDs, LGDs and EADs. Banks are encouraged to disclose this in a consistent way, and provide a narrative explanation of what the results mean and, if appropriate, how models have been revised in response to the results. While banks do provide some data on actual versus expected loss and accounting loan impairment charges, and on actual versus estimated PD, LGD and EAD parameters, this is usually only at a very high level in terms of asset classes, and is not consistent between banks. It is also usually only a comparison of the current year against the previous year. Few banks provide any narrative discussion of what these results reveal about how well their models are predicting losses, or about any changes to internal models undertaken as a result of these results.

Banks could therefore provide a comparison of the accounting loan impairment charge for the year with the previous year's expected loss for each major exposure class, and disclose the results of back-testing for each Basel exposure class by major business unit or for individual model parameters like PD, LGD and credit conversion factors.

They could also provide a discussion which puts these results into context, describing how they have assessed model performance and validated their models against loss and impairment data, and against the results of stress and scenario testing, and how, if appropriate, models have been revised in response to these results.

An example of advanced IRB credit exposures by internal PD grade may be found in **Figure 3** in the Appendix to Section 5, with examples of other RWA disclosures in Appendix A, as follows:

6.3 Liquidity

Scope

Liquidity disclosures should provide comprehensive information to support a consolidated and, where appropriate, a more granular understanding of a bank's liquidity risk. Key issues within the scope of this risk area include how the bank manages its liquidity risk, its current liquidity position and how it would measure and manage the impact of an adverse liquidity scenario.

Current disclosures

Liquidity disclosures have evolved rapidly over the past few years and vary considerably among banks. While there are examples of leading practice among banks which provide more granular and detailed information for some of these items, it is rare to find a bank that provides such disclosure across all of them.

Liquidity reserve, including consideration of collateral available for rehypothecation

The format, extent and granularity of liquidity reserve disclosures vary across banks. Most banks present a qualitative description of their frameworks and approaches to managing their liquidity reserve. Some of them provide a breakdown of their liquidity reserve by types and amounts in different currencies in tabular and graphical formats. Others only disclose their aggregate liquidity reserve amounts. Liquidity reserve disclosures in some cases include estimates of the bank's borrowing capacity from various central banks.

The definition of assets included in the liquidity reserve varies, too. Most banks provide a qualitative description of liquid assets in the liquidity reserve, but some list regulatory requirements under which the assets qualify as liquidity reserve components. The latter group of banks also discloses information on securities and assets that can be used to address their liquidity needs but do not meet the regulatory definitions of liquidity reserve components.

The amount of the liquidity reserve available at major entities within their corporate structures (e.g., parent holding company, bank and non-bank entities, etc.) is provided in certain cases. The liquidity reserve is also presented by some banks on a quarterly basis to draw attention to its changes over time.

Banks currently provide liquidity reserve information in many different formats and varying levels of detail. Users have asked that the liquidity reserve disclosure include a breakdown of its components to differentiate between, for example, cash and balances at central banks, balances with other banks, securities guaranteed by sovereigns, central banks and multilateral banks, liquid bonds and other liquid assets. Users have also expressed their desire to receive liquidity reserve information for each major currency held by the bank with information on any significant restrictions on such assets held in any subsidiaries.

Liquidity metrics used by management and proposed regulatory liquidity ratios

Most institutions disclose liquidity ratios used internally and provide a qualitative discussion of how they are used for internal risk management purposes.

Similarly, most banks provide a high-level discussion about the liquidity coverage ratio and the net stable funding ratio (NSFR), without disclosing the metrics. The regulatory requirements for these ratios have not been finalised. Only a very limited number of banks disclose estimates of these ratios, some with tables showing the granular details of NSFR calculations.

The BCBS is currently working on its recommendations for disclosure of the Basel III regulatory ratios and the EDTF does not intend to make recommendations in advance of this work. Rather, it seeks to highlight users concerns with current disclosure and encourage

banks to help users understand their internal liquidity management processes and governance.

Stress testing and scenario analysis

A number of banks provide a qualitative description of stress testing methodologies, scenarios and major assumptions used in internal liquidity and funding stress testing, without disclosing quantitative stress testing results. Common scenarios used include a downgrade of a bank's credit rating, a shift in systemic market risk, interest rate changes and significant losses in equity markets. Most banks provide a high level qualitative discussion of their contingency plans and actions undertaken under various stress scenarios.

A few banks provide tables with metrics summarising stress results under specific scenarios. Examples are (i) various levels of liquidity reserves are presented under a 50 basis points movement in interest rates or a 12% drop in the equity market; or (ii) a table showing the impact of stress scenarios on the funding gap is published, along with the offsetting effect of management's planned countermeasures. A number of banks also disclose the impact of one and two-notch credit rating downgrades in the amount of collateral and termination payments they would have to make under the terms of their derivative contracts. Such disclosure is helpful.

Recommendations for enhanced risk disclosures

Recommendation	
18:	Describe how the bank manages its potential liquidity needs and provide a quantitative analysis of the components of the liquidity reserve held to meet these needs, ideally by providing averages as well as period-end balances. The description should be complemented by an explanation of possible limitations on the use of the liquidity reserve maintained in any material subsidiary or currency.

Banks could provide a breakdown of the components of their liquidity reserve based on management's internal definition. They could provide a narrative discussion on whether or not their definitions of liquid assets are consistent with those prescribed or proposed by regulators, and their quantitative disclosures could be complemented by narrative describing the material percentages of their liquidity reserves that are maintained in significant restricted subsidiaries or in different currencies. Where relevant, it would be helpful to provide this information by line of business.

Users would appreciate this information being provided as at the period end and on an average basis, with disclosure of how such averages are derived (e.g. using daily or monthly balances).

See **Figure 15** in Appendix A.

Regulatory ratios

While disclosure of regulatory liquidity ratios would aid comparability, disclosure of liquidity reserve components using regulatory definitions would be challenging given that those definitions are not final and there is uncertainty around their implementation across jurisdictions. The BCBS is currently working on its recommendations for disclosures in this area. Therefore, in common with other regulatory ratios, the EDTF does not recommend that these ratios are disclosed until the requirements are finalised and in force. Nevertheless, users find it very helpful if banks outline their plans to meet each new key regulatory ratio once finalised.

Stress testing

Management could explain their liquidity stress testing practices and their linkage to the bank's broader liquidity management framework.

Legal entity restrictions

Management could also discuss material liquidity maintained in subsidiaries that is not available for use in other entities and or the availability of excess liquidity at the group level.

6.4 Funding

Scope

Funding disclosures should provide comprehensive information to support an understanding of a bank's funding sources at a consolidated and, where appropriate, more granular level. Key issues within the scope of this risk area include the maturity transformation model used by the bank, its funding plan and its primary funding sources.

Current disclosures

Similar to liquidity disclosures, funding disclosures have evolved rapidly over the past few years and vary considerably among banks. In general, there is sufficiently detailed information provided on funding to meet most users' needs. However, as a result of the limited amount of information currently provided, users find it challenging to understand asset encumbrance.

Balance sheet, including summary of wholesale funding

A number of banks provide information on their funding, with some breaking down their asset classes and funding sources in tables and charts. The disclosures typically include a bar chart of external funding sources showing major categories such as capital markets and equity, retail, transaction banking, discretionary wholesale, secured funding and financing vehicles. Some banks disclose tables that include deposit sources (private, corporate or institutional) and types (demand deposits, saving accounts etc). Additionally, many banks publish tables with details of their securities financing activities and provide qualitative and quantitative breakdowns of securities purchased under resale agreements, securities sold under repurchase agreements, and securities borrowed or sold.

A qualitative discussion of the bank's dependence on different sources of funding is usually provided. Some banks categorise funding into short- and long-term borrowing and discuss the extent of their reliance on each type of funding. Loan-to-deposit ratios are disclosed by a number of banks. Some banks publish other ratios such as the advances to core funding ratio, which they use to monitor reliance on short-term funding. In addition, qualitative descriptions of internal metrics used to monitor funding gaps and reliance on short-term unsecured funding are provided in some cases.

Maturity analysis of financial assets and liabilities, including currency profile and contingent items

Some banks provide a detailed table outlining the maturity distribution of their assets and liabilities by residual contractual maturity. Different classes of assets and liabilities are categorised into from eight to 10 maturity buckets. Maturities vary from 'on demand' to 'over 10 years'. More granular maturity buckets are commonly used for the period within the first 12 months of the remaining maturity. Some banks only provide the maturity profile of their financial liabilities, without disclosing similar information for their financial assets.

A significant change in the maturity profile is of interest to users. Some banks publish a 'cumulative funding gap', defined as the total amount of assets minus liabilities within a specific maturity bucket, to draw attention to their position mismatches. Also provided, in addition to the contractual maturity distribution of assets and liabilities, are tables setting out the behavioural maturity profile based on models of customer behaviour under normal business conditions.

In addition to on-balance sheet liabilities, banks provide a maturity analysis of their off-balance sheet obligations such as securities lending indemnification, credit guarantees and performance guarantees. Information includes the definition of liabilities, their nominal amount and the events and conditions on which the liabilities are contingent.

Summary of encumbered and unencumbered assets

A number of banks provide the amounts of encumbered assets, i.e. assets that have been pledged as collateral in various business activities. The amounts of assets pledged, mortgaged and otherwise subjected to lien are presented in tabular form. A ratio of the portion of encumbered assets to total assets is also provided and compared with previous periods.

Pledged assets are broken down by asset class, their corresponding liabilities, and the major entities that they are pledged to. One bank discloses the amount of pledged assets in major geographies. Some banks publish a table with a breakdown of pledged assets under various business activities, such as securities borrowing and lending, derivatives transactions, repurchase agreements and covered bonds. Also disclosed is the fair value of assets accepted as collateral that the bank is permitted to sell or repledge in the absence of default.

Recommendations for enhanced risk disclosures

Asset encumbrance

While some banks have historically used secured funding sources to fund assets, it was difficult for investors to gauge the full extent of the practice in the period leading up to the credit crisis based on bank disclosures made at the time. Since the credit crisis, the banking sector as a whole has increasingly employed assets on the balance sheet to create liquidity and obtain funding expanding, for example, the use of term repo facilities provided by central banks and covered bond programmes. Encumbered assets reduce the pool of assets available to unsecured creditors which is regarded as being a particularly important area of risk disclosure. The overall balance of secured and unsecured funding, the extent to which assets are encumbered and the amount of unencumbered assets available to support liquidity are all important factors in investors' considerations.

Asset encumbrance information typically appears in different parts of annual reports. Users want information on the breakdown of encumbered and unencumbered assets, including a categorisation of the type of encumbrance presented, in one place in a summary format. The specific categories of assets included in potential asset encumbrance disclosures are likely to be bank specific and so not be consistent across institutions, at least in the short-term. As in other areas of disclosures, these inconsistencies are influenced by differences in regulatory, legal and accounting regimes between jurisdictions.

Encumbered assets include, for example, (i) mortgage loans pledged in favour of covered bond holders; (ii) loans on the consolidated balance sheet that are held by separate bankruptcy remote entities to back securitisation obligations; and (iii) securities pledged as collateral in financing and repo transactions.

An analysis of total encumbered and unencumbered assets by asset type would include as a minimum, cash and other liquid assets, other investment securities, loans and other financial and non-financial assets. Users are seeking to understand those assets that cannot be pledged or otherwise used as security for funding, either because they have already been so pledged, or due to some restriction which prevents this, and the quantum of assets that are not encumbered and are available for use as collateral in the normal course of business.

Recommendation	
19:	Summarise encumbered and unencumbered assets in a tabular format by balance sheet categories, including collateral received that can be rehypothecated or otherwise redeployed. This is to facilitate an understanding of available and unrestricted assets to support potential funding and collateral needs. See **Figure 5** in the Appendix to Section 5.

The objective of this disclosure is to differentiate assets that are used to support funding or collateral needs at the balance sheet date from those assets that are available for potential funding needs. The disclosure is not designed to identify assets which would be available to meet the claims of creditors or to predict assets that would be available to creditors in the event of a resolution or bankruptcy.

For this purpose, encumbered assets are:

- assets which have been pledged as collateral (for example, which are required to be separately disclosed under IFRS 7 'Financial Instruments: Disclosures'); or
- assets which an entity believes it is restricted from using to secure funding, for legal or other reasons, which may include market practice or sound risk management. Restrictions related to the legal position of certain assets, for example, those held by consolidated securitisation vehicles or in pools for covered bond issuances, may vary in different jurisdictions or interpretations.

Unencumbered assets are the remaining assets that an entity owns. These comprise:

- assets that are readily available in the normal course of business to secure funding or meet collateral needs. Banks need to evaluate which assets they consider to be readily available in the light of their own circumstances. For example, banks may define 'readily available' assets as those that are accepted by central banks or in the repo markets at the balance sheet date.
- Other unencumbered assets are not subject to any restrictions on their ability to secure funding or be offered as collateral, but the bank would not consider them to be readily available for these purposes in the normal course of business. This category may include wider classes of unencumbered assets not readily accepted as collateral by central banks or other lenders in the provision of support outside the normal course of business. It could also include non-financial instruments such as unmortgaged property.

Other information banks could disclose in this connection is as follows:

- a description of the nature of the other assets which are considered to be encumbered and unencumbered where such transactions are material to the bank, including explaining the characteristics of securities with a lien on a whole or part of a portfolio of assets, such as the Spanish 'cédulas hipotecarias';
- the ratio of encumbered assets to total assets, excluding items that may gross up such metrics such as matched-book repo transactions and grossed up derivative assets and liabilities; and
- in addition to unencumbered assets, the fair value of assets accepted as collateral that the bank is permitted to sell or repledge and the amount of any such collateral that has been repledged.

Such quantitative disclosure could provide the basis for a discussion of the assets available to support potential funding and collateral needs.

It is acknowledged that, in some circumstances, information about assets pledged to central banks as part of emergency liquidity assistance may be particularly sensitive and, as a result, would not be separately provided.

Additional contractual obligations

Banks could disclose the additional amount of unencumbered assets that would be needed to meet collateral requirements in the event of downgrades by rating agencies or events under the other contractual agreements. Management could provide such information for selected

scenarios which, in practice, generally include the bank being downgraded by one or two rating notches. See **Figure 16** in Appendix A.

Maturity analysis of assets and liabilities

Many banks provide asset and liability, or liability-only maturity information, though there are notable differences in terms of the maturity buckets and the granularity of asset and liability categories used. Users currently perform analyses on the maturity gap of assets and liabilities based on information provided by banks, but these analyses require a number of assumptions about the behaviour of certain assets and liabilities. The EDTF had extensive discussions about whether maturity information could most usefully be provided based on remaining contractual maturities or based on management's behavioural assumptions. Both banks and users recognise the limitations of using contractual maturity information in analysing a bank's funding profile. Contractual maturity information is not used to manage risk and is not considered to be representative of the risks involved. While behavioural information is used to manage the risks, some banks have highlighted commercial sensitivity around disclosing this information and some users would prefer to apply their own behavioural assumptions to the base data. Having sufficiently detailed and consistently presented information would be helpful in this regard. Therefore, the EDTF decided to concentrate its recommendation on encouraging banks to provide more detailed asset and liability maturity information based on contractual maturities. Banks may also choose to provide behavioural information, which better reflects their own risk management process.

The recommended contractual maturity analysis of balance sheet carrying amounts would be disclosed in a tabular form, breaking down the assets and liabilities by key types and showing their remaining contractual maturity by time bucket. There is an important challenge around ensuring the consistency of definitions of different types of deposits and other wholesale funding categories as well as those for the particular asset and liability categories to be used for disclosure purposes. Where necessary, it would be helpful to define the terms used.

Recommendation	
20:	Tabulate consolidated total assets, liabilities and off-balance sheet commitments by remaining contractual maturity at the balance sheet date. Present separately (i) senior unsecured borrowing (ii) senior secured borrowing (separately for covered bonds and repos) and (iii) subordinated borrowing. Banks should provide a narrative discussion of management's approach to determining the behavioural characteristics of financial assets and liabilities. See **Figure 6** in the Appendix to this Section 5.

It is suggested that contractual maturities are presented in at least eight maturity buckets, as follows: (1) less than 1 month, (2) 1 to 3 months, (3) 3 months to 6 months, (4) 6 months to 9 months, (5) 9 months to one year, (6) one to two years, (7) beyond two and less than five years, and (8) beyond five years.

The discussion of management's approach to determining the behavioural characteristics of the bank's financial assets and liabilities could include a description of the assumptions about customers' behaviour which apply to prepayments and renewals.

At a minimum, categories could be no less granular than the bank's primary balance sheet categories. However, investors have expressed interest in more detailed analyses, where possible, such as analyses of deposits by customer type, insured and uninsured deposits, wholesale funding sources and other details that would inform users who are assessing behavioural considerations.

The maturity table could also separate disclose the following types of liabilities: (i) senior unsecured borrowing, (ii) senior secured borrowing (covered bonds and repos separately) and (iii) subordinated borrowing.

Banks may prefer to use different assumptions for their trading assets and derivative contracts, perhaps by categorising them as on demand because they may be closed out at any time or require collateral or cash movements for any changes in value. It would help if the assumptions were supplemented with clear definitions and management's rationale for their choice of category.

While the contractual maturity table will enable users to carry out their own assessments of the balance sheet, it may also be useful if banks provide their own maturity estimates for certain balance sheet items, if applicable. This could include demand or non-maturity deposits, loans with pre-payment options and structured notes, for example. Management might also explain their assessment of the behavioural liquidity characteristics where these differ materially from the contractual basis presented.

Qualitative disclosures

Recommendation
21: Discuss the bank's funding strategy, including key sources and any funding concentrations, to enable effective insight into available funding sources, reliance on wholesale funding, any geographical or currency risks and changes in those sources over time.

See **Figure 17** in Appendix A.

In addition to the quantitative disclosures discussed above, banks could provide qualitative disclosures in the following areas:

Funding:

- *Funding plan*: the types of funding sources to be used and the access of the bank to each source.
- *Funding concentrations*: material concentrations in funding sources, with specific attention to wholesale funding and its distribution across different jurisdictions and different currencies.
- *Funding sources*: how the funding sources of the bank have changed over time.
- *Internal funding process*: how the bank's internal funding of legal entities operates within the bank's internal funding dynamic.

Stress testing:

Management could also explain their funding stress testing practices and their link to the bank's broader liquidity and funding management framework.

6.5 Market risk

Scope

This risk area addresses the effect on fair value or the future cash flows of a bank's on- and off-balance sheet financial positions as a result of changes in market factors such as:

- interest rates;
- foreign exchange rates;
- commodity prices;
- equity prices; or
- credit spreads.

This includes market risk associated with trading and non-trading portfolios.

Current disclosures

Market risk disclosures are governed by both accounting and regulatory requirements that depend on an institution's legal jurisdiction and the financial markets and exchanges on which its equity or other securities are traded. There are differences in application or adaptation of reporting requirements in different jurisdictions which often restrict comparability between banks.

Disclosure presentation

Market risk disclosures give rise to three challenges for users:

- Because market risk measures such as VaR (the most common primary risk management approach currently used by banks to measure and disclose traded market risk) are based on economics rather than on accounting, it can be difficult for users to effectively understand the relationship between market risk disclosure information and a bank's balance sheet and income statement.
- Market risk information may be presented in a variety of locations, such as financial statement footnotes, risk reports and narrative reporting, and may appear in certain less obvious financial statement line items, such as pension obligations. This can present additional complexity for the reader trying to understand market risk holistically.
- Limited implementation guidance combined with non-prescriptive disclosure requirements result in quantitative disclosures that can be insufficiently supported by meaningful and contextual qualitative information.

Market risk governance

While banks generally provide some information about their market risk governance frameworks, more and better organised information would be helpful, especially in the areas of overall market risk governance, business strategy, risk appetite and related metrics or limits, independent risk management functions and control procedures, such as risk limit breach escalation and remediation protocols.

Market risk identification and measurement

Many banks use quite non-specific language to describe their risk identification and measurement methodologies and, as a consequence, the level of detail often fails to provide sufficient information to enable an understanding to be derived of the quantitative measures that banks disclose.

Analyses of risk factors within VaR are often limited to the primary market risk factors, interest rates, foreign exchange rates, commodity prices and equity prices. For non-traded portfolio risk measures, breakdowns vary, with some banks reporting interest rate shock results or sensitivities and others publishing more granular analyses. Some banks provide qualitative and quantitative disclosures of additional risk factors relevant to their trading and non-trading market risk portfolios (e.g. issuer specific risk, credit and debit valuation adjustment risks, prepayment/option adjusted spreads and securitised product risk) and analysis of foreign exchange and equity risk in their non-trading market risk portfolios.

Model assumptions, validation, proxies, limitations, changes and their corresponding impacts on market-risk measures are generally not described in a level of detail that would inform the user of the potential impacts of model risk, risks not modelled in VaR or any other relevant risk measures.

Disclosures also tend not to describe thoroughly back-testing, the reasons for back-testing exceptions or management actions to address any exceptions which arose.

Current disclosures generally provide only limited discussions of 'tail risk', or the potential for extreme loss events beyond reported VaR confidence intervals. For example, stress testing scenarios, assumptions, results and related management actions are not often discussed in detail. In addition, disclosures regarding assumed liquidity horizons within market risk measures are limited. The integration of market risk stress tests into comprehensive enterprise-wide stress tests across all positions subject to market risk (e.g. traded and non-traded market risk) and the interrelation with stress tests of other risk factors, such as counterparty credit risk, funding risk and liquidity risk, are also generally not provided.

Banks disclose varying levels of information related to how hedging is used to manage market risk and how hedging instruments are treated under market risk measures.

The description by banks of their economic capital methodology, usage, and allocation practices tend to overlap with limited specific accounts of how economic capital or other capital or performance measures are integrated into strategy and risk appetite.

Recommendations for enhanced risk disclosures

Disclosure presentation

Users are interested in understanding how much of the market risk arising from business activities is managed through the bank's primary risk management measures and how much is managed in other ways.

Recommendation	
22:	Provide information that facilitates users' understanding of the linkages between line items in the balance sheet and income statement with positions included in the trading market risk disclosures (using the bank's primary risk management measures such as VaR) and non-trading market risk disclosures such as risk factor sensitivities, economic value and earnings scenarios and/or sensitivities. See **Figure 7** in the Appendix to Section 5.

The linking of market risk measures to the balance sheet to identify portfolios in the balance sheet that are included in particular market risk disclosures (e.g. VaR or other primary risk management measures used for trading portfolios, risk factor sensitivities, economic value or earnings scenarios for non-trading portfolios), may be presented in the manner which is most meaningful to the bank. This could include qualitative, qualitative with numerical support, or quantitative referencing.

Quantitative linking can enhance clarity and make financial statements easier to relate to the reported risk narratives.

Qualitative and related quantitative disclosures could include a comparative analysis that explains material changes occurring between reporting periods. Qualitative discussion could identify and explain the most material differences between positions included in risk metrics and those in the balance sheet, so that users can understand the composition and completeness thereof. For example, a qualitative disclosure with numerical support could provide approximate amounts of portfolios or products included in or excluded from VaR, such as in the statement: 'Our trading VaR does not include certain credit products with a fair value of US$10 billion which are included in the trading assets line on the balance sheet.'

Providing such information will enhance comparability between banks with different reporting requirements, demonstrate the completeness of the risk coverage and put the magnitude and range of risk measures presented into context.

Market risk identification and management

Recommendation	
23:	Provide further qualitative and quantitative breakdowns of significant trading and non-trading market risk factors that may be relevant to the bank's portfolios beyond interest rates, foreign exchange, commodities and equity measures.

Banks might consider providing additional information.

Primary risk management measures, such as VaR, could be analysed into risk factors, providing:

- a breakdown of relevant trading market risk factors beyond interest rates, foreign exchange rates and commodity and equity prices to support qualitative disclosures which discuss the nature, significance, measurement and control of these and other risk factors. For example, mortgage risks such as prepayment/extension risk could be included as an additional risk factor for a bank with a significant residential mortgage portfolio. Significant issuer credit exposures, credit spread, migration and jump-to-default measures and credit and/or debit valuation adjustments could also be included to reflect trading portfolio credit risk;
- market risk factors and related measures supporting an analysis of non-trading portfolio to the extent they are relevant, including:
  - *interest rate risk in the banking book*: significant risk factors analysed, for example, by currency or benchmark curve, re-pricing risk, yield curve risk, prepayment risk and basis risks;
  - *foreign exchange risk:* significant currency exposures in non-functional currencies analysed by type, such as net investment structural exposures and non-structural balance sheet exposures; and
  - *equity price risk:* significant equity exposures analysed by core risk factor (e.g. regional or sector equity index).

Relevant shift and/or shock scenarios and their particular effects on earnings, net interest income, capital and/or other risk measures could be presented to the extent that they are consistent with the way the bank manages its risk.

A quantitative analysis showing the effect of changes in significant market risk factors on unfunded pension liabilities as well as how pension liability risk is managed over the long-term could also be presented.

Such disclosures would provide users with more specific information about a bank's exposures and enable them to evaluate how business models vary from bank to bank. This should help to improve transparency and comparability across banks.

Recommendation
24: Provide qualitative and quantitative disclosures that describe significant market risk measurement model limitations, assumptions, validation procedures, use of proxies, changes in risk measures and models through time and descriptions of the reasons for back-testing exceptions, and how these results are used to enhance the parameters of the model.

Banks might consider providing the following types of information:

Model methodology

- Banks could describe significant model assumptions, validation procedures, limitations and usage of proxies, along with risks not captured in VaR and other market risk measurement models such as economic capital and stress testing.
- Banks could disclose the quantitative effects of significant changes to risk models under previous and revised methodologies together with a description to help users understand the extent of the changes. Similarly, banks could describe model limitations and any model-related provisions or reserves as part of their risk management policies, procedures and practices.

Period-on-period variance analysis

- Banks could discuss significant trends and/or period-on-period fluctuations in risk measures. For example, a significant reduction in VaR may be the result of the disposal of a certain portfolio or line of business, changes in portfolio composition, changes in market risk factors, or a combination thereof.

VaR backtesting

- Banks could describe back-testing results and exceptions, including root causes and related actions. The discussion of exceptions could include both profits and losses, and focus on instances where the number of exceptions exceeds that predicted by the reported VaR confidence interval.
- Banks could describe trading revenue components such as intra-day positions, net income, fees, spreads and commissions along with the types of positions included in trading revenue. They could also describe the use of back-testing as a measure of VaR model performance. A graphical comparison of daily VaR to the related daily P&L for the period could enhance clarity and help financial statement users.

These enhancements would add context and clarity to the graphical comparison of daily VaR to daily P&L that many banks currently disclose.

Recommendation	
25:	Provide a description of the primary risk management techniques employed by the bank to measure and assess the risk of loss beyond reported risk measures and parameters, such as VaR, earnings or economic value scenario results, through methods such as stress tests, expected shortfall, economic capital, scenario analysis, stressed VaR or other alternative approaches. The disclosure should discuss how market liquidity horizons are considered and applied within such measures.

Supplemental analyses

Banks could provide other analyses that supplement their primary risk management techniques by describing the potential risk of loss beyond the reported risk measures. For example:

- *Tail risk*: Banks could provide disclosures that describe the methods for measuring tail risk through measures such as expected shortfall, stress tests, scenario analysis and Basel 2.5 stressed VaR. Banks could discuss how these measures relate to one another, as well as how they are evaluated and used by management.
- *Market liquidity horizon*: Banks could discuss how they manage illiquid positions. For example, banks could describe how market liquidity horizons are assessed and applied within market risk measures such as VaR and stress testing, with quantitative results presented as appropriate. The liquidity horizon in this context is defined as the amount of time required to hedge or otherwise neutralise the risk of loss in positions. Reported VaR figures generally assume a one or 10-day horizon, which may not correspond to the time required to neutralise the risk of large or illiquid positions. A one-day horizon may be appropriate for highly liquid positions such as spot yen/dollar, but may be inappropriate for illiquid positions such as certain structured credit instruments.
- *Other analyses*: Other analyses, such as stressed VaR and expected shortfall, could be described to the extent that they are calculated and used by management.

Banks could describe how their disclosed market risk measures relate to the methodology, usage and allocation of economic and regulatory capital, how stress testing is used within the economic capital frameworks applicable to the bank, and the underlying risk aggregation assumptions. A description of how these measures are used within the broader risk governance and capital management frameworks would further enhance disclosures.

Banks could also provide a qualitative discussion of the assumptions used for economic capital measures, including risk aggregation assumptions (e.g., correlation assumptions). This would give users a more holistic view of the bank's full market risk management programme.

6.6 Credit risk

This risk area addresses the risk that a bank will suffer a financial loss if its customers, clients or market counterparties fail to meet a payment obligation under a contract. Such losses result from on- and off-balance sheet items that arise from both banking and trading activities, and from wholesale, corporate and retail businesses.

This section encompasses key areas including credit risk exposures, non-performing or impaired financial assets and related impairment allowances as well as forbearance arrangements. Information about a bank's counterparties, including mitigants to credit risk, such as collateral or netting agreements, is critical to understanding a bank's exposure to credit risk.

Current disclosures

Banks currently publish a wide range of credit risk information. The disclosure of long-established sources of credit risk, such as those arising from retail and corporate lending, and their split by industry or geographical region, is well developed and typically shown. However, credit risk arising from derivative transactions is an area where many banks could improve their disclosures. Other such areas where disclosure could be enhanced include counterparty risk concentrations and the use and value of collateral and forbearance practices. Users would also welcome information about the evolution of restructured loans and the performance of acquired loans.

Current initiatives in this area include work by the International Accounting Standards Board and Financial Accounting Standards Board to develop new financial reporting requirements for the impairment of financial instruments and the disclosure requirements of IFRS 13 'Fair Value Measurement'. These initiatives should increase the quality of credit risk disclosure, and may help improve comparability between banks. Recommendations made by the BCBS and implemented by national regulators are also a source of change in credit risk disclosure, as are separate initiatives by a number of national banking regulators. For example, the Financial Services Authority in the UK takes a close interest in the disclosure by banks of their forbearance strategies.

Sovereign debt is an area where banks' credit risk disclosures have developed relatively rapidly, although users would have preferred a quicker response. In the EU, regulators encouraged better disclosure of financial institutions' exposure to Eurozone uncertainty, including potential default on sovereign debt, through public statements which set out expectations for both qualitative and quantitative disclosure, along with a review of the accounting treatment of Greek sovereign debt. In the US, in early 2012, Securities and Exchange Commission staff issued guidance on disclosure obligations for reporting issuers entitled 'European Sovereign Debt Exposures'. This was aimed at increasing the comparability of disclosures, including in the narrative reporting section of reports.

In general, current disclosures on credit risk are good in certain respects. But overall, there is a lack of consistency in the areas for which banks provide analysis and there are many areas where users find existing disclosures to be insufficiently detailed.

Recommendations for enhanced risk disclosures

Quantitative information on overall credit risk – both on- and off-balance sheet

Recommendation	
26:	Provide information that facilitates users' understanding of the bank's credit risk profile, including any significant credit risk concentrations. This should include a quantitative summary of aggregate credit risk exposures that reconciles to the balance sheet, including detailed tables for both retail and corporate portfolios that segments them by relevant factors. The disclosure should also incorporate credit risk likely to arise from off-balance sheet commitments by type.

A summary of aggregated credit risk exposures that reconciles to the balance sheet will help users assess the more detailed analysis.

Loans to and bonds issued by sovereigns and financial institutions may need to be presented separately, for example, where there are specific concerns about one or more sovereign borrowers in a particular region or where they represent particular concentration risks. Detailed tables of both retail and corporate exposures that segment the portfolio by relevant factors such as line of business, geography and credit quality could be provided where this helps explain the risks arising. Trading books will include both debt securities and derivative exposures that may need to be addressed separately in the risk disclosures.

It would also be helpful to provide narrative disclosures to explain changes in the bank's credit risk profile, including management's views of key credit risks in the forthcoming period, key sensitivities and how the bank intends to manage those risks.

Ensuring that more detailed tables reconcile to the balance sheet would help users understand their context. While credit risk tends to be markedly less volatile than market risk, it is nonetheless subject to change which can be significant. Investors, analysts and regulators have expressed an interest in better understanding movements in credit risk. Referring to areas of concentration or providing qualitative disclosures on how credit risk is impacted by trends in other parts of the economy may help users understand the potential for credit risk to change in the future.

This analysis could include the following:

- *Granular exposure breakouts:* detailed quantitative tables that support the summary credit risk exposure table, with an analysis of both retail and corporate portfolios (including sovereigns and financial institutions) as appropriate. These tables could segment credit risk along multiple dimensions, for example by analysing the performing, restructured and impaired or non-performing loans separately, including a breakdown by factors relevant to the portfolio such as geography, line of business, credit quality (e.g. probability of default, loan-to-value and credit score) and vintage (See **Figures 18 and 19** in Appendix A).

- *Off-balance sheet commitments:* banks could provide a quantitative analysis of the credit risk likely to arise from off-balance sheet commitments by type (undrawn overdrafts, credit card lines and guarantees) along with an indication of how this credit risk was determined.

- *Concentrations of credit risk:* these are of interest to users and could be highlighted in qualitative disclosures. Banks could specifically address higher-risk exposures of current and emerging interest to investors, even when not material. Where it would be informative, banks could consider explaining that a publicly known emerging risk is not material in their circumstances.

Where significant concentrations exist, banks could provide a quantitative analysis of the exposures. For example, many banks already publish tables of European sovereign states to which they have credit risk exposure.

- *Management's view:* as noted in Section 6.1, banks could explain management's view of the main credit risks in the reporting period, the key sensitivities and how the bank intends to manage these risks.

- *Derivatives:* banks could enhance their gross notional derivatives disclosures by quantifying their OTC derivatives and those traded on recognised exchanges. For OTC derivatives, details could be provided of collateralisation agreements by product type.

Impaired or non-performing loans

Banks currently provide information about impairment charges during the reporting period. However, in itself, the impairment charge does not provide complete insight into the asset quality issues that the charge is reflecting. A clear presentation of the state of a bank's asset quality is therefore necessary to help users assess the trends in the loan book in the reporting period. Explaining the bank's practices for loan forbearance and restructured loans and how the presentation of impaired or non-performing loans is affected, including the considerations which go into deciding when a loan can return to a performing status (or is 'cured'), can help users put the impairment information into context and make comparisons more meaningful across the industry. It is notable that, under US reporting requirements, there are consistent industry-wide definitions of both non-performing loans and troubled debt restructurings which help improve comparability.

Recommendations

27: Describe the policies for identifying impaired or non-performing loans, including how the bank defines impaired or non-performing, restructured and returned-to-performing (cured) loans as well as explanations of loan forbearance policies.

28: Provide a reconciliation of the opening and closing balances of non-performing or impaired loans in the period and the allowance for loan losses. See **Figure 8** in the Appendix to Section 5. Disclosures should include an explanation of the effects of loan acquisitions on ratio trends, and qualitative and quantitative information about restructured loans.

Banks could provide quantitative disclosures on impaired or non-performing loans in addition to publishing movements in impairment allowances. These might segregate the banks' corporate and retail portfolios, and indicate how movements in impaired or non-performing loans differ significantly within these portfolios, for example by business, geographical region, or other factors. It may be helpful to explain the treatment of collectively assessed impairment allowances for loans which are not considered to be impaired, for example, by separately identifying this element of the collectively assessed impairment allowance.

Users would also welcome information that would help them understand the performance of restructured and acquired loans.

It would also help users understand the impairment allowance held against impaired or non-performing loans if banks provided similar flow analyses of the loan loss allowance showing the opening allowance, allowances made in the reporting period, corporate and retail charge-offs, corporate and retail recoveries, other changes and the closing allowance. Banks could aim to disclose this information for at least a five-year period, if feasible (see **Figure 20** in Appendix A).

Concentration risks

The financial crisis provided a reminder that significant loan losses can arise from very different credit risk concentrations. To assess a bank's credit risk exposure properly, users need to understand concentration risks.

Significant concentration risks could be highlighted in narrative disclosures. For example, many banks already name the European sovereign states to which they have credit risk exposure and are quantifying the amounts; the continuation of this practice would be welcomed for as long as it is relevant. In addition, banks could provide commentary on management's approach to managing concentration risk.

Derivatives exposure and credit risk mitigation

Some banks provide information about which types of derivative transactions are cleared through a central counterparty. The use of such counterparties, which is set to increase as new regulations require certain transactions to be dealt through them, reduces a bank's exposure to individual counterparties and disclosure about them is relevant to investors.

Investors would like to measure the progress made by banks towards moving OTC derivatives onto exchanges and, where they are not being moved onto exchanges, what progress has been made in moving them to be cleared by central counterparties (CCPs). Where CCPs are not employed, users need to know what collateralisation agreements are in place.

While users generally understand the wide variety of netting arrangements in place, it is not consistently reported under different accounting regimes, at least not on the face of the balance sheet. Banks report net exposures at the balance sheet date, which does not help users understand potential future exposures or possible outcomes in terms of potential collateralisation receipts or calls.

Recommendation
29: Provide a quantitative and qualitative analysis of the bank's counterparty credit risk that arises from its derivatives transactions. This should quantify gross notional derivatives exposure, including whether derivatives are OTC or traded on recognised exchanges. Where the derivatives are OTC, the disclosure should quantify how much is settled by central counterparties and how much is not, as well as provide a description of collateral agreements.

Where CCPs are not used, investors would like to better understand the collateralisation practices a bank has in place. These disclosures could be analysed by product type in a similar manner to that currently used for derivative disclosures (interest rate swaps, foreign exchange swaps, credit default swaps (CDSs), etc) and by vintage, if possible, to illustrate progress in moving to exchanges or CCPs and thus reducing systemic risk.

Where derivatives are OTC and not cleared by a CCP, investors would like to understand the type of transaction by product type in the following categories:

- one-way collateral arrangements, setting out whether the collateral is applied in favour of the bank or the other party;
- bilateral collateral arrangements; and
- uncollateralised arrangements.

It could also be helpful to quantify these derivative disclosures by mark to market positions (positive replacement values and negative replacement values) as well as the gross notional positions.

Banks hold debt securities as part of their routine treasury management and for trading. When accounted for at amortised cost, subsequent deterioration in credit risk may not be apparent to users. Even when accounted for at fair value, the way in which impairments have arisen, and the calculation of impairment charges, is typically less well-disclosed than for impairments arising in the loan book. Accordingly, banks could make further efforts to ensure that credit risk changes affecting all types of assets held are addressed in both the qualitative and quantitative disclosures they provide.

Collateral

As credit risk is so significant, the description of a bank's approach to managing it and the techniques it uses are important elements in its credit risk disclosures.

Recommendation

30: Provide qualitative information on credit risk mitigation, including collateral held for all sources of credit risk and quantitative information where meaningful. Collateral disclosures should be sufficiently detailed to allow an assessment of the quality of collateral. Disclosures should also discuss the use of mitigants to manage credit risk arising from market risk exposures (i.e. the management of the impact of market risk on derivatives counterparty risk) and single name concentrations.

The tools available to manage credit risk include hedging and sales activities, forbearance, netting arrangements, guarantees and collateral. Banks could explain how they use these and other tools with reference to their appetite for credit risk in general and to quantitative limits in particular.

Banks could disclose the use of mitigants (collateral, guarantees, swaps, insurance, etc.) to manage credit risk arising from market risk and credit risk exposures (such as single name concentrations). For example, certain risk mitigants such as CDSs can be used to reduce primary exposure to a sovereign or large corporate borrower while increasing exposure to the financial institution providing the mitigant. Where relevant, this could be discussed. Derivatives disclosure could also include a discussion of how the operational risk of collateralisation is managed.

Qualitative disclosure could address banks' practices for obtaining collateral, the frequency of valuation for different types of collateral, whether an in-house or an external valuer is employed, the use of indices and how future cash flows are estimated. Examples might be whether the collateral is property, secured against sub-prime property, real-estate development or income-producing real estate, or first or second lien, if the loan is a mortgage. Significant market risk inherent within assets held as collateral could also be disclosed.

6.7 Other risks

Scope

In contrast to the risk areas that focus on financial risks – such as credit, market and liquidity risks – the 'other risks' area includes non-financial risks such as operational risk, reputational risk, fraud risk, legal risk and regulatory risk.

Financial institutions are exposed to different types of non-financial risks and frequently define them differently. For example, some banks manage legal risk as part of operational risk, while others manage it separately. As a result, it is difficult – and indeed perhaps impossible – to precisely define the boundaries of this risk area or provide an exhaustive list of the risks that are within its scope. Examples of the types of risks that could be usefully addressed in this risk area are included in the recommendations.

Current disclosures

There are few disclosure requirements for other risks, although some jurisdictions have exchange listing or other rules that require management to provide certain information. Partly as a consequence, there is a lack of broad consensus around what should be disclosed in respect of these risks.

Leading practice generally discusses key risks such as operational risk, reputational risk, fraud risk, and legal risk in terms of the following headings:

- definition of the risk;
- governance and organisational structure;
- description of how the risk is managed;
- description of how the risk is measured (if applicable);
- use of risk mitigation techniques (e.g. insurance); and
- capital allocation, including Pillar 1 (if the risk is included).

Leading practice also clearly identifies new risks and changes in the bank's risk processes, and often separately identifies top and emerging risks. Rather than being a static list of standard risk types, these disclosures include a discussion of recent events, such as litigation, regulatory reviews of mortgage-related activities or anti-money laundering practices, and any actions taken by the bank as a result.

If a risk gives rise to a significant volume of smaller losses, such as with operational risk or fraud risk, leading practice includes aggregated quantitative information about the number of internal and external incidents and the resulting operational losses.

However, current disclosures generally lack a discussion of any lessons learned following the occurrence of a non-financial risk or any changes to its risk processes that the bank made as a result. Disclosures often fail to demonstrate a link between the discussion of risk prevention or mitigation and the consequences of losses, in terms of provisions and contingent liabilities or reputational damage.

While some non-financial risks may result in significant events that have substantial implications for the bank, predicting the possible outcomes of such events is often virtually impossible. There are examples of such events both within and outside the financial services industry, such as the Deepwater Horizon oil spill, the earthquake in Japan in 2011, the liquidation of Bernard L Madoff Investment Securities LLC, and the significant regulatory changes made as a result of the recent financial crisis.

The range of other risks that a bank is managing can, therefore, be broad and, when events occur, they may overlap with disclosures relating to the resulting provisions and contingent liabilities. The occurrence of such an event would be expected to affect a bank's risk management.

Recommendations for enhanced risk disclosures

Recommendations	
31:	Describe 'other risk' types based on management's classifications and discuss how each one is identified, governed, measured and managed. In addition to risks such as operational risk, reputational risk, fraud risk and legal risk, it may be relevant to include topical risks such as business continuity, regulatory compliance, technology, and outsourcing.
32:	Discuss publicly known risk events related to other risks, including operational, regulatory compliance and legal risks, where material or potentially material loss events have occurred. Such disclosures should concentrate on the effect on the business, the lessons learned and the resulting changes to risk processes already implemented or in progress.

Some banks disclose operational losses from period to period. Similarly, some banks disclose the use of risk mitigation and transfer techniques (such as the use of insurance). Such information is useful and, where practical, banks are encouraged to provide it.

Appendix A: Examples of recommended disclosures

This appendix includes examples of suggested disclosure formats which illustrate the additional explanatory guidance in Section 6. All data included in the Figures are for illustrative purposes. It is understood that differing business models, reporting regimes and materiality will affect how banks provide such information.

Figures other than those in the Appendix to Section 5

Capital adequacy and risk-weighted assets

Liquidity

Funding

Credit risk

Capital adequacy and risk-weighted assets

Figure 9. *Example of a reconciliation of regulatory capital to the balance sheet – balance sheets*

	Accounting balance sheet as in published financial statements	Decon-solidation of insurance/ other entities	Consolidation of banking associates/ other entities	Under regulatory scope of consolidation	Cross-refer to
	US$m	US$m	US$m	US$m	
Assets					
Trading assets	560,005	6,892	–	566,897	
Loans and advances to customers	854,604	(12,032)	153,264	995,836	
of which IRB impairment allowances	12,000	–	–	12,000	f
of which STD impairment allowances	1,000	–	1,000	2,000	l
Financial investments	215,648	(35,608)	58,900	238,940	
Investment in JVs and associates	30,000	10,000	(14,000)	26,000	g
of which positive goodwill on acquisition	1,000	–	–	1,000	e
Goodwill and intangible assets	30,000	(3,000)	500	27,500	c
Deferred tax assets	5,000	–	–	5,000	b
Other assets	934,586	(22,698)	58,713	970,601	
of which defined benefit pension fund asset	1,500	–	–	1,500	h
Total assets	2,629,843	(56,446)	257,377	2,830,774	
Liabilities					
Deposits by banks	240,533	(155)	37,853	278,231	
Customer accounts	1,512,369	(780)	245,661	1,757,250	
Trading liabilities	369,852	(230)	6	369,628	
Financial liabilities designated at fair value	90,000	(10,000)	–	80,000	
of which tier 1 capital instruments	2,000	–	–	2,000	k
of which tier 2 capital instruments	10,000	–	–	10,000	m
Debt securities in issue	147,852	–	–	147,852	
Other liabilities	114,560	(44,741)	(28,043)	41,776	
Current and deferred tax liabilities	1,500	(100)	400	1,800	
of which deferred tax liability on goodwill and intangibles	300	–	–	300	d
Retirement benefits	2,500	–	–	2,500	i
Subordinated liabilities	28,000	–	1,500	29,500	
of which tier 1 capital instruments	2,000	–	–	2,000	k
of which tier 2 capital instruments	10,000	–	–	10,000	m
Total shareholders' equity	120,321	(440)	–	119,881	a
Non-controlling interests	2,356	–	–	2,356	j
Total equity and liabilities	2,629,843	(56,446)	257,377	2,830,774	

Figure 10. *Example of a reconciliation of regulatory capital to the balance sheet – capital*

		2012		Cross refer to
	US$m	US$m	US$m	
Total shareholders' equity per accounting balance sheet			120,321	a
Called up share capital			6,772	
Retained earnings			84,801	
Share premium			6,411	
Other equity instruments			4,435	
Other reserves			17,902	
Regulatory adjustments to accounting basis			(47,965)	
Preference share premium			(1,065)	
Other equity instruments			(4,435)	
Deconsolidation of special purpose entities			(2,030)	
Prudential valuation adjustment			(1,000)	
Deferred tax assets that rely on future profitability			–	b
Per balance sheet		(27,500)		c
Deferred tax liability		300		d
Positive purchased goodwill on acquisition		(1,000)		e
Other (regulatory adjustments)		(100)		
Goodwill and intangibles		(28,300)	(28,300)	
Securitisation positions			–	
IRB impairment allowances		12,000		f
Expected loss		(15,000)		
Other (regulatory adjustments)		–		
Shortfall of provisions to expected losses		(3,000)	(3,000)	
Investment in insurance subsidiaries		(3,440)		
Per balance sheet	(26,000)			g
Reverse amount related to banking associates	14,000			
Reverse positive purchased goodwill on acquisition	1,000			e
Investment in JVs and associates	(11,000)	(11,000)		
Deferred tax assets arising from temporary differences		(5,000)		
Amounts below threshold		11,305		
Threshold deductions		(8,315)	(8,135)	
Other (items under transitional arrangements)			–	
Prudential filters			(1,285)	
Asset per the balance sheet		(1,500)		h
Liability per the balance sheet		2,500		i
Tax		(485)		
Other (regulatory adjustments)		–		
Defined benefit pension fund adjustment		515	515	
Own credit spread			(2,000)	
Cash flow hedging reserve			200	
Other (items under transitional arrangements)			–	
Non-controlling interest			1,206	
Per balance sheet			2,356	j
Transferred to other tiers of capital			(150)	
Amount restricted in CET1			(1,000)	
Common equity tier 1 capital			72,277	

	2012 US$m	2012 US$m	Reference
Additional tier 1 capital		9,330	
Preference share premium		1,065	
Other equity instruments		4,435	
Transfer from CET1		(150)	
Hybrid capital securities		3,980	
Per balance sheet	4,000		k
Reversal of own credit spread	(20)		
Other (items under transitional arrangements including regulatory adjustments)		–	
Tier 2 capital		20,500	
Transfer from CET1		–	
Collective impairment allowances		1,000	
Per balance sheet	2,000		l
Reverse the amount that relates to banking associates	(1,000)		
Subordinated debt		19,500	
Per balance sheet	20,000		m
Amortisation	(100)		
Reversal of own credit spread	(400)		
Other (items under transitional arrangements including regulatory adjustments)		–	
Other (items under transitional arrangements including regulatory adjustments)		(1,000)	
Total regulatory capital		101,107	

Figure 11. *Example for disclosures of model approaches and exposure classes*

	Total	Under standardised approach		Under F-IRB approach		Under A-IRB approach		Total	Total capital
	EAD	EAD	RWAs	EAD	RWAs	EAD	RWAs	RWAs	req'ment
	US$m	US$m	US$m	US$m	US$m	US$m	US$m	US$m	US$m
Exposure class:	1,929,639	519,835	342,327	13,528	8,330	1,396,276	524,228	874,885	69,991
Sovereign	453,707	92,005	10,121	–	–	361,702	17,296	27,417	2,193
(significant sub-portfolios …)									
Corporate	627,218	219,896	191,310	13,528	8,330	393,794	242,483	442,123	35,370
(significant sub-portfolios …)									
Institutional	165,489	36,943	17,933	–	–	128,546	25,056	42,989	3,439
(significant sub-portfolios …)									
Mortgages	423,044	90,597	47,110	–	–	332,447	118,614	165,724	13,258
(significant sub-portfolios …)									
Revolving credit ...	136,454	9,681	7,261	–	–	126,773	89,402	96,663	7,733
(significant sub-portfolios …)									
Other	123,727	70,713	68,592	–	–	53,014	31,377	99,969	7,998

Figure 12. *Example for disclosures of model outcomes*

	Average PD	Average LGD	EAD	RWAs	RWA density
	%	%	US$m	US$m	%
Exposure class:			1,396,276	524,228	37.54
Sovereign	0.15	19.56	361,702	17,296	4.78
(significant sub-portfolios …)					
Corporate	2.45	35.73	393,794	242,483	61.58
(significant sub-portfolios …)					
Institutional	0.38	30.32	128,546	25,056	19.49
(significant sub-portfolios …)					
Mortgages	4.85	25.34	332,447	118,614	35.68
(significant sub-portfolios …)					
Revolving credit	2.35	85.45	126,773	89,402	70.52
(significant sub-portfolios …)					
Other	7.85	34.85	53,014	31,377	59.19

Figure 13. *Example for disclosure of estimated and actual loss parameters*

	Average estimated PD	Actual default rate	Average estimated LGD	Actual LGD	Estimated EAD	Actual EAD
	%	%	%	%	US$m	US$m
Exposure class:					1,034	988
Sovereign	0.10	0.01	10.99	11.20	151	150
(significant sub-portfolios …)						
Corporate	3.01	1.58	35.61	28.50	209	189
(significant sub-portfolios …)						
Institutional	0.50	0.02	42.03	30.50	96	99
(significant sub-portfolios …)						
Mortgages	1.85	2.08	15.10	16.02	230	280
(significant sub-portfolios …)						
Revolving credit	2.10	2.70	80.70	80.90	300	270
(significant sub-portfolios …)						
Other	5.20	3.81	60.90	59.20	46	23

Figure 14. *Example for changes in risk parameters since last reporting date*

	Average PD	Average LGD	EAD	RWAs	RWA density
	%	%	US$m	US$m	%
Exposure class:			41,331	1,786	
Sovereign	0.01	(1.56)	22,994	460	(0.19)
(significant sub-portfolios …)					
Corporate	(0.14)	(0.37)	(12,942)	(2,588)	1.33
(significant sub-portfolios …)					
Institutional	(0.01)	(0.17)	500	50	0.04
(significant sub-portfolios …)					
Mortgages	(0.20)	(0.90)	23,337	2,800	1.80
(significant sub-portfolios …)					
Revolving credit	(1.10)	(2.32)	5,324	852	(2.39)
(significant sub-portfolios …)					
Other	(0.45)	(5.75)	2,118	212	(2.04)

Liquidity

Figure 15. *Example of a liquidity reserve disclosure*

Source of incremental funding or margin requirement	Carrying value	Liquidity value
	US$m	US$m
Cash and holdings at central banks	105	105
Deposits in other banks available overnight	15	15
Securities issued or guaranteed by sovereigns, central banks or multilateral development banks	36	33
Other[1]	14	12
Liquid assets eligible at central banks (not included above)	36	36
Undrawn credit lines granted by central banks	32	32
Other assets eligible as collateral for discount[1]	11	9
Other liquid assets[1]	4	3
Total liquid assets	253	245

1 *Narrative explanation could be provided, if relevant.*

Funding

Figure 16. *Example of a disclosure of additional contractual obligations*

Source of incremental funding or margin requirement	One-notch downgrade	Two-notch downgrade
	US$m	US$m
Contractual derivatives funding or margin requirements	11	20
Other contractual funding or margin requirements	2	9

Figure 17. *Example of a disclosure of the composition of wholesale funding*[1]

	Maturity of wholesale funding							
	Not more than 1 month	Over 1 month but not more than 3 months	Over 3 months but not more than 6 months	Over 6 months but not more than 1 year	Sub-total less than 1 year	Over 1 year but not more than 2 years	Over 2 years	Total
	US$m	US$m	US$m	US$m	US$m	US$m	US$m	US$m
At 31 December 2011								
Deposits from banks	16	7	3	1	27	7	1	35
CDs and CP	12	15	14	4	45	2	1	48
Asset-backed CP	5	3	1	–	9	–	–	9
Senior unsecured MTNs	–	2	–	3	5	11	13	29
Senior unsecured structured notes	2	3	4	9	18	20	38	76
Covered bonds/ABS	–	1	1	2	4	10	14	28
Subordinated liabilities	–	–	–	–	–	1	20	21
Other	7	2	1	1	11	2	3	16
Total	42	33	24	20	119	53	90	262
Of which:								
– secured	7	5	3	2	17	11	12	40
– unsecured	35	28	21	18	102	42	78	222

1 *The composition of wholesale funding for the purpose of this table would exclude:*

- *repo transactions that are included in a maturity table of assets, liabilities and off-balance sheet comitments; and*
- *financial instruments issued by the entity that have been distributed via the retail network of the entity and that are not part of the wholesale funding market.*

Credit risk

Figure 18. *Example table for corporate credit risk disclosure*

The disclosure below illustrates possible analyses that could be relevant

		2012 US$m	2011 US$m
Corporate	Performing	218	220
	Restructured	18	18
	Impaired/Non-performing	9	9
		245	247
Corporate	**Geography/business units**		
	Europe	147	148
	US	81	80
	Asia	17	19
	xxx		
		245	247
Corporate	**Industry**		
	Oil and gas	83	85
	Shipping	62	60
	Healthcare	45	42
	Machinery	55	60
	xxx		
		245	247
Corporate	**PD Bands**		
	<5%	115	120
	5-10%	63	61
	11-20%	51	53
	21-50%	6	4
	>50%	10	9
		245	247

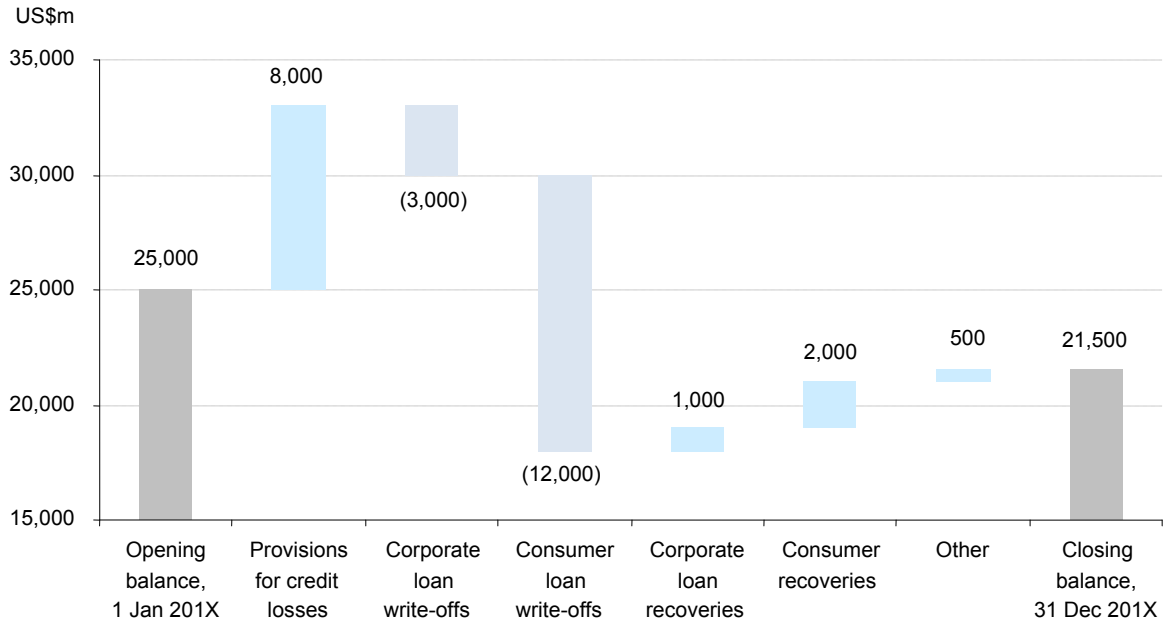
Figure 19. *Example table for retail credit risk disclosure*

The disclosure below illustrates possible analyses that could be relevant for amortised cost loan balances.

		2012 US$m	2011 US$m
Retail	Performing	178	175
	Restructured	9	9
	Impaired/Non-performing	16	16
		203	200
Retail	**LTV**[1]		
	≤50%	110	108
	>50% and ≤70%	46	45
	>70% and ≤90%	18	18
	>90% and ≤100%	12	11
	>100% and ≤110%	6	7
	>110% and ≤130%	6	6
	>130%	5	5
		203	200
Retail	**Geography/business units**		
	Europe	122	120
	US	69	71
	Asia	12	9
	xxx		
		203	200

1 *Relevant to secured lending, e.g. residential mortgages.*

Figure 20. ***Example of a flow statement for impairment allowances***



Appendix B: Examples of leading or best practice disclosures in current bank reporting

To assist banks in adopting the recommendations in this report, this appendix sets out examples of, or excerpts from, leading or best practice disclosures that were presented in banks' recent annual and interim reports, Pillar 3 reports or other publicly available documents. It is important to note that many of the examples set out in this appendix illustrate only particular elements of the relevant recommendation.

Disclosures reproduced (in full or in part) in this appendix:

No.	Description of disclosure	Bank	Report reference	Relevant recommendation	
General recommendations					
1	Top and emerging risks	HSBC Holdings	2011 Annual report, pages 13 and 99-103	3	Top and emerging risks
Risk governance and risk management strategies/business model					
2	Risk management organisation	Goldman Sachs	2011 Annual report, pages 75-76	5	Risk management organisation
3	Compensation structure	Deutsche Bank	2011 Remuneration report, pages 5-8	6	Risk culture
4	Continuous development program	DBS	2011 Annual report, page 47	6	Risk culture
5	Allocation of capital	ING	2011 Annual report, page 109	7	Risk appetite
6	Capital allocation framework	JP Morgan Chase	2011 Annual report, page 123	7	Risk appetite
7	Economic capital	Royal Bank of Canada	2011 Annual report, page 61	7	Risk appetite
8	Analysis of adverse scenarios	Santander	2011 Annual report, page 172	8	Stress testing
Capital adequacy and risk-weighted assets					
9	Scope of the standarised and IRB approaches	Barclays	2011 Pillar 3 report, page 32	14	Method used to calculate RWAs
10	Credit risk by exposure class	Lloyds Banking Group	2011 Pillar 3 report, page 32	15	RWAs - portfolio composition
11	Credit risk metrics by line of business and PD grade	Deutsche Bank	2011 Pillar 3 report, page 73-76	15	RWAs - portfolio composition
12	Credit risk metrics by line of business and PD grade	RBS Group	2011 Pillar 3 report, pages 25-32	15	RWAs - PD grades
Liquidity					
13	Liquidity buffer composition	Nordea	Q1 2012 Fact book, page 73	18	Liquidity reserve
14	Aggregate of liquidity resources	Citigroup	2011 Annual report, page 47	18	Liquidity reserve
Funding					
15	Assets pledged and collateral held	Barclays	2011 Annual report, page 271	19	Asset encumbrance
16	Additional collateral or termination payments that may be required	Goldman Sachs	2011 Annual report, page 83	19	Asset encumbrance
17	Maturity analysis of assets and liabilities	Swedbank	Q1 2012 Fact report, page 72	20	Maturity analysis of assets and liabilities
Market risk					
18	Decomposition of relevant risk factors	Bank of America	2011 Annual report, pages 112 and 115	23	VaR risk factor decomposition
19	Discussion of non-traded portfolios	UBS	2011 Annual report, pages 136-139	23	Non-traded market risk
20	Sensitivity and VaR analyses	RBS Group	2011 Annual report, pages 131-133 and 234	23	Non-traded market risk
21	Year-on-year variance analysis	Barclays	2011 Annual report, page 123	24	Period-on-period variance analysis
22	Changes in VaR model	Credit Suisse	2011 Annual report, pages 117-120	24	Model methodology
23	Graph of daily VaR and P&L	UBS	2011 Annual report, page 135	24	Model methodology and backtesting
24	VaR limitations	Morgan Stanley	2011 Annual report, page 104	24	Model methodology
25	Alternative risk measures	Barclays	2011 Annual report, pages 122 and 123	25	Supplemental analyses
26	Stress testing scenarios and results	BNP Paribas	2011 Annual report, pages 270 and 271	25	Stress testing

No.	Description of disclosure	Bank	Report reference	Relevant recommendation	
Credit risk					
27	Credit risk by industry	Commonwealth Bank of Australia	2012 Annual report, page 182	26	Overview of credit risk
28	Credit exposure by business division	UBS	2011 Annual report, page 119	26	Overview of credit risk
29	Risk of credit-related losses	Mitsubishi UFJ Financial Group	2012 Annual report, pages 8-9	26	Overview of credit risk
30	Impairment and cash loss projections	HSBC Holdings	2011 Annual report, page 151	26	Overview of credit risk
31	Quantitative information on undrawn amounts	Nordea Group	2011 Pillar 3 report, page 15	26	Off balance sheet exposures
32	Renegotiated loans and forbearance	HSBC Holdings	2011 Annual report, pages 129-132	27	Restructured loans
33	Impairment information	Wells Fargo	2011 Annual report, page 144	28	Impairment and non-performing loans
34	Quantitative disclosure on derivatives	UniCredit	2011 Pillar 3 report, page 179	29	Derivatives exposure
35	Quantitative disclosure on derivatives	Deutsche Bank	Q1 2012 Interim report, page 20	29	Derivatives exposure
Other risks					
36	Definition of operational risks	Mizuho	2011 Annual report, page 67	31	Definition of other risks
37	Operational risk management model	Mizuho	2011 Annual report, page 68	31	Description of risk management process for other risks

Other additional leading practice examples, not reproduced in this report.

No.	Description of disclosure	Bank	Report reference	Relevant recommendation	
General recommendations					
38	Roadmap for risk disclosures	Santander	2011 Annual report, page 146	1	Roadmap to risk disclosures
Risk governance and risk management strategies/business model					
39	Graphic of risk governance structure	RBS Group	2011 Annual report, page 42	5	Risk management organisation
40	Total reward principles	UBS	2011 Compensation report, pages 8 and 9	6	Risk culture
41	Design delivery: implementation of the risk appetite framework	RBS Group	2011 Annual report, page 101	6	Risk culture
42	RWAs- Basel 2.5	Credit Suisse	2011 Annual report, page 101	7	Risk appetite
43	Sensitivity of revenues to interest	BNP	2011 Pillar 3 report, page 42	8	Sensitivity analysis
Capital adequacy and risk-weighted assets					
44	Movement in tier 1 capital in the first half of 2012	HSBC Holdings	June 2012 interim report, page 197	11	Flow statement of regulatory capital
45	Credit RWA exposures by rating approach and industry	Lloyds Banking Group	2011 Pillar 3 report, page 35	15	RWAs - portfolio composition
46	Credit RWA exposures by rating approach and contractual maturity	Lloyds Banking Group	2011 Pillar 3 report, page 39	15	RWAs - portfolio composition
Liquidity					
47	Details of additional liquid assets	Swedbank	Q1 2012 Fact book, page 55	18	Liquidity buffer
Funding					
48	Assets charged as security for liabilities and collateral accepted as security	HSBC Holdings	2012 Interim report, page 250	19	Asset encumbrance
49	The value of assets accepted as collateral that the bank is permitted to sell or repledge	HSBC Holdings	2012 Interim report, page 251	19	Asset encumbrance
50	Detailed maturity analysis of liabilities by source	Swedbank Group	Q1 2012 Fact book, page 38	20	Maturity analysis of assets and liabilities
Market risk					
51	Decomposition of relevant risk factors – CVA treatment in VaR	Citigroup	2011 Annual report, page 98	23	VaR risk factor analysis
52	Presentation of non-traded portfolios	BNP Paribas	2011 Annual report, page 272	23	Non-traded market risk

No.	Description of disclosure	Bank	Report reference	Relevant recommendation	
53	Pension sensitivity to actuarial assumptions	HSBC Holdings	2011 Annual report, page 324	23	Pension risk
54	Qualitative discussion of revenue components	JPMorgan Chase	2011 Annual report, page 160	24	VaR back-testing
55	Alternative risk measures	Mizuho	2011 Annual report, page 160	25	Supplemental analyses
56	Use of economic capital	Deutsche Bank	2011 Annual report, pages 100 and 105	25	Economic capital
Credit risk					
57	Maximum exposure to credit risk	Deutsche Bank	2011 Annual report, page 63	26	Overview of credit risk
58	Dynamic nature of credit risk	RBS Group	2011 Pillar 3 report, page 15	26	Overview of credit risk
59	Exposure at default by 10 most important counterparties	Societe Generale	2012 Pillar 3 report, page 40	26	Concentration risks
60	Impairment information	HSBC Holdings	2011 Annual report, page 137	28	Impairment and non-performing loans
61	Valuation control environment	Barclays	2011 Annual report, page 231	29	Derivatives exposure
62	Valuation control environment	RBS Group	2011 Annual report, page 345	29	Derivatives exposure
63	Quantitative disclosure on derivatives	UBS	2011 Annual report, page 360	29	Derivatives exposure
64	Credit concentrations from mortgages	Credit Suisse	2011Annual Report, page 311	30	Collateral
65	Credit concentrations from mortgages and commercial real estate	Santander	2011 Annual report, pages 167-171	30	Collateral
66	Approach to credit risk	Citigroup	2011 Annual report, pages 88-91	30	Collateral
Other risks					
67	Disclosure of significant operational risk loss event: computer systems failure	Mizuho	2011 Annual report, pages 10-18	32	Disclosure of significant loss events
68	Disclosure of significant operational risk loss event: residential mortgages through crisis	JPMorgan Chase	2011 Annual report, pages 27-32	32	Disclosure of significant loss events
69	Operational losses	DNB Group	2011 Pillar 3 report, page 35	32	Operational losses

General recommendations

1. *Top and emerging risks*

Top and emerging risks

We classify certain risks as 'top' or 'emerging'. We define a 'top risk' as being a current, emerged risk which has arisen across any of our risk categories, regions or global businesses and has the potential to have a material impact on our financial results or our reputation and the sustainability of our long-term business model, and which may form and crystallise within a one year horizon. We consider an 'emerging risk' to be one which has large uncertain outcomes which may form and crystallise beyond a one year horizon and, if it were to crystallise, could have a material effect on our long term strategy.

Our approach to identifying and monitoring top and emerging risks is informed by the risk factors.

All of our activities involve, to varying degrees, the measurement, evaluation, acceptance and management of risk or combinations of risks which we assess on a Group-wide basis. Top and emerging risks fall under the following three broad categories:

- macro-economic and geopolitical risk;
- macro-prudential, regulatory and legal risks to our business model;
- risks related to our business operations, governance and internal control systems.

During 2011 our senior management paid particular attention to a number of top and emerging risks which are summarised below:

Macro-economic and geopolitical risk

- Eurozone – risk of sovereign defaults
- Eurozone member departing from the currency union
- Increased geopolitical risk in certain regions

Macro-prudential, regulatory and legal risks to our business model

- Regulatory developments affecting our business model and Group profitability
- Regulatory investigations and requirements relating to conduct of business and financial crime negatively affecting our results and brand
- Dispute risk

Risks related to our business operations, governance and internal control systems

- Challenges to achieving our strategy in a downturn
- Internet crime and fraud
- Social media risk
- Level of change creating operational complexity and heightened operational risk
- Information security risk

All of the above risks are regarded as top risks with the exception of social media risk which is an emerging risk.

A detailed account of these risks is provided on page 99. Further comments on expected risks and uncertainties are made throughout the *Annual Report and Accounts 2011*, particularly in the section on Risk, pages 98 to 210.

Source: HSBC Holdings 2011 Annual Report, page 13.

1. *Top and emerging risks* *(continued)*

Top and emerging risks

(Unaudited)

Details of the top and emerging risks identified through our risk management processes are set out below:

Macro-economic and geopolitical risk

- Eurozone – risk of sovereign default
- Eurozone member departing from the currency union
- Increased geopolitical risk in certain regions

Eurozone – risk of sovereign and counterparty defaults

Exposures to the eurozone have received increasing focus given the continued instability in the area and the potential for contagion from the peripheral to core eurozone countries.

There is an increasing risk of sovereign defaults by the peripheral eurozone countries which would place further pressure on banks within the core European countries that are exposed to these sovereigns. Although our exposure to the peripheral eurozone countries is relatively limited, we are exposed to counterparties in the core European countries which could be affected by any sovereign crisis. Our eurozone exposures are described in more detail on pages 113 to 118.

Potential impact on HSBC

- Our exposures to European banks may come under stress, heightening the potential for credit and market risk losses, if the sovereign debt crisis in the region increases the need to recapitalise parts of the sector.
- Trade and capital flows may contract as a result of banks deleveraging, protectionist measures being introduced in certain markets or the emergence of geopolitical risks, which in turn might curtail profitability.
- A prolonged period of low interest rates due to policy actions taken to address the eurozone crisis will constrain, through spread compression and low returns on assets, the interest income we earn from investing our excess deposits.
- In the event of contagion from stress in the peripheral eurozone sovereign and financial sectors, our ability to borrow from other financial institutions or to engage in funding transactions may be adversely affected by market dislocation and tightening liquidity.
- We have actively managed the risk of sovereign defaults during 2011 by reducing exposures and other measures.

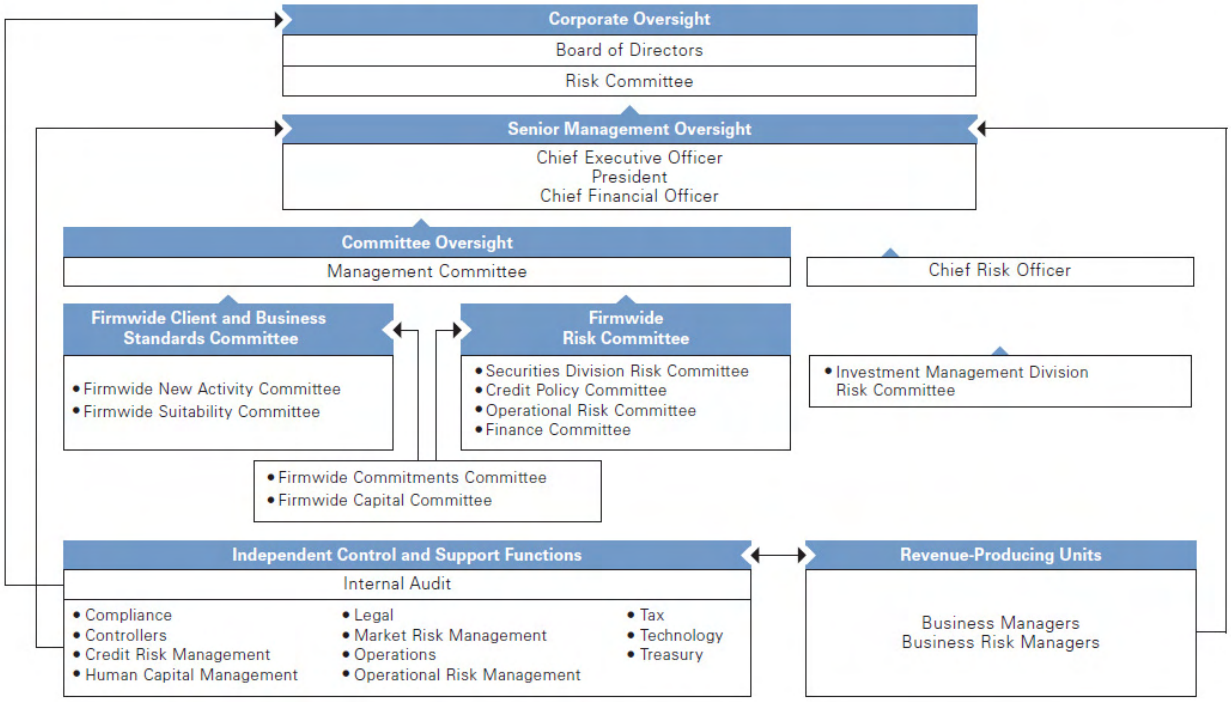
Source: HSBC Holdings 2011 Annual Report, excerpt from pages 99-103.

Risk governance and risk management strategies/business model

2. *Risk management organisation*

Management's Discussion and Analysis

The chart below presents an overview of our risk management governance structure, highlighting the oversight of our Board, our key risk-related committees and the independence of our control and support functions.



Management Committee. The Management Committee oversees the global activities of the firm, including all of the firm's independent control and support functions. It provides this oversight directly and through authority delegated to committees it has established. This committee is comprised of the most senior leaders of the firm, and is chaired by the firm's chief executive officer. The Management Committee has established various committees with delegated authority and the chairperson of the Management Committee appoints the chairpersons of these committees. Most members of the Management Committee are also members of other firmwide, divisional and regional committees. The following are the committees that are principally involved in firmwide risk management.

Firmwide Client and Business Standards Committee. The Firmwide Client and Business Standards Committee assesses and makes determinations regarding business standards and practices, reputational risk management, client relationships and client service, is chaired by the firm's president and chief operating officer, and reports to the Management Committee. This committee also has responsibility for overseeing the implementation of the recommendations of the Business Standards Committee. This committee has established the following two risk-related committees that report to it:

Source: Goldman Sachs 2011 Annual Report, page 75.

2. *Risk management organisation* *(continued)*

- **Firmwide New Activity Committee.** The Firmwide New Activity Committee is responsible for reviewing new activities and establishing a process to identify and review previously approved activities that are significant and that have changed in complexity and/or structure or present different reputational and suitability concerns over time to consider whether these activities remain appropriate. This committee is co-chaired by the firm's head of operations/chief operating officer for Europe, Middle East and Africa and the chief administrative officer of our Investment Management Division who are appointed by the Firmwide Client and Business Standards Committee chairperson.
- **Firmwide Suitability Committee.** The Firmwide Suitability Committee is responsible for setting standards and policies for product, transaction and client suitability and providing a forum for consistency across divisions, regions and products on suitability assessments. This committee also reviews suitability matters escalated from other firm committees. This committee is co-chaired by the firm's international general counsel and the co-head of our Investment Management Division who are appointed by the Firmwide Client and Business Standards Committee.

Firmwide Risk Committee. The Firmwide Risk Committee is responsible for the ongoing monitoring and control of the firm's global financial risks. Through both direct and delegated authority, the Firmwide Risk Committee approves firmwide, product, divisional and business-level limits for both market and credit risks, approves sovereign credit risk limits and reviews results of stress tests and scenario analyses. This committee is co-chaired by the firm's chief financial officer and a senior managing director from the firm's executive office, and reports to the Management Committee. The following four committees report to the Firmwide Risk Committee, which is responsible for appointing the chairperson of each of these committees:

- **Securities Division Risk Committee.** The Securities Division Risk Committee sets market risk limits, subject to overall firmwide risk limits, for our Fixed Income, Currency and Commodities Client Execution and Equities Client Execution businesses based on a number of risk measures, including VaR, stress tests, scenario analyses, and inventory levels. This committee is chaired by the chief risk officer of our Securities Division.
- **Credit Policy Committee.** The Credit Policy Committee establishes and reviews broad credit policies and parameters that are implemented by our Credit Risk Management department (Credit Risk Management). This committee is chaired by the firm's chief credit officer.
- **Operational Risk Committee.** The Operational Risk Committee provides oversight of the ongoing development and implementation of our operational risk policies, framework and methodologies, and monitors the effectiveness of operational risk management. This committee is chaired by a managing director in Credit Risk Management.
- **Finance Committee.** The Finance Committee has oversight of firmwide liquidity, the size and composition of our balance sheet and capital base, and our credit ratings. This committee regularly reviews our liquidity, balance sheet, funding position and capitalization, and makes adjustments in light of current events, risks and exposures, and regulatory requirements. This committee is also responsible for reviewing and approving balance sheet limits and the size of our GCE. This committee is co-chaired by the firm's chief financial officer and the firm's global treasurer.

The following committees report jointly to the Firmwide Risk Committee and the Firmwide Client and Business Standards Committee.

- **Firmwide Commitments Committee.** The Firmwide Commitments Committee reviews the firm's underwriting and distribution activities with respect to equity and equity-related product offerings, and sets and maintains policies and procedures designed to ensure that legal, reputational, regulatory and business standards are maintained on a global basis. In addition to reviewing specific transactions, this committee periodically conducts general strategic reviews of sectors and products and establishes policies in connection with transaction practices. This committee is co-chaired by the global co-head of our Financial Institutions Group for Investment Banking and the head of Mergers & Acquisitions for Europe, Middle East, Africa and Asia Pacific for Investment Banking who are appointed by the Firmwide Client and Business Standards Committee chairperson.

Source: Goldman Sachs 2011 Annual Report, page 76.

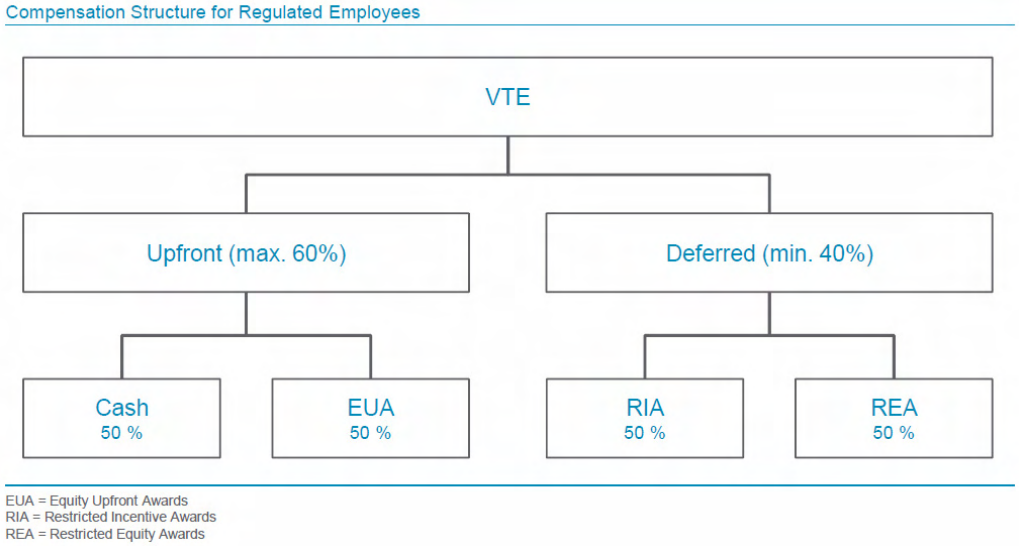
3. *Compensation structure*

Compensation Structures for Regulated Employees

Regulated Employees are subject to the same matrix as the general employee population in order to determine the percentage of their variable award that is deferred. All Regulated Employees are subject to a minimum of 40% deferral as required under the InstitutsVergV regulations, however in practice, many are subject to deferral rates of 80% and higher. The highest earning Regulated Employees and by association, typically the most senior employees in the bank, are subject to deferral rates in excess of 90%.

All Regulated Employees receive 50% of their deferred variable remuneration in the form of equity (REA) and 50% in restricted cash (RIA). The deferred equity award is subject to a minimum three year vesting period during which time performance and behavioural forfeiture provisions apply (for more details see below). Upon the vesting of each tranche, a further minimum six month retention period applies during which time employees are not permitted to sell the shares. The remaining 50% of the deferred award in cash is subject to a minimum three year vesting period during which time, performance and behavioural forfeiture provisions apply.

In accordance with Section 5 InstitutsVergV regulations, 50% of the upfront award (the remaining portion after the deferred percentage is calculated) is also awarded in equity (an Equity Upfront Award 'EUA'). At award, the equity is subject to a minimum six month retention period during which time the shares cannot be sold. As a result of 50% of the upfront award being delivered in equity, Regulated Employees receive a maximum of 30% of their total discretionary variable compensation in upfront cash. In practice, for Regulated Employees with deferral rates in excess of 80 or 90%, this equates to an upfront cash payment of approximately 5%-10% or less of the overall value of their award.



Source: Deutsche Bank 2011 Remuneration Report, page 5.

3. *Compensation structure* *(continued)*

Ex-post risk adjustment measures for Regulated Employees

The Bank continues to support the use of clawback provisions for deferred compensation awards to ensure the ultimate value of compensation awarded to employees is reflective of the Bank's performance and the performance of the individual themselves and their respective division.

The 2011 variable compensation awards to Regulated Employees include the following clawback provisions:

Group clawback

This clawback utilises positive Group NIBT (Net Income Before Income Taxes) as a performance condition for vesting in the full value of the Restricted Equity Award (REA) and Restricted Incentive Award (RIA) granted for 2011. The performance condition is met only if Group NIBT is zero or greater. If Group NIBT is negative for any year during the three year vesting period the performance condition will not be met and 100% of the REA and RIA tranches due to vest in respect of that year will be forfeited.

Divisional clawback

This clawback utilises positive Divisional NIBT as a performance condition for vesting in the full value of the REA and RIA granted for 2011. The performance condition is met for individual employees only if their respective Divisional NIBT is zero or greater. If NIBT is negative for any Division during any year of the three year vesting period, the performance condition will not be met and 100% of the REA and RIA tranches due to vest in respect of that year will be forfeited by all employees in the applicable Division.

The Divisional clawback measure does not apply to Regulated Employees working in Infrastructure divisions on the basis that they are not revenue generating.

Performance Forfeiture clawback

This clawback puts an employee's RIA at risk into the future and allows Deutsche Bank to determine whether adjustments may be necessary based on actual outcomes. Up to 100% of an employee's unvested RIA award can be clawed back in the event that the Bank discovers that the original award value was inappropriate because a performance measure is later deemed to be materially inaccurate or if a deal, trade or transaction considered to be attributable to the employee has a significant adverse effect on a DB Company, Division or the DB Group.

Policy/Regulatory Breach clawback

All of the Bank's long-term compensation plans contain a behavioural clawback, which includes provisions providing for the forfeiture of all unvested and unpaid compensation if an employee is terminated for misconduct, including but not limited to, dishonesty, fraud, misrepresentation or breach of trust. An award may also be clawed back for an internal policy or procedure breach or breach of any applicable laws or regulations imposed other than by the Bank. Specific tranches of an award may also be forfeited where it is determined that a policy breach has occurred, however the disciplinary sanctions fall short of termination for Cause.

Each of the above clawbacks were applied to the 2010 variable compensation awards granted to Regulated Employees. For 2011 awards, however, the Bank has extended the Group and Divisional clawbacks such that either clawback may now trigger the forfeiture of both the RIA and REA tranches. As such, if the Group NIBT is negative in a particular year, all Regulated Employees will forfeit both REA and RIA tranches in respect of that year. If a Division's NIBT is negative then all Regulated Employees from the Division will forfeit both the RIA and REA tranches. In addition to the enhancements made in respect of clawbacks for deferred awards, the Bank has determined that the EUA will be subject to the Policy/Regulatory Breach clawback during the retention period and will also carry a service requirement until the delivery date. Both of these provisions represent enhancements to the 2010 EUA clawback provisions.

Source: 2011 Deutsche Bank Remuneration Report, page 6.

3. *Compensation structure* *(continued)*

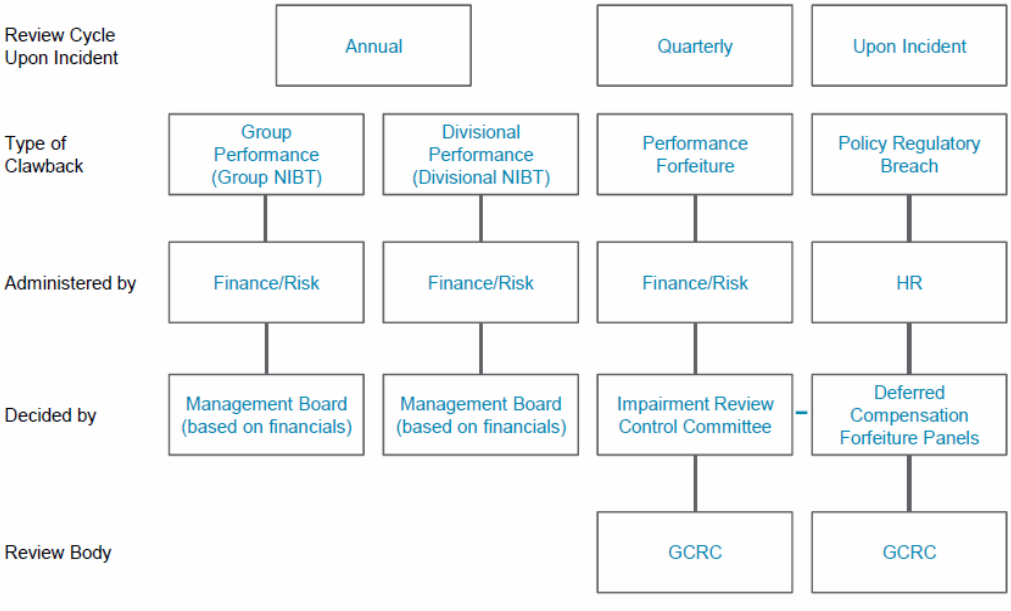
Performance Forfeiture Governance

The Bank is mindful that the implementation of performance adjustment and clawback measures is just one step in the overall governance process. It is equally important that formal measures are taken to ensure the policies are monitored closely by appropriately qualified and experienced members of the Bank's independent control functions who have the authority to take appropriate action where required. The NIBT conditions are explicit and quantitative in nature and therefore are formally determined based on Bank-wide and divisional results following the end of each financial year.

The Performance Forfeiture clawback is more subjective in nature and, given its expansion to a far larger population of employees, it is essential that it is effectively governed. To ensure this, the Bank has established an independent control body, the Impairment Review Control Committee (IRCC). The Committee is empowered in this role by the SECC and membership includes representatives from the Bank's Risk, Legal and HR Divisions, in addition to the Chief Financial Officers aligned to each revenue earning Division. This committee will be responsible for reviewing potential forfeiture cases, including reviewing all financial and risk evidence, and reaching forfeiture decisions.

Throughout the course of a year, the Bank incurs numerous profit and loss transactions in the normal course of operations. Risk and Finance will be responsible for independently identifying to the IRCC which items are outside the Bank's normal operations. Other control functions, and the Divisions themselves, will also be required to self-report to the IRCC in instances where they believe that losses or one-off costs require formal investigation. The IRCC will meet quarterly to assess the relevant cases in a timely manner to ensure that forfeitures are communicated in the appropriate time span. If cases require adjudication outside of the quarterly cycle, the committee will meet as necessary. Cases brought to the IRCC for review, especially those raised by the Divisions themselves, may also involve aspects of behaviour that could trigger the Bank's Policy/Regulatory Breach clawback (and vice versa). For this reason the IRCC will work closely with the Deferred Compensation Forfeiture Panels globally to ensure a thorough review of both the financial and behavioural aspects of all potential forfeiture cases.

Clawback Overview and Governnance



Source: Deutsche Bank 2011 Remuneration Report, pages 7 and 8.

4. Continuous development program

Continuous Development Program ("CDP")

Sustainable high quality performance is an important factor in the proper discharge of the duties of directors. During the course of 2011, the NC continued to implement the CDP for directors to ensure that they are continually equipped with the appropriate skills and knowledge to perform their roles on the Board and the committees. These sessions ensured that all directors received regular updates on relevant new legislation, regulations and changing market conditions. The CDP is based on the Guidelines.

The CDP has the following key objectives:

(i) Augmenting the knowledge of Board members so that they can contribute effectively.
(ii) Providing ongoing training conducted by external advisors and professional trainers to ensure all directors receive the knowledge they need to effectively carry out their duties.
(ii) Ensuring that the Board is kept abreast of regulatory and legislative developments and changes across key markets.

During the financial year, the following training programmes were provided to directors:

– An update on international accounting standards.

– A presentation on current regulatory hot topics and risk issues.

– The members of the BRMC attended two internal workshops on the Group's risk appetite framework as well as the approach, implementation plans and timelines for various initiatives within the risk area.

Board members also attended three modules of training delivered by external speakers organised by MAS covering a range of topics as follows:

Module One
Key lessons learnt on board direction and oversight from bank failures and the recent financial crisis. This module focused on areas in which boards should pay greater attention in order to provide better oversight of bank operations. Financial reform proposals were also addressed with a focus on the implication for banks.

Module Two
Issues and challenges faced by bank boards; enhancing the effectiveness and performance of the board; how to strengthen the role of directors, especially independent directors; interaction between board and management, and best practices in board oversight of a bank's operation.

Module Three
Board's role in supervising banks to meet desired outcomes of MAS' supervision of banks; how boards might achieve this and discussion on how bank boards and the regulator can forge a closer working relationship in order to meet supervisory objectives more effectively.

Source: DBS 2011 Annual Report, page 47.

5. *Allocation of capital*

Economic and Regulatory Capital (Bank diversified only) by risk type

	Economic Capital		Regulatory Capital	
	2011	2010	**2011**	2010
Credit risk	**14,365**	15,245	**22,474**	22,452
Market risk	**8,262**	7,233	**1,124**	364
Business Risk	**2,448**	2,435		
Operational Risk	**1,683**	1,619	**2,836**	2,872
Total banking operations	**26,758**	26,532	**26,434**	25,688

Economic Capital (Bank diversified only) by business line combination

	Economic Capital		Regulatory Capital	
	2011	2010	**2011**	2010
Commercial Banking	**9,726**	10,695	**11,615**	11,395
Retail Banking Benelux	**4,445**	4,613	**5,552**	5,498
Retail Banking Direct & International	**9,475**	8,881	**8,783**	8,587
Corporate Line Bank (1)	**3,112**	2,343	**484**	208
Total banking operations	**26,758**	26,532	**26,434**	25,688

Source: ING 2011 Annual Report, page 109.

6. *Capital allocation framework*

Line of business equity

December 31, (in billions)	2011	2010
Investment Bank	$ 40.0	$ 40.0
Retail Financial Services	25.0	24.6
Card Services & Auto	16.0	18.4
Commercial Banking	8.0	8.0
Treasury & Securities Services	7.0	6.5
Asset Management	6.5	6.5
Corporate/Private Equity	73.3	64.3
Total common stockholders' equity	$ 175.8	$ 168.3

Line of business equity

Year ended December 31, (in billions)	Yearly Average 2011	2010	2009
Investment Bank	$ 40.0	$ 40.0	$ 33.0
Retail Financial Services	25.0	24.6	22.5
Card Services & Auto	16.0	18.4	17.5
Commercial Banking	8.0	8.0	8.0
Treasury & Securities Services	7.0	6.5	5.0
Asset Management	6.5	6.5	7.0
Corporate/Private Equity	70.8	57.5	52.9
Total common stockholders' equity	$ 173.3	$ 161.5	$ 145.9

Line of business equity

The Firm's framework for allocating capital is based on the following objectives:

- Integrate firmwide and line of business capital management activities;
- Measure performance consistently across all lines of business; and
- Provide comparability with peer firms for each of the lines of business

Equity for a line of business represents the amount the Firm believes the business would require if it were operating independently, incorporating sufficient capital to address regulatory capital requirements (including Basel III Tier 1 common capital requirements), economic risk measures and capital levels for similarly rated peers. Capital is also allocated to each line of business for, among other things, goodwill and other intangibles associated with acquisitions effected by the line of business. ROE is measured and internal targets for expected returns are established as key measures of a business segment's performance.

Effective January 1, 2010, the Firm enhanced its line of business equity framework to better align equity assigned to the lines of business with changes anticipated to occur in each line of business, and to reflect the competitive and regulatory landscape. The lines of business are now capitalized based on the Tier 1 common standard, rather than the Tier 1 capital standard. Effective January 1, 2011, capital allocated to Card was reduced by $2.4 billion to $16.0 billion, largely reflecting portfolio runoff and the improving risk profile of the business; capital allocated to TSS was increased by $500 million, to $7.0 billion, reflecting growth in the underlying business.

Effective January 1, 2012, the Firm further revised the capital allocated to certain businesses, reflecting additional refinement of each segment's Basel III Tier 1 common capital requirements. The Firm continues to assess the level of capital required for each line of business, as well as the assumptions and methodologies used to allocate capital to the business segments, and further refinements may be implemented in future periods.

Source: JPMorgan Chase 2011 Annual Report, page 123.

7. Economic capital

Economic Capital

Economic capital is our internal quantification of risks associated with business activities which is the capital required to remain solvent under extreme market conditions, reflecting our objective to maintain a debt rating of at least AA. Economic capital is attributed to each business segment in proportion to management's assessment of the risks. It allows for comparable performance measurements among our business segments through ROE and RORC as described in the Key performance and non-GAAP measures section and also aids senior management in determining resource allocation in conjunction with other factors.

Economic capital is also used to assess the adequacy of our capital base. Our policy is to maintain a level of available capital, defined as common equity and other capital instruments with equity-like permanence and loss absorption features such as preferred shares and Innovative Tier 1 instruments that exceed Economic capital with a comfortable cushion.

Economic capital is calculated and attributed on a wider array of risks than is Basel II Pillar I regulatory capital, which is calibrated predominantly to target credit, market (trading) and operational risk measures. Economic capital is calculated based on credit, market (trading and non-trading), operational, business and fixed asset, and insurance risks and includes capital attribution for goodwill and other intangibles.

- Business risk is the risk of loss or harm due to variances in volumes, prices and costs caused by competitive forces, regulatory changes, reputation and strategic risks.
- Fixed asset risk is defined as the risk that the value of fixed assets will be less than their book value at a future date.

For further discussion on credit, market, operational and insurance risks, refer to the Risk management section.

The calculation and attribution of economic capital involves a number of assumptions and judgments by management which are monitored to ensure that the economic capital framework remains comprehensive and consistent. The models are benchmarked to leading industry practices via participation in surveys, reviews of methodologies and ongoing interaction with external risk management industry professionals.

We revised our economic capital methodology, prospectively, effective November 1, 2010. For further details, refer to the How we measure and report our business segments section.

The following provides a discussion of our Economic capital from continuing operations.

Economic capital — **Table 63**

(C$ millions, average balances)	2011	2010
Credit risk	$ 10,100	$ 8,250
Market risk (trading and non-trading)	4,200	3,300
Operational risk	4,350	3,250
Business and fixed asset risk	2,950	2,250
Insurance risk	550	350
Risk capital	$ 22,150	$ 17,400
Goodwill and intangibles	9,450	8,400
Economic capital	31,600	25,800
Under attribution of capital	900	3,650
Average common equity from discontinued operations	3,050	3,800
Average common equity	$ 35,550	$ 33,250

Economic capital increased $5.8 billion from a year ago, mainly due to the change in the capital allocation methodology noted above of which $4.7 billion was attributed across different risk types and business segments. The remaining $1.1 billion was largely due to higher goodwill and intangibles from the acquisition of BlueBay and higher Operational & Business risk due to revenue growth. These factors were partially offset by lower Credit risk mainly due to a reduction in the capital rate for non accrual loans and the impact of a stronger Canadian dollar.

We remain well capitalized with current levels of available capital exceeding the economic capital required to underpin all of our material risks.

Source: Royal Bank of Canada 2011 Annual Report, page 61.

8. *Analysis of adverse scenarios*

Analysis of scenarios
As part of its management of monitoring and continuous control, the Group conducts simulations of its portfolio using adverse scenarios and stress tests in order to assess the Group's solvency in the face of certain situations in the future. These simulations cover all the Group's most relevant portfolios and are done systematically using a corporate methodology which:

- Determines the sensitivity of risk factors (PD, LGD) to certain macroeconomic variables.
- Defines reference scenarios (at the global level as well as for each of the Group's units).
- Identifies rupture scenarios (levels as of which the sensitivity of risk factors to macroeconomic variables is more accentuated) and the distance of these scenarios from the current situation and the reference scenarios.
- Estimates the expected loss of each scenario and the evolution of the risk profile of each portfolio in the face of movements in certain macroeconomic variables.

The simulation models use the data of a complete economic cycle to measure the performance of risk factors in the face of changes in macroeconomic variables.

The scenarios take into account the vision of each unit as well as the global vision. The macroeconomic variables include:

- The unemployment rate
- Property prices
- GDP
- Interest rates
- Inflation

The analysis of scenarios enables senior management to better understand the foreseeable evolution of the portfolio in the face of market conditions and changing situations, and it is a key tool for assessing the sufficiency of the provisions established for stress scenarios.

The analysis of the baseline and acid scenarios for the whole Group and for each unit, with a time frame of three years, shows the strength of the balance sheet to different market and macroeconomic situations.

EU Stress test exercises
In order to assess the solvency and resistance of banks to an adverse scenario, the European Banking Authority (EBA), in cooperation with the Bank of Spain, the European Central Bank, the European Commission and the European Systemic Risk Board, conducted in 2011 a stress test on 91 banks representing 65% of the total assets of the European banking system.

The EBA's stress test analysed the level of capital that banks would reach in 2012 and their evolution since the end of 2010 (the starting point) in two types of scenario: a benchmark scenario and an adverse one. The exercise assumed that the balance sheet remained without changes over its starting position, the business model remained constant by countries and product strategies, and there are no acquisitions or disposals. It therefore does not reflect the estimate that the bank's management could have of the development of the Group's results over the next two years. The banks submitted to the test had to have, initially, a Tier 1 core ratio of at least 5% in the most adverse scenario.

In the case of Santander, the stress tests showed the strength and validity of its business model. The results published on July 15, 2011 show that even in the most adverse scenario, the Group is able to generate profits, distribute dividends and continue to generate capital. Santander will end 2012 with a Tier 1 capital of 8.4% in the most adverse scenario and 8.9% including generic provisions.

These results compare very well with those of our competitors. Santander will be the bank that will post the most profits in the most adverse scenario (EUR 8,092 million in 2011 and 2012).

Source: Santander 2011 Annual Report, page 172.

Capital adequacy and risk-weighted assets

9. *Scope of standardised and IRB approaches*

Table 7: The scope of the Standardised and IRB approaches

Business	Credit Risk Weighted Assets	Counterparty Credit Risk Weighted Assets	Standardised Approach	Foundation IRB Approach	Advanced IRB Approach
UK Retail & Business Banking	£29,089m		Certain minor portfolios within personal accounts, mortgages and consumer loans	None	Most portfolios
Europe Retail & Business Banking	£15,838m	£2m	All other portfolios	None	Portugal mortgages, Italy mortgages, Spain mortgages, Spain cards, Italy personal loans
Africa RBB	£29,834m	£6m	All Barclays Africa portfolios (excluding Absa). Certain minor Absa portfolios.	Wholesale portfolios in Absa	Retail portfolios in Absa
Barclaycard	£29,429m		Non UK portfolios except Germany, UK Secured Lending, Partnerships, Recent Acquisitions	None	UK retail credit cards, Germany retail credit cards
Barclays Capital	£62,213m	£37,361m	Certain insurer and fund manager portfolios, certain non-UK or emerging market portfolios	None	Most portfolios
Barclays Corporate	£65,163m	£562m	Non UK portfolios, asset and sales finance, New Markets and Western Europe portfolios	None	Larger and Medium business portfolios, UK trade finance portfolios
Barclays Wealth	£11,394m	£153m	Most portfolios	None	Spain Mortgages
Head office Functions and other operations	£2,265m		None	None	All portfolios

Barclays continuously develops credit models for the calculation of regulatory capital and aims to use the Advanced Internal Ratings Based (AIRB) approach for all of its significant portfolios. To achieve this target, Barclays has a well developed AIRB roll-out plan which is discussed with our regulators and updated on a 6-monthly basis. The plan is based on current regulatory requirements with portfolios taken advanced as soon as practicable, recognising any data constraints and methodology challenges.

Source: Barclays 2011 Pillar 3 Report, page 32.

10. *Credit risk by exposure class*

CREDIT RISK EXPOSURE: ANALYSIS BY EXPOSURE CLASS

As at 31 December 2011 the total credit risk exposures of the Group amounted to £807.6bn (2010: £878.5bn).

Credit risk exposures by exposure class are provided in the table below, together with the associated RWA, average risk weight and average credit risk exposure.

Exposure Class	2011 Credit Risk Exposure £m	2011 Risk Weighted Assets £m	2011 Average Risk Weight %	2011 Average Credit Risk Exposure [4] £m
Exposures subject to the IRB Approach				
Foundation IRB Approach				
Corporate - Main	100,796	60,405	60%	100,190
Corporate - SME	23,162	15,168	65%	25,631
Corporate - Specialised lending	8,028	6,683	83%	8,351
Central governments and central banks	17,714	1,299	7%	13,766
Institutions	11,892	2,426	20%	16,456
Retail IRB Approach				
Retail - Residential mortgages	361,121	58,926	16%	365,115
Retail - Qualifying revolving retail exposures	38,614	19,112	49%	40,449
Retail - Other retail	16,642	18,479	111%	18,366
Retail - SME	2,642	2,306	87%	2,593
Other IRB Approaches [1]				
Corporate - Specialised lending	5,961	4,469	75%	6,006
Equities - Exchange traded	-	-	-	-
Equities - Private equity	-	-	-	-
Equities - Other	15	57	370%	8
Securitisation positions [2]	31,027	9,376	30%	36,112
Total - IRB Approach	617,614	198,706	32%	633,043
Exposures subject to the Standardised Approach				
Central governments and central banks	72,442	57	0%	71,471
Regional governments or local authorities	41	8	20%	53
Administrative bodies and non-commercial undertakings	371	361	97%	360
Multilateral development banks	83	-	-	28
Institutions	1,177	399	34%	1,163
Corporates	34,805	33,478	96%	38,823
Retail	8,032	6,030	75%	10,013
Secured on real estate property	38,037	31,473	83%	40,729
Past due items	8,678	9,907	114%	13,195
Items belonging to regulatory high risk categories	2,433	3,603	148%	2,367
Securitisation positions	-	-	-	9
Short term claims on institutions or corporates	456	451	99%	976
Collective investment undertakings	113	24	21%	77
Other items [3]	23,330	17,734	76%	25,764
Total - Standardised Approach	189,998	103,525	54%	205,028
TOTAL	807,612	302,231	37%	838,071

Notes

[1] Credit risk exposures subject to other IRB approaches include corporate specialised lending exposures risk weighted in accordance with supervisory slotting criteria, equity exposures risk weighted in accordance with the Simple Risk Weight Method and securitisation positions risk weighted in accordance with the Internal Assessment Approach, Ratings Based Approach or Supervisory Formula Approach.

[2] Securitisation positions exclude amounts allocated to the 1,250% risk weight category. These amounts are deducted from capital, after the application of value adjustments, rather than being risk weighted at 1,250%.

[3] Other items (Standardised Approach) predominantly relate to other balance sheet assets that have no associated credit risk. These comprise various non-financial assets, including fixed assets, cash, items in the course of collection, prepayments, sundry debtors and deferred tax assets.

[4] Average credit risk exposure represents the average exposure across the year to 31 December.

Source: Lloyds Banking Group 2011 Pillar 3 Report, page 32.

11. *Credit risk metrics by line of business and PD grade* *(continued)*

6.3 Advanced IRBA Exposure

The advanced IRBA requires differentiating a bank's credit portfolio into various regulatory defined exposure classes namely central governments, institutions, corporates and retail clients. The Group identifies the relevant regulatory exposure class for each exposure by taking into account factors like customer-specific characteristics, the rating system used as well as certain materiality thresholds which are regulatory defined.

The tables below show the Group's advanced IRBA exposures, excluding Postbank, distributed on a rating scale and separately for each regulatory IRBA exposure class. The EAD is presented in conjunction with exposures-weighted average PD, LGD and risk weight ("RW") information. The information is shown after credit risk mitigation obtained in the form of financial, physical and other collateral as well as guarantees and credit derivatives. The effect of double default, as far as applicable, is considered in the average risk weight. It implies that for a guaranteed exposure a loss only occurs if the primary obligor and the guarantor fail to meet their obligations at the same time.

It has to be noted that the EAD gross information for exposures covered by guarantees or credit derivatives is assigned to the exposure class of the original counterparty respectively whereas the EAD net information assigns the exposures to the protection seller. As a consequence the EAD net can be higher than the EAD gross.

Source: Deutsche Bank 2011 Pillar 3 Report, page 73.

11. *Credit risk metrics by line of business and PD grade (continued)*

Table 25 EAD of Advanced IRBA Credit Exposures by PD Grade

Dec 31, 2011

	AAA – AA 0.00 – 0.04 %	A 0.04 – 0.11 %	BBB 0.11 – 0.5 %	BB 0.5 – 2.27 %	B 2.27 – 10.22 %	CCC 10.22 – 99.99 %	Default[1]	Total
Central Governments								
EAD gross in € m.	102,638	2,712	2,280	1,669	759	380	163	110,601
EAD net in € m.	113,128	2,716	2,023	818	276	0	163	119,124
Average PD in %	0.00	0.07	0.27	1.37	5.28	21.82	100.00	0.17
Average LGD in %	48.01	42.12	46.68	11.14	35.45	50.00	5.00	47.51
Average RW in %	0.27	23.36	45.71	33.39	124.98	289.48	62.50	2.17
Institutions								
EAD gross in € m.	27,831	36,188	15,543	4,227	182	230	136	84,337
EAD net in € m.	29,482	43,156	13,539	3,287	148	224	136	89,972
Average PD in %	0.04	0.06	0.25	0.99	4.65	21.89	100.00	0.33
Average LGD in %	23.65	29.18	22.81	20.29	29.75	14.55	10.01	26.02
Average RW in %	7.10	11.75	26.28	48.34	98.72	84.20	61.08	14.15
Corporates								
EAD gross in € m.	98,278	69,659	74,786	50,666	24,246	10,784	7,519	335,939
EAD net in € m.	97,813	70,082	69,951	45,518	21,159	10,019	7,169	321,711
Average PD in %	0.03	0.07	0.24	1.14	4.65	23.14	100.00	3.49
Average LGD in %	26.79	35.86	31.83	26.35	25.94	14.25	26.58	29.35
Average RW in %	9.72	18.51	32.57	56.93	92.11	78.46	29.02	31.27
Retail Exposures Secured by Real Estate Property								
EAD gross in € m.	1,286	3,444	15,979	30,695	10,446	2,784	1,185	65,819
EAD net in € m.	1,286	3,444	15,971	30,657	10,409	2,764	1,171	65,703
Average PD in %	0.03	0.08	0.28	1.18	4.36	21.66	100.00	4.01
Average LGD in %	8.70	9.14	9.57	9.99	10.19	10.45	14.00	9.94
Average RW in %	0.94	1.92	5.09	14.61	31.89	60.46	0.83	15.78
Qualifying Revolving Retail Exposures[2]								
EAD gross in € m.	277	1,208	1,722	1,023	307	73	53	4,664
EAD net in € m.	277	1,208	1,722	1,023	307	73	53	4,664
Average PD in %	0.03	0.08	0.24	1.04	4.45	20.24	100.00	2.09
Average LGD in %	40.27	40.37	39.40	37.59	38.78	38.31	42.37	39.28
Average RW in %	1.10	2.12	5.11	15.50	45.14	102.69	6.95	10.57
Other Retail Exposures[2]								
EAD gross in € m.	175	691	5,239	9,568	4,777	2,021	1,024	23,495
EAD net in € m.	199	756	5,393	9,593	4,841	1,980	935	23,697
Average PD in %	0.03	0.08	0.29	1.14	4.64	21.61	100.00	7.23
Average LGD in %	30.74	33.36	42.31	41.91	43.67	35.35	49.74	41.75
Average RW in %	3.66	7.51	23.36	45.56	67.18	83.31	2.32	44.81
Total IRBA Exposures								
EAD gross in € m.	230,486	113,901	115,549	97,848	40,718	16,273	10,081	624,856
EAD net in € m.	242,185	121,362	108,599	90,895	37,140	15,062	9,628	624,871
Average PD in %	0.02	0.07	0.25	1.15	4.57	22.64	100.00	2.59
Average LGD in %	36.25	32.90	28.35	22.24	24.03	16.45	26.79	30.84
Average RW in %	4.92	15.51	27.10	40.47	71.87	76.00	23.90	21.99

[1] The relative low risk weights in the column "Default" reflect the fact that capital requirements for defaulted exposures are principally considered as a deduction from regulatory capital equal to the difference in expected loss and allowances.
[2] The changes in comparison to 2010 reflect predominantly an exposure reassignment from the exposure class "Qualifying Revolving Retail Exposures" to "Other Retail Exposures" following a revision of the allocation method.

Source: Deutsche Bank 2011 Pillar 3 Report, page 74.

11. *Credit risk metrics by line of business and PD grade (continued)*

	AAA – AA 0.00 – 0.04 %	A 0.04 – 0.11 %	BBB 0.11 – 0.5 %	BB 0.5 – 2.27 %	B 2.27 – 10.22 %	CCC 10.22 – 99.99 %	Default[1]	Total
								Dec 31, 2010
Central Governments								
EAD gross in € m.	47,437	2,973	2,270	1,570	936	449	–	55,636
EAD net in € m.	57,821	2,973	2,193	666	450	1	–	64,104
Average PD in %	0.00	0.07	0.32	1.12	3.93	22.00	–	0.05
Average LGD in %	48.32	42.46	43.64	32.46	25.04	50.00	–	47.56
Average RW in %	0.63	20.06	51.92	66.75	87.20	287.23	–	4.58
Institutions								
EAD gross in € m.	44,182	56,871	22,617	6,328	2,230	983	628	133,839
EAD net in € m.	46,160	61,583	20,735	4,837	1,576	870	601	136,363
Average PD in %	0.04	0.06	0.25	0.97	4.65	18.72	100.00	0.73
Average LGD in %	23.28	30.50	26.56	27.56	23.64	23.07	27.92	27.21
Average RW in %	7.34	15.35	26.39	54.25	76.47	103.09	28.99	17.02
Corporates								
EAD gross in € m.	174,234	60,496	61,596	49,510	17,345	10,465	8,079	381,726
EAD net in € m.	175,342	58,069	58,665	45,993	15,112	9,826	7,857	370,864
Average PD in %	0.03	0.07	0.25	1.15	4.42	24.18	100.00	3.13
Average LGD in %	18.70	33.38	35.92	29.81	30.98	16.24	16.80	25.49
Average RW in %	6.10	17.55	36.62	65.54	107.38	92.58	24.12	26.89
Retail Exposures Secured by Real Estate Property								
EAD gross in € m.	1,509	5,094	12,308	27,332	9,746	1,962	1,199	59,150
EAD net in € m.	1,509	5,093	12,303	27,305	9,697	1,943	1,184	59,035
Average PD in %	0.03	0.08	0.27	1.20	4.31	21.70	100.00	4.05
Average LGD in %	4.53	6.80	8.62	10.86	10.34	10.03	14.32	9.84
Average RW in %	0.50	1.43	4.58	16.14	32.15	58.05	1.24	15.77
Qualifying Revolving Retail Exposures								
EAD gross in € m.	5	20	38	43	31	7	12	156
EAD net in € m.	5	20	38	43	31	7	12	156
Average PD in %	0.04	0.08	0.25	1.15	5.03	21.67	100.00	10.36
Average LGD in %	38.86	38.71	38.40	37.36	37.56	37.50	42.28	38.27
Average RW in %	1.11	1.96	5.16	16.55	47.53	102.96	9.03	20.93
Other Retail Exposures								
EAD gross in € m.	360	1,743	5,973	11,531	6,103	1,366	847	27,923
EAD net in € m.	398	1,825	6,124	11,592	6,078	1,349	774	28,140
Average PD in %	0.04	0.08	0.29	1.15	4.49	21.12	100.00	5.28
Average LGD in %	36.41	33.39	33.56	32.74	34.85	38.21	43.48	34.03
Average RW in %	4.61	7.21	18.12	35.71	53.52	89.59	3.49	35.14
Total IRBA Exposures								
EAD gross in € m.	267,727	127,197	104,803	96,315	36,390	15,232	10,765	658,429
EAD net in € m.	281,234	129,563	100,058	90,436	32,944	13,996	10,429	658,661
Average PD in %	0.03	0.07	0.26	1.16	4.41	23.20	100.00	2.51
Average LGD in %	25.49	31.17	30.64	24.35	25.19	17.93	19.17	26.96
Average RW in %	5.14	15.78	29.75	46.18	73.49	88.17	20.26	22.03

[1] The relative low risk weights in the column "Default" reflect the fact that capital requirements for defaulted exposures are principally considered as a deduction from regulatory capital equal to the difference in expected loss and allowances.

A year-on-year comparison reflects a decrease in EAD of advanced IRBA exposures in the Group's corporate and institutions segments which is largely driven by the inclusion of a larger percentage of securities financing transactions and to a lesser extent by derivative transactions under the expected positive exposure method ("EPE"). The EPE method considers the appropriate netting and collateral agreements in the EAD calculation and thereby reflecting the EAD net of collateral. The increase in the central governments segment is primarily due to increased interest earning deposits with central banks for liquidity purposes. The Group's securities financing transactions excluding Postbank are included in Table 25 "EAD of Advanced IRBA Credit Exposures by PD Grade" with a total EAD of € 80 billion as of December 31, 2011, and € 175 billion as of December 31, 2010. The corresponding RWA amounted to € 2.0 billion and € 3.2 billion at year end 2011 and 2010 respectively.

Source: Deutsche Bank 2011 Pillar 3 Report, pages 75 and 76.

12. *Credit risk metrics by line of business and PD grade*

Credit risk continued

Tables 12 to 19 detail the key parameters of the advanced IRB RWA calculation for each of the exposure classes. They include OTC derivatives and repo products, which are also detailed in the counterparty credit risk disclosures. However, they exclude products where no PD exists such as securitisation positions and non-customer assets. The credit risk of such products is indicated by either external ratings or ratings derived using the standardised approach.

Table 12: Central governments and central banks by asset quality band

Asset quality band	EAD post CRM (1) £m	Exposure weighted average LGD (2) %	Exposure weighted average risk-weight (2) %	Undrawn commitments (3) £m	Undrawn weighted average CCF (4) %
2011					
AQ1	127,030	8.7	1.5	41,253	6.7
AQ2	762	44.5	10.0	55	28.1
AQ3	1,527	36.6	23.6	222	3.5
AQ4	530	36.6	33.8	62	89.9
AQ5	68	18.8	46.6	31	81.2
AQ6	13	23.4	59.1	2	30.3
AQ7	115	9.7	30.7	4	100.8
AQ8	12	51.3	232.4	-	-
AQ9	-	-	-	-	-
AQ10/default (5)	1,426	88.9	-	-	-
	131,483	10.2	2.0	41,629	6.9
2010					
AQ1	106,837	8.9	1.8	36,563	7.6
AQ2	590	51.9	15.7	183	4.8
AQ3	1,524	38.6	25.1	361	8.7
AQ4	2,047	47.3	59.4	577	14.5
AQ5	397	29.5	47.7	378	15.8
AQ6	55	19.7	54.8	106	38.0
AQ7	174	27.1	82.4	22	85.4
AQ8	8	9.8	45.7	-	-
AQ9	-	-	-	-	-
AQ10/default (5)	-	-	-	-	-
	111,632	10.4	3.6	38,190	8.0

Notes:
(1) EAD post CRM is exposure at default after the application of on-balance sheet netting and includes the advanced IRB element of counterparty credit risk, but excludes non-customer assets.
(2) Exposure weighted average LGD for each of the AQ bands is derived by multiplying the EAD of each position in the band by the associated LGD, summing the resulting amounts, and then dividing the resulting amount by the sum of the EADs of the relevant AQ band. The same method applies when calculating weighted average PD.
(3) Undrawn commitments are defined as the difference between the drawn balance and the relevant limit.
(4) Undrawn weighted average credit conversion factor (CCF) is the sum of CCF undrawn commitments divided by the sum of undrawn commitments within each of the relevant AQ bands.
(5) For defaulted assets (AQ10), the best estimate of expected loss (BEEL) methodology, based on downturn LGD, has been used. For these assets the Group takes a capital deduction equal to the difference between expected loss and provisions, and this may result in nil RWAs.

Key points

- The £20.2 billion increase in exposure rated AQ1 was due to a combination of increased repo activity and inflows in STMF.
- In addition, the increase in the AQ1 band reflects significant increases in overnight placements with the US central bank as part of the Group's balance sheet strategy.
- The £1.4 billion increase in exposure rated AQ10 was due to the downgrade of the Greek sovereign exposures from AQ4 during 2011. The £3.4 billion increase in undrawn commitments was predominantly driven by an increase in the German central bank limit, in accordance with the expansion of secured funding and short-term trading activity with highly rated sovereigns detailed on page 22.

Source: RBS Group 2011 Pillar 3 Report, page 25.

12. *Credit risk metrics by line of business and PD grade (continued)*

Credit risk continued

Table 13: Institutions by asset quality band

Asset quality band	EAD post CRM (1) £m	Exposure weighted average LGD (2) %	Exposure weighted average risk-weight (2) %	Undrawn commitments (3) £m	Undrawn weighted average CCF (4) %
2011					
AQ1	64,219	33.7	20.1	36,156	4.8
AQ2	2,354	48.0	43.0	681	13.7
AQ3	3,275	55.7	54.6	2,775	10.2
AQ4	1,797	56.0	93.8	1,102	10.0
AQ5	155	56.6	153.4	175	11.3
AQ6	96	40.9	164.2	29	10.6
AQ7	190	57.0	178.2	64	5.9
AQ8	88	61.8	372.9	33	8.1
AQ9	14	95.9	652.2	-	-
AQ10/default (5)	142	81.7	-	4	102.6
	72,330	36.0	25.6	41,019	5.5
2010					
AQ1	80,108	34.2	22.0	47,410	4.6
AQ2	1,659	48.1	44.7	1,106	11.0
AQ3	3,179	50.8	59.8	1,973	6.3
AQ4	1,433	51.2	80.3	1,810	12.8
AQ5	726	54.9	138.3	533	7.6
AQ6	95	60.4	227.5	101	7.1
AQ7	395	46.9	159.0	173	5.0
AQ8	44	54.2	286.1	41	6.3
AQ9	42	63.0	108.3	5	2.9
AQ10/default (5)	153	82.1	-	20	34.8
	87,834	35.7	26.7	53,172	5.2

Notes:
(1) EAD post CRM is exposure at default after the application of on-balance sheet netting and includes the advanced IRB element of counterparty credit risk, but excludes non-customer assets.
(2) Exposure weighted average LGD for each of the AQ bands is derived by multiplying the EAD of each position in the band by the associated LGD, summing the resulting amounts, and then dividing the resulting amount by the sum of the EADs of the relevant AQ band. The same method applies when calculating weighted average PD.
(3) Undrawn commitments are defined as the difference between the drawn balance and the relevant limit.
(4) Undrawn weighted average credit conversion factor (CCF) is the sum of CCF undrawn commitments divided by the sum of undrawn commitments within each of the relevant AQ bands.
(5) For defaulted assets (AQ10) ,the best estimate of expected loss (BEEL) methodology, based on downturn LGD, has been used. For these assets the Group takes a capital deduction equal to the difference between expected loss and provisions, and this may result in nil RWAs.

Key points

- The decrease of £15.5 billion in EAD was due to lower STMF business activity, detailed on page 20, and the resulting decline in repo and OTC derivative trading activity. The impact of this reduction was most notable within the AQ1 asset quality band and it also drove a slight decrease in LGDs.
- There was a slight reduction in the overall average risk-weights due to improvements in the quality of origination.

Source: RBS Group 2011 Pillar 3 Report, page 26.

12. *Credit risk metrics by line of business and PD grade (continued)*

Credit risk continued

Table 14: Corporates by asset quality band

Asset quality band	EAD post CRM (1) £m	Exposure weighted average LGD (2) %	Exposure weighted average risk-weight (2) %	Undrawn commitments (3) £m	Undrawn weighted average CCF (4) %
2011					
AQ1	99,497	28.3	14.1	62,935	29.5
AQ2	20,555	36.3	19.1	17,357	29.5
AQ3	29,285	35.5	26.3	23,643	32.0
AQ4	47,299	34.5	45.7	21,370	32.7
AQ5	49,530	28.7	64.1	11,771	35.9
AQ6	31,509	28.2	81.9	6,274	42.1
AQ7	22,341	41.6	150.1	4,379	48.3
AQ8	6,774	40.7	151.6	626	39.6
AQ9	10,550	40.8	261.9	700	55.5
AQ10/default (5)	36,346	58.9	0.2	2,065	75.2
	353,686	34.8	49.9	151,120	32.7
Corporates under the project finance supervisory slotting approach (6)					
Category 1 - strong	9,353		67.8	1,190	73.3
Category 2 - good	691		89.8	70	51.0
Category 3 - satisfactory	158		115.0	7	88.6
Category 4 - weak	716		250.0	39	90.3
Category 5 - defaulted	435		2.3	58	91.6
	11,353		78.8	1,364	74.0
2010					
AQ1	86,668	28.2	13.1	66,569	29.1
AQ2	21,026	34.7	18.8	17,726	28.3
AQ3	30,299	32.7	21.7	26,432	29.8
AQ4	50,602	33.4	43.3	26,290	30.6
AQ5	57,125	30.3	67.5	16,119	35.9
AQ6	39,712	29.8	87.3	8,326	39.7
AQ7	26,424	38.8	137.2	4,383	43.8
AQ8	8,971	38.8	179.9	637	53.6
AQ9	12,629	48.3	314.3	1,639	35.7
AQ10/default (5)	35,105	48.8	0.6	2,319	74.4
	368,561	33.8	56.8	170,440	31.7
Corporates under the project finance supervisory slotting approach (6)					
Category 1 - strong	11,612		65.5	1,571	59.9
Category 2 - good	574		84.8	118	54.3
Category 3 - satisfactory	840		115.0	129	87.8
Category 4 - weak	363		250.0	52	85.0
Category 5 - defaulted	22		-	-	-
	13,411		74.3	1,870	62.2

Notes:
(1) EAD post CRM is exposure at default after the application of on-balance sheet netting and includes the advanced IRB element of counterparty credit risk, but excludes non-customer assets.
(2) Exposure weighted average LGD for each of the AQ bands is derived by multiplying the EAD of each position in the band by the associated LGD, summing the resulting amounts, and then dividing the resulting amount by the sum of the EADs of the relevant AQ band. The same method applies when calculating weighted average PD.
(3) Undrawn commitments are defined as the difference between the drawn balance and the relevant limit.
(4) Undrawn weighted average credit conversion factor (CCF) is the sum of CCF undrawn commitments divided by the sum of undrawn commitments within each of the relevant AQ bands.
(5) For defaulted assets (AQ10), the best estimate of expected loss (BEEL) methodology, based on downturn LGD, has been used. For these assets the Group takes a capital deduction equal to the difference between expected loss and provisions, and this may result in nil RWAs.
(6) For project finance, customers are split into five categories. Within each category, customers are also split into two maturity bands: below and above 2.5 years. The risk-weight applied to each exposure is based on a combination of the category and the maturity band. There are no RWAs associated with customers in category 5 as these are addressed via capital deductions.

Source: RBS Group 2011 Pillar 3 Report, page 27.

12. *Credit risk metrics by line of business and PD grade (continued)*

Credit risk continued

Key points

- Exposures to corporates, excluding those calculated using the project finance supervisory slotting approach, declined by £14.9 billion, driven by a decrease in on-balance sheet exposures arising from asset disposals and repayments in the Non-Core portfolios. This decline was seen in all AQ bands with the exception of AQ1 and AQ10, where there was a migration within AQ bands relating to the property sector.
- The overall reduction in exposure was partially offset by the movement of qualifying exposure from retail to corporates due to a new SME lending strategy. This was primarily offset by an increase in OTC derivative exposures to obligors in the insurers and funds sector in the AQ1 band.
- LGD rated AQ3 and AQ10 deteriorated, primarily as a result of the worsening outlook for the property sector. In contrast, the exposure-weighted average risk-weight improved as the mix of new business and existing exposure shifted towards lower AQ bands.
- Undrawn commitments fell in tandem with drawn exposure.
- The reduction in EAD to corporates as calculated under the project finance supervisory slotting approach reflects reductions in exposures in Non-Core term loans and OTC derivatives.

Table 15: Retail SMEs by asset quality band (1)

Asset quality band	EAD post CRM (2) £m	Exposure weighted average LGD (3) %	Exposure weighted average risk-weight (3) %	Undrawn commitments (4) £m	Undrawn weighted average CCF (5) %
2011					
AQ1	-	-	-	-	-
AQ2	15	49.4	8.6	10	100
AQ3	2	58.3	10.2	1	100
AQ4	1,176	71.8	29.9	779	100
AQ5	1,007	43.6	44.9	166	100
AQ6	5,478	43.1	61.7	798	100
AQ7	2,684	41.7	71.0	102	100
AQ8	1,717	41.5	85.7	111	100
AQ9	820	43.1	132.1	19	100
AQ10/default	1,842	56.6	49.5	-	-
	14,741	46.7	64.9	1,986	100
2010					
AQ1	-	-	-	-	-
AQ2	15	49.3	7.6	11	100
AQ3	2	58.3	9.1	1	100
AQ4	1,238	73.6	28.6	888	100
AQ5	1,338	42.2	42.3	200	100
AQ6	7,573	41.4	56.2	1,027	100
AQ7	5,276	39.4	64.3	150	100
AQ8	2,221	41.9	84.5	114	100
AQ9	1,139	43.2	128.7	27	100
AQ10/default	1,680	57.4	51.6	-	-
	20,482	44.4	62.4	2,418	100

Notes:
(1) Consists primarily of loans and overdrafts to SMEs and are calculated using the retail IRB approach.
(2) EAD post CRM is exposure at default after the application of on-balance sheet netting and includes the advanced IRB element of counterparty credit risk, but excludes non-customer assets.
(3) Exposure weighted average LGD for each of the AQ bands is derived by multiplying the EAD of each position in the band by the associated LGD, summing the resulting amounts, and then dividing the resulting amount by the sum of the EADs of the relevant AQ band. The same method applies when calculating weighted average PD.
(4) Undrawn commitments are defined as the difference between the drawn balance and the relevant limit.
(5) Undrawn weighted average credit conversion factor (CCF) is the sum of CCF undrawn commitments divided by the sum of undrawn commitments within each of the relevant AQ bands.

Source: RBS Group 2011 Pillar 3 Report, page 28.

12. *Credit risk metrics by line of business and PD grade (continued)*

Credit risk continued

Key points

- Retail SME exposures are concentrated within UK business banking, where the most notable reduction occurred within business loans. This was due to the migration of certain customers from retail SME to corporate SME, with a view to serving them better. This resulted in a £5.7 billion decline in total EAD post CRM exposures to retail SME, predominantly those assigned to the AQ6 and AQ7 bands.
- The marginal deterioration in LGD and risk-weight reflects the impact of the quality of the migrated exposures. The reduction in undrawn commitments reflects the benefit of active management of exposures.

Table 16: Retail secured by real estate collateral by asset quality band (1)

Asset quality band	EAD post CRM (2) £m	Exposure weighted average LGD (3) %	Exposure weighted average risk-weight (3) %	Undrawn commitments (4) £m	Undrawn weighted average CCF (5) %
2011					
AQ1	-	-	-	-	-
AQ2	2,946	6.5	0.8	1,724	100.0
AQ3	-	-	-	-	-
AQ4	25,452	7.9	4.1	3,926	99.9
AQ5	41,511	9.5	9.3	2,429	89.8
AQ6	29,471	16.7	27.2	535	99.3
AQ7	14,902	23.5	62.1	481	67.0
AQ8	1,762	13.7	72.3	10	100.0
AQ9	5,288	23.6	130.3	7	100.0
AQ10/default	4,801	23.2	104.9	23	100.0
	126,133	13.6	28.1	9,135	95.5
2010					
AQ1	-	-	-	-	-
AQ2	2,990	5.0	0.6	1,710	100.0
AQ3	-	-	-	-	-
AQ4	23,701	6.7	3.5	1,836	100.0
AQ5	40,749	10.1	10.2	2,885	89.4
AQ6	31,718	16.9	27.6	910	99.8
AQ7	12,788	17.8	51.3	135	99.5
AQ8	2,703	15.2	74.5	7	99.3
AQ9	3,799	19.7	114.4	-	-
AQ10/default	3,783	18.4	104.3	33	100.0
	122,231	12.6	25.1	7,516	95.9

Notes:
(1) Consists of mortgages and is calculated using the IRB approach.
(2) EAD post CRM is exposure at default after the application of on-balance sheet netting and includes the advanced IRB element of counterparty credit risk, but excludes non-customer assets.
(3) Exposure weighted average LGD for each of the AQ bands is derived by multiplying the EAD of each position in the band by the associated LGD, summing the resulting amounts, and then dividing the resulting amount by the sum of the EADs of the relevant AQ band. The same method applies when calculating weighted average PD.
(4) Undrawn commitments are defined as the difference between the drawn balance and the relevant limit.
(5) Undrawn weighted average credit conversion factor (CCF) is the sum of CCF undrawn commitments divided by the sum of undrawn commitments within each of the relevant AQ bands.

Key points

- EAD increased by £3.9 billion, largely as a result of increases in exposure to borrowers in the AQ7 band. The increase was driven by new mortgage lending.
- The difficult economic conditions in Ireland were reflected in the Ulster Bank performance, which weighed on the overall portfolio risk profile and led to an increase in exposure to retail secured by real estate collateral in AQ10 from better AQ bands. However, the deterioration in the credit quality of these exposures was at least partially offset by improvements within UK Retail, most notable in improvements within AQ6.

Source: RBS Group 2011 Pillar 3 Report, page 29.

12. *Credit risk metrics by line of business and PD grade (continued)*

Credit risk continued

Table 17: Qualifying revolving retail exposures by asset quality band (1)

Asset quality band	EAD post CRM (2) £m	Exposure weighted average LGD (3) %	Exposure weighted average risk-weight (3) %	Undrawn commitments (4) £m	Undrawn weighted average CCF (5) %
2011					
AQ1	126	9.1	0.2	2,911	4.3
AQ2	6,492	49.6	1.3	5,028	98.4
AQ3	561	53.9	2.9	275	100.0
AQ4	3,987	56.4	6.5	2,904	91.1
AQ5	5,319	63.4	18.3	16,492	18.9
AQ6	3,179	67.8	39.0	3,861	32.3
AQ7	2,780	69.9	74.6	1,284	48.6
AQ8	2,892	77.0	143.6	465	75.9
AQ9	454	72.0	233.7	33	90.5
AQ10/default	1,068	76.9	55.1	271	0.1
	26,858	61.9	38.9	33,524	39.9
2010					
AQ1	106	8.9	0.2	2,434	4.2
AQ2	6,087	77.0	2.2	4,666	100.0
AQ3	-	-	-	-	-
AQ4	3,844	74.8	7.7	2,940	88.8
AQ5	5,453	72.2	20.9	14,893	21.7
AQ6	3,652	72.3	41.1	6,294	28.7
AQ7	2,822	72.9	83.2	1,811	43.5
AQ8	3,721	77.6	154.2	742	68.4
AQ9	739	82.3	269.4	55	92.8
AQ10/default	1,113	77.7	24.5	265	0.1
	27,537	74.7	48.7	34,100	40.4

Notes:
(1) Consists primarily of personal credit card and overdraft exposures and are calculated using the retail IRB approach.
(2) EAD post CRM is exposure at default after the application of on-balance sheet netting and includes the advanced IRB element of counterparty credit risk, but excludes non-customer assets.
(3) Exposure weighted average LGD for each of the AQ bands is derived by multiplying the EAD of each position in the band by the associated LGD, summing the resulting amounts, and then dividing the resulting amount by the sum of the EADs of the relevant AQ band. The same method applies when calculating weighted average PD.
(4) Undrawn commitments are defined as the difference between the drawn balance and the relevant limit.
(5) Undrawn weighted average credit conversion factor (CCF) is the sum of CCF undrawn commitments divided by the sum of undrawn commitments within each of the relevant AQ bands.

Key points

- The overall decrease in EAD was primarily the result of customers reducing their unsecured debt by paying down outstanding balances on revolving lines of credit.
- The apparent improvements in LGD and risk-weight were partially due to the implementation of a new unsecured LGD model during the fourth quarter of 2011.

Source: RBS Group 2011 Pillar 3 Report, page 30.

12. *Credit risk metrics by line of business and PD grade (continued)*

Credit risk continued

Table 18: Other retail exposures by asset quality band (1)

Asset quality band	EAD post CRM (2) £m	Exposure weighted average LGD (3) %	Exposure weighted average risk-weight (3) %	Undrawn commitments (4) £m	Undrawn weighted average CCF (5) %
2011					
AQ1	-	-	-	-	-
AQ2	-	-	-	-	-
AQ3	-	-	-	-	-
AQ4	118	65.8	34.8	1	100.0
AQ5	1,265	69.0	66.2	1	100.0
AQ6	2,153	75.9	94.8	-	-
AQ7	1,718	77.7	119.5	-	-
AQ8	645	75.4	141.3	-	-
AQ9	240	75.5	212.0	-	-
AQ10/default	1,961	78.9	55.1	-	-
	8,100	75.7	92.2	2	100.0
2010					
AQ1	-	-	-	-	-
AQ2	-	-	-	-	-
AQ3	-	-	-	-	-
AQ4	140	78.4	43.3	1	100.0
AQ5	635	62.1	60.3	2	100.0
AQ6	2,929	74.9	93.4	1	100.0
AQ7	1,888	73.0	111.0	-	-
AQ8	1,535	74.1	132.3	-	-
AQ9	401	72.7	204.0	-	-
AQ10/default	2,158	80.3	24.4	-	-
	9,686	74.7	89.3	4	100.0

Notes:
(1) Consists primarily of unsecured personal loans and are calculated using the retail IRB approach.
(2) EAD post CRM is exposure at default after the application of on-balance sheet netting and includes the advanced IRB element of counterparty credit risk, but excludes non-customer assets.
(3) Exposure weighted average LGD for each of the AQ bands is derived by multiplying the EAD of each position in the band by the associated LGD, summing the resulting amounts, and then dividing the resulting amount by the sum of the EADs of the relevant AQ band. The same method applies when calculating weighted average PD.
(4) Undrawn commitments are defined as the difference between the drawn balance and the relevant limit.
(5) Undrawn weighted average credit conversion factor (CCF) is the sum of CCF undrawn commitments divided by the sum of undrawn commitments within each of the relevant AQ bands.

Key points

- The reduction in EAD within the AQ6 to AQ9 bands was due to the continued run-off of lower quality unsecured lending in UK Retail.
- The personal loan book saw contractions in the period, driven by difficult market conditions. This contributed to the reduction in EAD within the AQ10 band and overall EAD.

Source: RBS Group 2011 Pillar 3 Report, page 31.

12. *Credit risk metrics by line of business and PD grade (continued)*

Credit risk continued

Table 19: Equities by asset quality band (1)

Asset quality band	EAD post CRM (2) £m	Exposure weighted average LGD (3) %	Exposure weighted average risk-weight (3) %	Undrawn commitments (4) £m	Undrawn weighted average CCF (5) %
2011					
AQ1	-	-	-	-	-
AQ2	-	-	-	-	-
AQ3	9	90	199	-	-
AQ4	-	-	-	-	-
AQ5	-	-	-	-	-
AQ6	383	90	345	-	-
AQ7	310	90	277	-	-
AQ8	13	90	679	-	-
AQ9	7	90	651	-	-
AQ10/default (6)	50	90	-	-	-
Equities calculated using PD/LGD approach	772	90	302	-	-
Equities calculated using simple risk-weight approach					
Exchange traded equity exposures	2	-	370	-	-
Private equity exposures	109	-	370	-	-
Other equity exposures	337	-	370	61	100
	448	-	370	61	100
	1,220				
2010					
AQ1	-	-	-	-	-
AQ2	-	-	-	-	-
AQ3	5	90	194	-	-
AQ4	-	-	-	-	-
AQ5	-	-	-	-	-
AQ6	760	90	279	-	-
AQ7	419	90	333	-	-
AQ8	6	90	570	-	-
AQ9	142	90	12	-	-
AQ10/default (6)	23	90	-	-	-
Equities calculated using PD/LGD approach	1,355	90	264	-	-
Equities calculated using simple risk-weight approach					
Private equity exposures	319	-	370	93	100
Other equity exposures	1	-	190	-	-
	320	-	370	93	100
	1,675				

Notes:
(1) Exclude equity exposures calculated under the simple risk-weight approach.
(2) EAD post CRM is exposure at default after the application of on-balance sheet netting and includes the advanced IRB element of counterparty credit risk, but excludes non-customer assets.
(3) Exposure weighted average LGD for each of the AQ bands is derived by multiplying the EAD of each position in the band by the associated LGD, summing the resulting amounts, and then dividing the resulting amount by the sum of the EADs of the relevant AQ band. The same method applies when calculating weighted average PD.
(4) Undrawn commitments are defined as the difference between the drawn balance and the relevant limit.
(5) Undrawn weighted average credit conversion factor (CCF) is the sum of CCF undrawn commitments divided by the sum of undrawn commitments within each of the relevant AQ bands.
(6) For defaulted assets (AQ10), the best estimate of expected loss (BEEL) methodology, based on downturn LGD, has been used. For these assets the Group takes a capital deduction equal to the difference between expected loss and provisions, and this may result in nil RWAs.

Key point

- Exposure decreased to £1.2 billion at 31 December 2011 from £1.7 billion at 31 December 2010, principally due to a decrease calculated using the PD/LGD approach, itself the result of disposals of equity positions, predominantly in the property and non-bank financial institutions sector. The decrease calculated using the PD/LGD approach was partially offset by an increase of £128 million in exposures calculated using the simple risk-weight (SRW) approach, resulting from a movement to the SRW approach for the EAD calculation of these exposures.

Source: RBS Group 2011 Pillar 3 Report, page 32.

Liquidity

13. *Liquidity buffer composition*

Liquidity buffer composition

Q1 2012

According to Swedish FSA and Swedish Bankers' Association definition as well as Nordea definition

Currency distribution, market value in millions EUR

EURm	SEK	EUR	USD	Other	Sum
Cash and balances with central banks	1 387	9 349	8 845	9 182	28 762
Balances with other banks	0	0	0	0	0
Securities issued or guaranteed by sovereigns, central banks or multilateral development banks *	2 329	5 284	2 081	9 241	18 936
Securities issued or guaranteed by municipalities or other public sector entities *	213	203	19	40	475
Covered bonds * :					
- Securities issued by other bank or financial institute	7 624	8 878		7 462	23 964
- Securities issued by the own bank or related unit	0	4 242		10 440	14 682
Securities issued by non financial corporates *	0	0	57	0	57
Securities issued by financial corporates, excluding covered bonds *	668	664	1 799	185	3 317
All other securities **	0	69	0	5	74
Total (according to Swedish FSA and Swedish Bankers' Association definition)	**12 222**	**28 691**	**12 800**	**36 555**	**90 267**
Adjustments to Nordea's official buffer *** :	-1 597	-9 724	-8 921	-9 713	-29 954
Total (according to Nordea definition)	**10 625**	**18 967**	**3 879**	**26 842**	**60 313**

Source: Nordea Q1 2012 Fact Book, page 73.

14. *Aggregate of liquidity resources*

Aggregate Liquidity Resources

	Non-bank (1)		Significant bank entities		Other entities (2)		Total	
In billions of dollars	**Dec. 31, 2011**	Dec. 31, 2010	**Dec. 31, 2011**	Dec. 31, 2010	**Dec. 31, 2011**	Dec. 31, 2010	**Dec. 31, 2011**	Dec. 31, 2010
Cash at major central banks	**$29.1**	$22.7	**$ 70.7**	$ 77.4	**$ 27.6**	$ 32.5	**$127.4**	$132.6
Unencumbered liquid securities	**69.3**	71.8	**129.5**	145.3	**79.3**	77.1	**278.1**	294.2
Total	**$98.4**	$94.5	**$200.2**	$222.7	**$106.9**	$109.6	**$405.5**	$426.8

(1) Non-bank includes the parent holding company (Citigroup), Citigroup Funding Inc. (CFI) and one of Citi's broker-dealer entities, Citigroup Global Markets Holdings Inc. (CGMHI).
(2) Other entities include Banamex and other bank entities.

As set forth in the table above, Citigroup's aggregate liquidity resources totaled $405.5 billion at December 31, 2011, compared with $426.8 billion at December 31, 2010. These amounts are as of period-end and may increase or decrease intra-period in the ordinary course of business. During the quarter ended December 31, 2011, the intra-quarter amounts did not fluctuate materially from the quarter-end amounts noted above.

At December 31, 2011, Citigroup's non-bank aggregate liquidity resources totaled $98.4 billion, compared with $94.5 billion at December 31, 2010. This amount included unencumbered liquid securities and cash held in Citi's U.S. and non-U.S. broker-dealer entities.

Citigroup's significant bank entities had approximately $200.2 billion of aggregate liquidity resources as of December 31, 2011. This amount included $70.7 billion of cash on deposit with major central banks (including the U.S. Federal Reserve Bank, European Central Bank, Bank of England, Swiss National Bank, Bank of Japan, the Monetary Authority of Singapore and the Hong Kong Monetary Authority), compared with $77.4 billion at December 31, 2010. The significant bank entities' liquidity resources also included unencumbered highly liquid government and government-backed securities. These securities are available-for-sale or secured funding through private markets or by pledging to the major central banks. The liquidity value of these liquid securities was $129.5 billion at December 31, 2011, compared with $145.3 billion at December 31, 2010. As shown in the table above, overall, liquidity at Citi's significant bank entities was down at December 31, 2011, as compared to December 31, 2010, as Citi deployed some of its excess bank liquidity into loan growth within Citicorp (see "Balance Sheet Review" above) and paid down long-term bank debt.

Citi estimates that its other entities and subsidiaries held approximately $106.9 billion in aggregate liquidity resources as of December 31, 2011. This included $27.6 billion of cash on deposit with major central banks and $79.3 billion of unencumbered liquid securities. Including these amounts, Citi's aggregate liquidity resources as of December 31, 2011 were approximately $405.5 billion.

Source: Citigroup 2011 Annual Report, page 47.

Funding

15. *Assets pledged and collateral held*

45 Assets pledged

Assets are pledged as collateral to secure liabilities under repurchase agreements, securitisations and stock lending agreements or as security deposits relating to derivatives. The following table summarises the nature and carrying amount of the assets pledged as security against these liabilities:

	2011 £m	2010 £m
Trading portfolio assets	86,677	111,703
Loans and advances	40,613	30,584
Available for sale investments	19,974	22,941
Other	2	45
Assets pledged	147,266	165,273

As at 31 December 2011, Barclays has an additional £16bn loans and advances with its asset backed funding programmes that can readily be used to raise additional secured funding and available to support future issuance.

Collateral held as security for assets

Under certain transactions, including reverse repurchase agreements and stock borrowing transactions, the Group is allowed to resell or repledge the collateral held. The fair value at the balance sheet date of collateral accepted and repledged to others was as follows:

	2011 £m	2010 £m
Fair value of securities accepted as collateral	391,287	422,890
Of which fair value of securities repledged/transferred to others	341,060	347,557

Source: Barclays 2011 Annual Report, page 271.

16. *Additional collateral or termination payments that may be required*

We allocate a portion of our GCE to ensure we would be able to make the additional collateral or termination payments that may be required in the event of a two-notch reduction in our long-term credit ratings, as well as collateral that has not been called by counterparties, but is available to them. The table below presents the additional collateral or termination payments that could have been called at the reporting date by counterparties in the event of a one-notch and two-notch downgrade in our credit ratings.

	As of December	
in millions	**2011**	2010
Additional collateral or termination payments for a one-notch downgrade	$1,303	$1,353
Additional collateral or termination payments for a two-notch downgrade	2,183	2,781

Source: Goldman Sachs 2011 Annual Report, page 83.

17. *Maturity analysis of assets and liabilities*

Maturity distribution, Swedbank Group, 31 March 2012 1)

SEKm	Payable on demand	<30 days.	<3 mths.	3 mths-1 yr.	1-2 yrs.	2-3 yrs.	3-5 yrs.	5-10 yrs.	>10 yrs.	Discount effect/ no maturity	Total
Assets											
Treasury bills and other bills eligible for refinaciation		2 410	2 426	1 954	184	3 221	1 490	4 283	3 107	3 971	**23 046**
Loans to credit institutions	6 543	79 424	2 236	3 583	2 686	2 230	264	239	311	857	**98 373**
Loans to the public	10 250	69 188	40 389	85 535	50 847	45 590	85 228	93 276	726 658	5 603	**1 212 564**
of which Swedbank Mortgage		540	5 560	7 390	7 380	7 360	14 578	32 750	642 668	4 363	**722 589**
Bonds and other interest-bearing securities		5 363	9 208	20 038	22 081	39 546	24 087	3 860	870	3 579	**128 632**
Other assets 2)	169 795	22 012	62 340	19 536	19 732	15 766	18 253	15 295	37 332	45 844	**425 905**
Total	**186 588**	**178 397**	**116 599**	**130 646**	**95 530**	**106 353**	**129 322**	**116 953**	**768 278**	**59 854**	**1 888 520**
Liabilities											
Amounts owed to credit institutions, short-term	63 814	48 477	12 918	1 050							**126 259**
Amounts owed to credit institutions, long-term		218	375	1 803	1 611	808	241	303		-1 618	**3 741**
Deposits and borrowings from the public	438 375	86 998	34 030	38 382	2 969	1 610	1 035	110	118	146	**603 773**
Debt securities in issue etc, short-term		48 144	66 205	16 787							**131 136**
of which Swedbank Mortgage		1 009	4 728	1 833							**7 570**
Debt securities in issue etc, long-term		8 436	19 968	54 687	83 486	204 231	216 852	41 881	18 077	5 853	**653 471**
of which Swedbank Mortgage		300	17 611	19 733	73 618	168 124	187 244	41 787	18 063	3 764	**530 244**
Subordinated liabilities								9 887	7 692	1 080	**18 659**
Other liabilities 2)		13 293	112 360	29 350	20 090	14 042	18 416	16 898	40 162	-8 533	**256 078**
Total	**502 189**	**205 566**	**245 856**	**142 059**	**108 156**	**220 691**	**236 544**	**69 079**	**66 049**	**-3 072**	**1 793 117**

1) In the table, undiscounted contractual cash flows are distributed according to the contracts' remaining maturity. Loans with amortisation are distributed according to amortisation schedule. Impaired loans are distributed based on assessed repayment schedual. Differences between undiscounted cash flows and carrying amount are reported together with items without an agreed maturity date, where the anticipated realisation date has not been determined, in the column Discount effect/ no maturity.

2) Other assets contents among others of Fund shares where customers bear the investment risk, intangible and tangible assets.
Other liabilities contents among others of Financial liabilities where customers bear the investment risk and Sold, not held, securities

Source: Swedbank Group Q1 2012 Fact Book, page 72.

Market risk

18. *Decomposition of relevant risk factors*

Interest Rate Risk
Interest rate risk represents exposures to instruments whose values vary with the level or volatility of interest rates. These instruments include, but are not limited to, loans, debt securities, certain trading-related assets and liabilities, deposits, borrowings and derivatives. Hedging instruments used to mitigate these risks include derivatives such as options, futures, forwards and swaps.

Foreign Exchange Risk
Foreign exchange risk represents exposures to changes in the values of current holdings and future cash flows denominated in currencies other than the U.S. dollar. The types of instruments exposed to this risk include investments in non-U.S. subsidiaries, foreign currency-denominated loans and securities, future cash flows in foreign currencies arising from foreign exchange transactions, foreign currency-denominated debt and various foreign exchange derivatives whose values fluctuate with changes in the level or volatility of currency exchange rates or non-U.S. interest rates. Hedging instruments used to mitigate this risk include foreign exchange options, currency swaps, futures, forwards, foreign currency-denominated debt and deposits.

Mortgage Risk
Mortgage risk represents exposures to changes in the value of mortgage-related instruments. The values of these instruments are sensitive to prepayment rates, mortgage rates, agency debt ratings, default, market liquidity, government participation and interest rate volatility. Our exposure to these instruments takes several forms. First, we trade and engage in market-making activities in a variety of mortgage securities including whole loans, pass-through certificates, commercial mortgages and collateralized mortgage obligations including CDOs using mortgages as underlying collateral. Second, we originate a variety of MBS which involves the accumulation of mortgage-related loans in anticipation of eventual securitization. Third, we may hold positions in mortgage securities and residential mortgage loans as part of the ALM portfolio. Fourth, we create MSRs as part of our mortgage origination activities. See *Note 1 – Summary of Significant Accounting Principles* and *Note 25 – Mortgage Servicing Rights* to the Consolidated Financial Statements for additional information on MSRs. Hedging instruments used to mitigate this risk include foreign exchange options, currency swaps, futures, forwards and foreign currency-denominated debt.

Equity Market Risk
Equity market risk represents exposures to securities that represent an ownership interest in a corporation in the form of domestic and foreign common stock or other equity-linked instruments. Instruments that would lead to this exposure include, but are not limited to, the following: common stock, exchange-traded funds, American Depositary Receipts, convertible bonds, listed equity options (puts and calls), OTC equity options, equity total return swaps, equity index futures and other equity derivative products. Hedging instruments used to mitigate this risk include options, futures, swaps, convertible bonds and cash positions.

Table 57 presents average, high and low daily trading VaR for 2011 and 2010.

Table 57 Market Risk VaR for Trading Activities

	2011			2010		
(Dollars in millions)	Average	High [1]	Low [1]	Average	High [1]	Low [1]
Foreign exchange	$ 20.0	$ 48.6	$ 5.6	$ 23.8	$ 73.1	$ 4.9
Interest rate	50.6	82.7	29.2	64.1	128.3	33.2
Credit	109.9	155.3	54.8	171.5	287.2	122.9
Real estate/mortgage	80.0	139.5	31.5	83.1	138.5	42.9
Equities	50.5	88.9	25.1	39.4	90.9	20.8
Commodities	18.9	33.8	8.4	19.9	31.7	12.8
Portfolio diversification	(163.1)	—	—	(200.5)	—	—
Total market-based trading portfolio	$ 166.8	$ 318.6	$ 75.0	$ 201.3	$ 375.2	$ 123.0

[1] The high and low for the total portfolio may not equal the sum of the individual components as the highs or lows of the individual portfolios may have occurred on different trading days.

The $35 million decrease in average VaR during 2011 was primarily due to a reduction in risk during the year. This was driven primarily by a decrease in credit exposures where average VaR decreased $62 million compared to 2010. In addition, for 2010 and 2011, data from the more volatile periods of 2007 and 2008 were no longer included in our three-year historical dataset. These impacts were partially offset by a reduction in portfolio diversification VaR of $37 million.

Source: Bank of America 2011 Annual Report, pages 112 and 115.

19. *Discussion of non-traded portfolios*

Non-trading portfolios

Audited

For the purposes of our disclosure, the market risks associated with our non-trading portfolios are quantified using sensitivity analysis. This includes an aggregate measure of our exposures to interest rate risk in the banking book and additional information for certain significant portfolios and positions that are not included in our management VaR or in our interest rate risk in the banking book table.

Interest rate risk in the banking book

Audited

The banking book consists of *Available-for-sale instruments, Loans and receivables,* certain *Instruments designated at fair value through profit or loss,* derivatives measured at fair value through profit or loss and derivatives employed for cash flow hedge accounting purposes, as well as related funding transactions. These positions may impact other comprehensive income or profit or loss, due to differences in accounting treatment.

All interest rate risk is subject to independent risk control. When not included in our VaR measure, interest rate risk is subject to specific monitoring, which may include interest rate sensitivity analysis, earnings-at-risk, capital-at-risk and combined stress testing metrics. Interest rate risk sensitivity figures are provided for the impact of a 1-basis-point parallel increase and the +/–100-basis-points parallel moves in yield curves on present values of future cash flows, irrespective of accounting treatment.

Audited

Our largest banking book interest rate risk exposures arise primarily from activities such as retail banking and lending in our Wealth Management & Swiss Bank division, as well as our treasury activities, which are mainly hedged.

Interest rate risks arising in Wealth Management & Swiss Bank are transferred either by means of back-to-back transactions or, in the case of products with no contractual maturity date or direct market-linked rate, by "replicating" portfolios from the originating business into one of two centralized interest rate risk management units of Group Treasury or the Investment Bank's fixed income, currencies and commodities (FICC) unit. These units manage these risks as part of their risk portfolios within their allocated market risk limits and controls, exploiting the netting potential across interest rate risks from different sources.

The Investment Bank's portfolio of assets that were reclassified to *Loans and receivables* from *Held-for-trading* in the fourth quarter of 2008 and the first quarter of 2009, and certain other debt securities held as *Loans and receivables,* also give rise to non-trading interest rate risk.

Audited

Interest rate risk within Wealth Management Americas arises from the business division's investment portfolio in addition to its lending and deposit products offered to clients.

This interest rate risk is closely measured, monitored and managed within approved risk limits and controls, taking into account Wealth Management Americas balance sheet items that naturally offset risk.

Audited

The interest sensitivity of non-contractual maturity products is modeled using historical behavior patterns from a complete interest rate cycle.

Group Treasury manages two main types of interest rate risk positions. One type is the risk transferred from Wealth Management & Swiss Bank's banking operations (mentioned above). The other type arises from investing or funding non-monetary corporate balance sheet items that have indefinite lives, such as equity and goodwill. For these items we have defined specific target durations based on which we fund and invest as applicable. These targets are defined by replication portfolios, which establish rolling benchmarks to execute against. The table below includes any residual risk in the Group Treasury books against these benchmarks. This activity and associated sensitivities of these replication portfolios are further discussed in the Group Treasury section.

In addition to its regular risk management activities, Group Treasury manages portfolios that aim to economically hedge negative effects on the firm's net interest income stemming from the extraordinarily low yield environment. These activities included our strategic investment portfolio which we sold during the third quarter of 2011. The sale of this portfolio was the main driver behind the decrease in sensitivity compared with year end 2010.

→ Refer to the "Interest rate and currency management" section of this report for more information

The table "Interest rate sensitivity – banking book" shows the impact on present value for an immediate +/–100-basis-points parallel move in yield curves. Due to the low level of interest rates the downward moves are capped to ensure that the resulting interest rates are not negative. This effect, combined with pre-payment risk on US mortgage products and impact of low interest

Audited

Impact of a 1-basis-point parallel increase in yield curves on present value of future cash flows[1]

CHF million	31.12.11	31.12.10
CHF	(0.7)	(0.7)
EUR	(1.6)	(2.1)
GBP	0.1	(2.9)
USD	(3.7)	(10.7)
Other	(0.1)	(0.3)
Total impact on interest rate-sensitive banking book positions	(6.0)	(16.6)

1 Does not include interest rate sensitivities for CVA on monoline credit protection, US and non-US RLN and our option to acquire equity of the SNB StabFund for which the interest rate sensitivities are separately disclosed. Also not included are the interest rate sensitivities of our inventory of student loan ARS, as from an economic perspective these exposures are not materially affected by parallel shifts in USD interest rates, holding other factors constant.

Source: UBS 2011 Annual Report, page 136.

19. *Discussion of non-traded portfolios* *(continued)*

rates on client deposit behavior, results in non-linear behavior of the exposure.

The impact of an adverse parallel shift in interest rates of 200 basis points on our banking book interest rate risk exposures is significantly below the threshold of 20% of eligible regulatory capital set by regulators.

Interest rate sensitivity of available-for-sale debt investments

Audited

Debt financial instruments classified as *Financial investments available-for-sale* amounted to CHF 52.5 billion on 31 December 2011 compared with CHF 73.9 billion on 31 December 2010. From an accounting perspective, the sensitivity of this position (excluding hedges) to a 1-basis-point parallel increase in the yields of the respective instruments is approximately negative CHF 6 million, which would be posted to other comprehensive income. The interest rate sensitivity of this position including the associated hedges is included within the table "Impact of a 1-basis-point parallel increase in yield curves on present value of future cash flows", some elements of which are additionally disclosed in VaR.

→ **Refer to "Note 13 Financial investments available-for-sale" in the "Financial information" section of this report for more information**

→ **Refer to "Debt investments" in the "Credit risk" section of this report for more information**

Interest rate sensitivity of interest rate swaps designated in cash flow hedges

Audited

To the extent effective, interest rate swaps designated in cash flow hedges are accounted for at fair value through equity under IFRS. Amounts deferred in equity are released to the income statement on the occurrence of the underlying hedged interest cash flows. Interest rate swaps designated in cash flow hedges are denominated in US dollar, euro, British pound, Swiss franc and Canadian dollar. As of 31 December 2011, the fair value of interest rate swaps amounted to CHF 7.5 billion (positive replacement values) and CHF 3.6 billion (negative replacement values). The impact on other comprehensive income under IFRS of a 1-basis-point increase of underlying LIBOR curves would have decreased equity by approximately CHF 25 million. This estimate excludes economically offsetting positions and is included in the above table on interest rate sensitivities in the banking book, together with hedge and funding effects that are partially offsetting.

Non-trading portfolios – valuation and sensitivity information by instrument category

Audited

This section includes a description of the valuation of certain significant product categories and related valuation techniques and models. In addition, sensitivity information is provided for certain significant instrument categories that are excluded from management VaR and the interest rate risk in the banking book as disclosed in the "Risk and treasury management" section of this report. Numbers are stated in US dollar, with the Swiss franc equivalent shown in brackets for comparative purposes.

Credit valuation adjustments on monoline credit protection

Audited

Included within our residual risk positions are negative basis trades, whereby we purchased credit default swap (CDS) protection from monolines against UBS-held underlyings, including residential mortgage-backed securities (RMBS) collateralized debt obligations (CDO) and commercial mortgage-backed securities (CMBS) CDO, transactions with collateralized loan obligations, and asset-backed securities CDO. Since the start of the financial crisis, the credit valuation adjustments (CVA) relating to these monoline exposures have been a source of valuation uncertainty, given market illiquidity, and the contractual terms of these exposures relative to other monoline-related instruments.

CVA amounts related to monoline credit protection are based on a methodology that uses CDS spreads on the monolines as a key input in determining an implied level of expected loss. Where a monoline has no observable CDS spread, a judgment is made on the most comparable monoline or combination of monolines, and the corresponding spreads are used instead. For RMBS CDO, CMBS CDO, and collateralized loan obligations asset categories, cash flow projections are used in conjunction with current fair values of the underlying assets to provide estimates of expected future exposure levels. For other asset categories, future exposure is derived from current exposure levels.

To assess the sensitivity of the monoline CVA calculation to alternative assumptions, the impact of a 10% increase in monoline credit default swaps spreads (e.g. from 1,000 basis points to 1,100 basis points for a specific monoline) was considered. On 31 December 2011, such an increase would have resulted in an increase in the monoline CVA of approximately USD 39 million

Interest rate sensitivity – banking book[1]

CHF million	31.12.11	
	–100 bps	+100 bps
CHF	17.5	(66.9)
EUR	169.6	(160.3)
GBP	(9.4)	13.2
USD	(105.5)	(364.9)
Other	(7.2)	(5.5)
Total impact on interest rate-sensitive banking book positions	65.0	(584.3)

1 Does not include interest rate sensitivities for CVA on monoline credit protection, US and non-US RLN and our option to acquire equity of the SNB StabFund for which the interest rate sensitivities are separately disclosed. Also not included are the interest rate sensitivities of our inventory of student loan ARS, as from an economic perspective these exposures are not materially affected by parallel shifts in USD interest rates, holding other factors constant.

Source: UBS 2011 Annual Report, page 137.

19. *Discussion of non-traded portfolios* *(continued)*

Audited (CHF 37 million) compared with USD 45 million (CHF 42 million) on 31 December 2010. After taking into account the impact of the potential commutation transaction discussed in "Note 32 Events after the reporting period" in the "Financial Information" section, this sensitivity reduces from USD 39 million (CHF 37 million) to USD 33 million (CHF 31 million), respectively.

The sensitivity of the monoline CVA to a decrease of one percentage point in the monoline recovery rate assumptions (e.g. from 30% to 29% for a specific monoline, conditional on default occurring) was estimated to result in an increase of approximately USD 11 million (CHF 10 million) in the CVA, compared with USD 9 million (CHF 8 million) on 31 December 2010. After taking into account the impact of the potential commutation transaction discussed in "Note 32 Events after the reporting period" in the "Financial Information" section, this sensitivity reduces from USD 11 million (CHF 10 million) to USD 3 million (CHF 3 million), respectively. The sensitivity to credit spreads and recovery rates is substantially linear.

US reference-linked notes

Audited The US reference-linked notes (RLN) consist of a series of transactions whereby UBS purchased credit protection, predominantly in note form, on a notional portfolio of fixed income assets. The referenced assets are comprised of USD asset-backed securities. These are primarily CMBS and subprime RMBS and/or corporate bonds and loans across all rating categories. While the assets in the portfolio are marked to market, the credit protection embedded in the RLN is fair valued using a market standard approach to the valuation of portfolio credit protection (Gaussian copula). This approach is intended to effectively simulate correlated defaults within the portfolio, where the expected losses and defaults of the individual assets are closely linked to the observed market prices (spread levels) of those assets. Key assumptions of the model include correlations and recovery rates. We apply fair value adjustments related to potential uncertainty in each of these parameters, which are only partly observable. In addition, we apply fair value adjustments for uncertainties associated with the use of observed spread levels as the primary inputs. These fair value adjustments are calculated by applying shocks to the relevant parameters and revaluing the credit protection. These shocks for correlation, recovery and spreads are set to various levels depending on the asset type and/or region and may vary over time depending on the best judgment of the relevant trading and control personnel. Correlation and recovery shocks are generally in the reasonably possible range of 5 to 15 percentage points. Spread shocks vary more widely and depend on whether the underlying protection is funded or unfunded to reflect cash or synthetic basis effects.

On 31 December 2011, the fair value of the US RLN credit protection was approximately USD 319 million (CHF 299 million) compared with USD 629 million (CHF 588 million) on 31 December 2010. The reduction in protection value was due to the reduction of notional of the notes primarily due to writedowns of the reference assets across the RLN deals. This fair value included fair value adjustments which were calculated by applying the shocks described above of approximately USD 22 million (CHF 21 million). This compared with USD 31 million (CHF 29 million) on 31 December 2010. The fair value adjustments may also be considered a measurement of sensitivity.

Non-US reference-linked notes

Audited The same valuation model and approach to the calculation of fair value adjustments are applied to the non-US RLN credit protection and the US RLN credit protection as described above, except that the spread is shocked by 10% for European corporate names.

On 31 December 2011, the fair value of the non-US RLN credit protection was approximately USD 468 million (CHF 439 million) compared with USD 660 million (CHF 616 million) on 31 December 2010. This fair value included fair value adjustments which were calculated by applying the shocks described above of approximately USD 46 million (CHF 43 million) compared with USD 72 million (CHF 67 million) on 31 December 2010. This adjustment may also be considered a measurement of sensitivity.

Option to acquire equity of the SNB StabFund

Audited Our option to purchase the SNB StabFund's equity is recognized on the balance sheet as a derivative at fair value (*positive replacement values*) with changes to fair value recognized in profit or loss. On 31 December 2011, the fair value (after adjustments) of the call option held by UBS was approximately USD 1,736 million (CHF 1,629 million) compared with USD 1,906 million (CHF 1,781 million) on 31 December 2010. The decline in the value of the option reflected lower forecast cash flows and increased risk premia for the fund's assets.

The model incorporates cash flow projections for all assets within the fund across various scenarios. It is calibrated to market levels by setting the spread above the one-month Libor rates used to discount future cash flows such that the model-generated price of the underlying asset pool equals our assessed fair value of the asset pool. The model incorporates a model reserve (fair value adjustment) to address potential uncertainty in this calibration. On 31 December 2011, this adjustment was USD 131 million (CHF 123 million) compared with USD 250 million (CHF 234 million) on 31 December 2010. The decline in the reserve amount reflects greater convergence of valuations across the scenarios, consistent with lesser dependence of the valuation on projections of future cash flows

On 31 December 2011, a 100-basis-point increase in the discount rate would have decreased the option value by approximately USD 139 million (CHF 130 million) compared with USD 167 million (CHF 156 million) on 31 December 2010; and a 100-basis-point decrease would have increased the option value by approximately USD 155 million (CHF 145 million) compared with USD 188 million (CHF 176 million).

Market risk – stress loss

To complement VaR and other measures of market risk, we run macro stress scenarios, combining various market moves to reflect the most common types of potential stress events, as well as more

Source: UBS 2011 Annual Report, page 138.

19. *Discussion of non-traded portfolios* *(continued)*

targeted stress tests for our concentrated exposures and vulnerable portfolios. Targeted stress tests are typically applied to specific asset classes or to specific markets and products. We continued to enhance our market risk stress framework in 2011, in order to increase the scope and detail of the analysis. Our scenarios capture the liquidity characteristics of different markets, asset classes and positions.

Our market risk stress testing framework is designed to provide a control framework that is forward-looking and responsive to changing market conditions. Our stress scenarios are therefore reviewed regularly in the context of the macroeconomic and geopolitical environment by a committee comprised of representatives from the business divisions, Risk Control and Economic Research. In response to changing market conditions and new developments around the world, we develop and run ad hoc stress scenarios to assess the potential impact on our portfolio.

→ Refer to the discussion on stress loss in this section for more information

Equity investments

Audited

Under IFRS, equity investments not in the trading book may be classified as *Financial investments available-for-sale, Financial assets designated at fair value through profit or loss* or *Investments in associates*.

We make investments for a variety of purposes, including revenue generation or as part of strategic initiatives. Other investments, such as exchange and clearing house memberships, are held to support our business activities. We may also make investments in funds that we manage, in order to fund or "seed" them at inception, or to demonstrate that our interests concur with those of investors. We also buy, and are sometimes required by agreement to buy, securities and units from funds that we have sold to clients. These may include purchases of illiquid assets such as interests in hedge funds.

We may make direct investments in a variety of entities or buy equity holdings in both listed and unlisted companies, if such investments are illiquid. The fair value of equity investments tends to be dominated by factors specific to the individual stocks, and our equity investments are generally intended to be held for the medium or long term and may be subject to lockup agreements. For these reasons, we generally do not control these exposures using the market risk measures applied to trading activities. Such equity investments are, however, subject to a different range of controls, including pre-approval of new investments by business management and Risk Control and regular monitoring and reporting. They are also included in our firm-wide earnings-at-risk, capital-at-risk and combined stress testing metrics.

Audited

Investments made as part of an ongoing business are also subject to our standard controls, including portfolio and concentration limits. Seed money and co-investments in UBS-managed funds made by Global Asset Management are, for example, subject to a portfolio limit. All investments must be approved by delegated authorities and are monitored and reported to senior management.

Composition of equity investments

Audited

On 31 December 2011, we held equity investments totaling CHF 2.2 billion, of which CHF 0.7 billion were classified as *Financial investments available-for-sale*, CHF 0.7 billion as *Financial assets designated at fair value* and CHF 0.8 billion as *Investments in associates*.

This compares with 31 December 2010, when we held equity investments totaling CHF 2.6 billion, of which CHF 0.9 billion classified as *financial investments available-for-sale*, CHF 0.9 billion as *financial assets designated at fair value* and CHF 0.8 billion as *investments in associates*.

The vast majority of the CHF 0.7 billion of *Financial assets designated at fair value* represented the assets of trust entities associated with employee compensation schemes. They are broadly offset by liabilities to plan participants included in *Other liabilities*. The equivalent positions on 31 December 2010 amounted to CHF 0.9 billion.

→ Refer to "Note 12 Financial assets designated at fair value", "Note 13 Financial investments available-for-sale" and "Note 14 Investments in associates" in the "Financial information" section of this report for more information

Source: UBS 2011 Annual Report, page 139.

20. *Sensitivity and VaR analysis*

Interest rate risk

The banking book consists of interest bearing assets, liabilities and derivative instruments used to mitigate risks which are accounted for on an accrual basis, as well as non-interest bearing balance sheet items, which are not subjected to fair value accounting.

The Group provides financial products to satisfy a variety of customer requirements. Loans and deposits are designed to meet customer objectives with regard to repricing frequency, tenor, index, prepayment, optionality and other features. When aggregated, they form portfolios of assets and liabilities with varying degrees of sensitivity to changes in market rates.

However, mismatches in these sensitivities give rise to net interest income (NII) volatility as interest rates rise and fall. For example, a bank with a floating rate loan portfolio and largely fixed rate deposits will see its NII rise as interest rates rise and fall as rates decline. Due to the long-term nature of many banking book portfolios, varied interest rate repricing characteristics and maturities, it is likely the NII will vary from period to period, even if interest rates remain the same. New business volumes originated in any period will alter the interest rate sensitivity of a bank if the resulting portfolio differs from portfolios originated in prior periods.

The Group assesses interest rate risk in the banking book (IRRBB) using a set of standards to define, measure and report the market risk. It is the Group's policy to minimise interest rate sensitivity in banking book portfolios and where interest rate risk is retained, to ensure that appropriate measures and limits are applied. Key measures used to evaluate IRRBB are subjected to approval of divisional Asset and Liability Management Committees (ALCOs) and the Group Asset and Liability Management Committee (GALCO).

Limits on IRRBB are proposed by the Group Treasurer for approval by the Executive Risk Forum annually.

The Group uses a variety of approaches to quantify its interest rate risk. IRRBB is measured using a version of the same value-at-risk (VaR) methodology that is used for the Group's trading portfolios. Net interest income exposures are measured in terms of sensitivity over time to movements in interest rates. Additionally, Citizens measures the sensitivity of the market value of equity to changes in forward interest rates.

With the exception of Citizens and GBM, divisions are required to manage IRRBB through internal transactions with Group Treasury, to the greatest extent possible. Residual risks in divisions must be measured and reported as described below.

Group Treasury aggregates exposures arising from its own external activities and positions transferred to it from divisions. Where appropriate Group Treasury nets off-setting risk exposures to determine a residual exposure to interest rate movements. Hedging transactions using cash and derivative instruments are executed to manage IRRBB exposures, within the GALCO approved VaR limits.

Citizens and GBM manage their own IRRBB exposures within approved limits to satisfy their business objectives.

IRRBB VaR for the Group's retail and commercial banking activities at a 99% a confidence level was as follows:

	Average £m	Period end £m	Maximum £m	Minimum £m
2011	63	51	80	44
2010	58	96	96	30
2009	86	101	123	53

A breakdown of the Group's IRRBB VaR by currency is shown below.

Currency	2011 £m	2010 £m	2009 £m
Euro	26	33	32
Sterling	57	79	111
US dollar	61	121	42
Other	5	10	9

Key points

- Interest rate exposure at 31 December 2011 was considerably lower than at 31 December 2010 but average exposure was 9% higher in 2011 than in 2010.
- The reduction in US dollar VaR reflects, in part, changes in holding period assumptions following changes in Non-Core assets.

Source: RBS Group 2011 Annual Report, page 131.

20. *Sensitivity and VaR analysis* *(continued)*

Balance sheet management: Interest rate risk continued

Sensitivity of net interest income*

The Group seeks to mitigate the effect of prospective interest rate movements, which could reduce future net interest income (NII) in the Group's businesses, whilst balancing the cost of such activities on the current net revenue stream. Hedging activities also consider the impact on market value sensitivity under stress.

The following table shows the sensitivity of NII, over the next twelve months, to an immediate upward or downward change of 100 basis points to all interest rates. In addition, the table includes the impact of a gradual 400 basis point steepening and a gradual 300 basis point flattening of the yield curve at tenors greater than a year. This scenario differs from that applied in the previous year in both the severity of the rate shift and the tenors to which this is applied.

Potential favourable/(adverse) impact on NII	2011 £m	2010 £m	2009 £m
+ 100 basis points shift in yield curves	244	232	510
– 100 basis points shift in yield curves	(183)	(352)	(687)
Bear steepener	443		
Bull flattener	(146)		

Key points*

- The Group's interest rate exposure remains slightly asset sensitive, driven in part by changes to underlying business assumptions as rates rise. The impact of the steepening and flattening scenarios is largely driven by the investment of net free reserves.
- The reported sensitivity will vary over time due to a number of factors such as market conditions and strategic changes to the balance sheet mix and should not therefore be considered predictive of future performance.

Source: RBS Group 2011 Annual Report, page 132.

20. *Sensitivity and VaR analysis (continued)*

Structural foreign currency exposures

Structural foreign exchange exposures represent net investment in subsidiaries, associates and branches, the functional currencies of which are currencies other than sterling. The Group hedges structural foreign currency exposures only in limited circumstances. The Group's objective is to ensure, where practical, that its consolidated capital ratios are largely protected from the effect of changes in exchange rates. The Group seeks to limit the sensitivity to its Core Tier 1 ratio to 20 basis points in a 10% rate shock scenario. The Group's structural foreign currency position is reviewed by GALCO regularly.

The table below shows the Group's structural foreign currency exposures.

2011	Net assets of overseas operations £m	RFS MI £m	Net investments in foreign operations £m	Net investment hedges £m	Structural foreign currency exposures pre-economic hedges £m	Economic hedges (1) £m	Residual structural foreign currency exposures £m
US dollar	17,570	1	17,569	(2,049)	15,520	(4,071)	11,449
Euro	8,428	(3)	8,431	(621)	7,810	(2,236)	5,574
Other non-sterling	5,224	272	4,952	(4,100)	852	—	852
	31,222	270	30,952	(6,770)	24,182	(6,307)	17,875
2010							
US dollar	17,137	2	17,135	(1,820)	15,315	(4,058)	11,257
Euro	8,443	33	8,410	(578)	7,832	(2,305)	5,527
Other non-sterling	5,320	244	5,076	(4,135)	941	—	941
	30,900	279	30,621	(6,533)	24,088	(6,363)	17,725
2009							
US dollar	15,589	(2)	15,591	(3,846)	11,745	(5,696)	6,049
Euro	21,900	13,938	7,962	(2,351)	5,611	(3,522)	2,089
Other non-sterling	5,706	511	5,195	(4,001)	1,194	—	1,194
	43,195	14,447	28,748	(10,198)	18,550	(9,218)	9,332

Note:
(1) The economic hedges represent US dollar and euro preference shares in issue that are treated as equity under IFRS, and do not qualify as hedges for accounting purposes.

Key points

- The Group's structural foreign currency exposure at 31 December 2011 was £24.2 billion and £17.9 billion before and after economic hedges respectively, broadly unchanged from the end of 2010 position.
- Changes in foreign currency exchange rates will affect equity in proportion to structural foreign currency exposure. A 5% strengthening in foreign currencies against sterling would result in a gain of £1.27 billion (2010 - £1.27 billion; 2009 - £0.98 billion) in equity, while a 5% weakening would result in a loss of £1.15 billion (2010 - £1.15 billion; 2009 - £0.88 billion) in equity.

Equity risk

The Group holds equity positions in the banking book in order to achieve strategic objectives, such as membership of an exchange or clearing house, or to support venture capital transactions or customer restructuring arrangements. The Group is exposed to market risk on these banking book equity positions because they are measured at fair value. Fair values are based on available market prices where possible. In the event that market prices are not available, fair value is based on appropriate valuation techniques or management estimates.

The table below sets out the Group's banking book equity positions.

2011	Listed £m	Unlisted £m	Total £m
Group	576	1,768	2,344
2010			
Group	535	2,080	2,615
2009			
Group before RFS Holdings minority interest	401	2,388	2,789
RFS Holdings minority interest	60	211	271
Group	461	2,599	3,060

Note:
(1) The table above excludes equity exposures held-for-trading and those held by insurance/assurance entities.

Source: RBS Group 2011 Annual Report, page 133.

20. *Sensitivity and VaR analysis (continued)*

Risk management: Market risk continued

Non-trading portfolios

The table below analyses the risk for the Group's non-trading portfolios.

VaR is not always the most appropriate measure of risk for assets in the banking book and particularly for those in Non-Core, which will diminish over time as the asset inventory is sold down.

In order to better represent the risk of the non-traded portfolios, the table below analyses the VaR for the non-trading portfolios but excludes the Non-Core structured credit portfolio (SCP). These assets are shown separately on a drawn notional and fair value basis by maturity profile and asset class. The risk in this portfolio is managed on both a third party asset and RWA basis.

Also excluded from the non-traded VaR are the loans and receivable products that are managed within the credit risk management framework.

	2011				2010				2009			
Non-trading VaR	Average £m	Period end £m	Maximum £m	Minimum £m	Average £m	Period end £m	Maximum £m	Minimum £m	Average £m	Period end £m	Maximum £m	Minimum £m
Interest rate	8.8	9.9	11.1	5.7	8.7	10.4	20.5	4.4	13.0	13.9	26.3	7.7
Credit spread	18.2	13.6	39.3	12.1	32.0	16.1	101.2	15.4	81.7	100.3	131.5	39.7
Currency	2.1	4.0	5.9	0.1	2.1	3.0	7.6	0.3	1.4	0.6	7.0	0.2
Equity	2.1	1.9	3.1	1.6	1.2	3.1	4.6	0.2	3.3	2.2	5.8	1.6
Diversification (1)		(13.6)				(15.9)				(20.4)		
	19.7	15.8	41.6	13.4	30.9	16.7	98.0	13.7	80.4	96.6	126.9	46.8
Core	19.3	15.1	38.9	13.5	30.5	15.6	98.1	12.8	78.4	95.9	126.9	46.8
Non-Core	3.4	2.5	4.3	2.2	1.3	2.8	4.1	0.2	3.5	1.9	16.9	—

Note:
(1) The Group benefits from diversification, which reflects the risk reduction achieved by allocating investments across various financial instrument types, industry counterparties, currencies and regions. The extent of diversification benefit depends on the correlation between the assets and risk factors in the portfolio at a particular time. Diversification has an inverse relationship with correlation. The diversification factor is the sum of the VaR on individual risk types less the total portfolio VaR.

Key points

- The Group's total non-trading VaR at 31 December 2011 was significantly lower than at 31 December 2010, due to the exceptional volatility of the 2008/2009 financial crisis dropping out of the two-year time series data used in the VaR calculation.
- The maximum credit spread VaR was considerably lower in 2011 than in 2010. This was due to the implementation in early 2011 of the relative price-based mapping scheme for the Dutch RMBS portfolio. The availability of more granular data provided a better reflection of the risk in the portfolio.

Source: RBS Group 2011 Annual Report, page 234.

21. *Year-on-year variance analysis*

Analysis of traded market risk exposures (Audited)

The trading environment in 2011 was characterised by weak underlying economic growth as well as uncertain market direction resulting in lower client activity particularly in the second half of 2011. In this environment, Barclays Capital's market risk exposure, as measured by average total DVaR, increased 8% to £57m (2010: £53m).

The three main risk factors affecting DVaR were spread, interest rate and equity risk. From 2010 levels, average DVaR for spread risk fell by £3m (6%) and interest rate DVaR fell by £16m (48%) reflecting cautious positioning. Equity DVaR increased by £4m (29%) on continued growth of the global equities business and product offerings.

The diversification effect fell 38% to an average of £40m in 2011 due to increasing cross asset correlation as the European crisis worsened. However, the tail risk indicated by the expected shortfall and 3W measures fell 9% to £71m and 16% to £121m respectively from 2010 levels.

Source: Barclays 2011 Annual Report, page 123.

22. *Changes in VaR model*

We use the same VaR model for risk management and regulatory capital purposes, except for the confidence level and holding period used. We regularly review our VaR model to ensure that it remains appropriate given evolving market conditions and the composition of our trading portfolio. As part of the ongoing review to improve risk management approaches and methodologies, we implemented a significantly revised VaR methodology for both ▷risk management VaR and ▷regulatory VaR in the second quarter of 2011. We believe these changes make VaR a more useful risk management tool and improve the responsiveness of the model to market volatility. We have approval from FINMA to use this revised VaR methodology for both risk management and regulatory capital purposes. We have restated risk management VaR for prior periods to show meaningful trends. The methodology changes were implemented in June 2011 and are fully reflected in risk management VaR. For regulatory VaR, these methodology changes have been reflected from implementation only. The revisions to the VaR methodology included:

- Historical dataset changed to two years (from three years);
- Exponential weighting to give emphasis to more recent market data and volatility (previously: equal weighting of market data and the use of scaled VaR);
- Expected shortfall calculation based on average losses (previously: losses from a single event);
- One-day holding period for risk management VaR (from a ten-day holding period adjusted to one day, with regulatory VaR continuing to be based on a ten-day holding period); and
- Confidence level changed to 98% for risk management VaR (from 99%, with regulatory VaR continuing to be based on a 99% confidence level).

In addition, we also made asset-class methodology changes, including changing the non-investment grade model to a spread-based rather than a price-based model to better capture issuer-specific basis and maturity risk and modifying the traded loans model to better capture basis risk. We also implemented a single stock volatility model to better capture equity exposures. Additionally, we enhanced the VaR methodology for non-agency RMBS exposures to reflect the risk of assets traded on a price-basis instead of a spread-basis and to better capture non-linear effects and basis risk.

We have approval from FINMA, as well as from certain other regulators of our subsidiaries, to use our regulatory VaR model in the calculation of trading book market risk capital requirements. We continue to receive regulatory approval for ongoing enhancements to the methodology, and the model is subject to regular reviews by regulators.

For risk management VaR, we use a one-day holding period and a 98% confidence level. This means there is a 1-in-50 chance of incurring a daily mark-to-market trading loss at least as large as the reported VaR. For regulatory VaR, we present one-day, 99% VaR, which is a ten-day VaR adjusted to a one-day holding period. In order to show the aggregate market risk in our trading books, the chart entitled "Daily risk management VaR" shows the trading-related market risk on a consolidated basis.

Source : Credit Suisse 2011 Annual Report, pages 117 and 118.

22. *Changes in VaR model* *(continued)*

One-day, 98% risk management VaR and one-day, 99% regulatory VaR (CHF)

						Risk management VaR (98%)	Regulatory VaR (99%)
in / end of	Interest rate & credit spread	Foreign exchange	Commodity	Equity	Diversification benefit	**Total**	**Total**
2011 (CHF million)							
Average	73	13	10	23	(44)	75	94
Minimum	54	5	2	14	– [1]	54	49
Maximum	99	25	26	47	– [1]	107	161
End of period	73	12	4	25	(40)	74	79
2010 (CHF million)							
Average	102	18	22	27	(67)	102	142
Minimum	78	6	10	15	– [1]	68	103
Maximum	127	43	32	50	– [1]	142	205
End of period	90	21	18	25	(63)	91	124
2009 (CHF million)							
Average	150	21	25	31	(83)	144	143
Minimum	94	6	16	17	– [1]	85	80
Maximum	245	63	40	60	– [1]	237	269
End of period	104	12	18	32	(71)	95	131

Excludes risks associated with counterparty and own credit exposures. In June 2011, we made significant changes to our VaR methodology. Risk management VaR for periods prior to implementation has been restated in order to show meaningful trends. For regulatory VaR, these methodology changes have been reflected from implementation only.
[1] As the maximum and minimum occur on different days for different risk types, it is not meaningful to calculate a portfolio diversification benefit.

One-day, 98% risk management VaR and one-day, 99% regulatory VaR (USD)

						Risk management VaR (98%)	Regulatory VaR (99%)
in / end of	Interest rate & credit spread	Foreign exchange	Commodity	Equity	Diversification benefit	**Total**	**Total**
2011 (USD million)							
Average	82	14	11	26	(48)	85	105
Minimum	64	6	2	15	– [1]	65	55
Maximum	107	29	29	51	– [1]	117	177
End of period	77	13	4	27	(42)	79	84
2010 (USD million)							
Average	91	16	20	24	(60)	91	136
Minimum	68	6	9	14	– [1]	64	95
Maximum	111	38	28	44	– [1]	124	210
End of period	78	18	16	22	(54)	80	132
2009 (USD million)							
Average	137	19	23	29	(77)	131	128
Minimum	93	6	13	17	– [1]	83	78
Maximum	217	54	38	52	– [1]	210	226
End of period	100	11	17	31	(67)	92	126

Excludes risks associated with counterparty and own credit exposures. In June 2011, we made significant changes to our VaR methodology. Risk management VaR for periods prior to implementation has been restated in order to show meaningful trends. For regulatory VaR, these methodology changes have been reflected from implementation only.
[1] As the maximum and minimum occur on different days for different risk types, it is not meaningful to calculate a portfolio diversification benefit.

Source: Credit Suisse 2011 Annual Report, pages 119 and 120.

23. *Graph of daily VaR and P&L*

Backtesting

Audited

Backtesting compares 1-day 99% regulatory VaR calculated for positions at the close of each business day with the revenues which actually arise on those positions on the following business day. Our backtesting revenues exclude non-trading revenues, such as fees and commissions and estimated revenues from intraday trading. A backtesting exception occurs when backtesting revenues are negative and the absolute value of those revenues is greater than the previous day's VaR.

We experienced three backtesting exceptions in 2011 compared with one backtesting exception in 2010. All three exceptions occurred in the third quarter 2011 due to extreme market moves and the unauthorized trading incident.

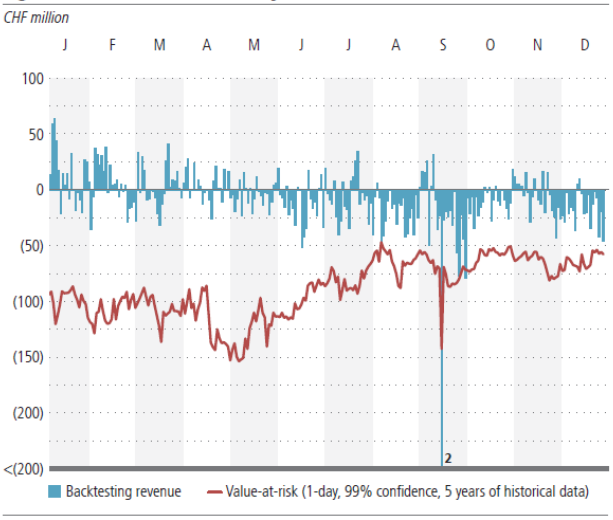
The chart "Investment Bank: development of backtesting revenues against value-at-risk" shows the 12-month development of 1-day 99% VaR against backtesting revenues in the Investment Bank for the whole year of 2011. The histogram "Investment Bank: all revenue distribution" shows the Investment Bank's full trading revenues distribution in 2011.

We investigate all backtesting exceptions and any exceptional revenues on the profit side of the VaR distribution. In addition, we report all backtesting results to senior business management, the Group Chief Risk Officer and business division Chief Risk Officers.

Audited

Backtesting exceptions are also reported to internal and external auditors and to the relevant regulators.

Investment Bank: development of backtesting revenues[1] against value-at-risk (1-day, 99% confidence)



1 Excludes non-trading revenues, such as commissions and fees, and revenues from intraday trading.
2 Backtesting exception as a result of the unauthorized trading incident.

Source: UBS 2011 Annual Report, page 135.

24. *VaR limitations*

Among their benefits, VaR models permit estimation of a portfolio's aggregate market risk exposure, incorporating a range of varied market risks and portfolio assets. One key element of the VaR model is that it reflects risk reduction due to portfolio diversification or hedging activities. However, VaR risk measures should be interpreted carefully in light of the methodology's limitations, which include but are not limited to: past changes in market risk factors may not always yield accurate predictions of the distributions and correlations of future market movements; changes in portfolio value in response to market movements (especially for complex derivative portfolios) may differ from the responses calculated by a VaR model; VaR using a one-day time horizon does not fully capture the market risk of positions that cannot be liquidated or hedged within one day; the historical market risk factor data used for VaR estimation may provide only limited insight in losses that could be incurred under market conditions that are unusual relative to the historical period used in estimating the VaR; and published VaR results reflect past trading positions while future risk depends on future positions. A small proportion of market risk generated by trading positions is not included in VaR. The modelling of the risk characteristics of some positions relies on approximations that, under certain circumstances, could produce significantly different results from those produced using more precise measures. VaR is most appropriate as a risk measure for trading positions in liquid financial markets and will understate the risk associated with severe events, such as periods of extreme illiquidity. The Company is aware of these and other limitations and, therefore, uses VaR as only one component in its risk management oversight process. As explained above, this process also incorporates stress testing and scenario analyses and extensive risk monitoring, analysis, and control at the trading desk, division and Company levels.

Source: Morgan Stanley 2011 Annual Report, page 104.

25. *Alternative risk measures*

Risk measurement
Barclays uses a range of complementary technical approaches to measure and control traded market risk including: Daily Value at Risk (DVaR), Expected Shortfall, 3W, primary and secondary stress testing and combined scenario stress testing.

The daily average, maximum and minimum values of DVaR, Expected Shortfall and 3W were calculated as below:

The daily average, maximum and minimum values of DVaR, Expected Shortfall and 3W (audited)	Year ended 31 December 2011			Year ended 31 December 2010		
DVaR (95%)	Average £m	High[a] £m	Low[a] £m	Average £m	High[a] £m	Low[a] £m
Interest rate risk	17	47	7	33	50	21
Spread risk	45	69	25	48	62	30
Commodity risk	12	18	7	16	25	9
Equity risk	18	34	9	14	29	6
Foreign exchange risk	5	8	2	6	15	2
Diversification effect	(40)	na	na	(64)	na	na
Total DVaR	57	88	33	53	75	36
Expected Shortfall	71	113	43	78	147	47
3W	121	202	67	144	311	72

Source: Barclays 2011 Annual Report, pages 122 and 123.

26. *Stress testing scenarios and results*

STRESS TESTING

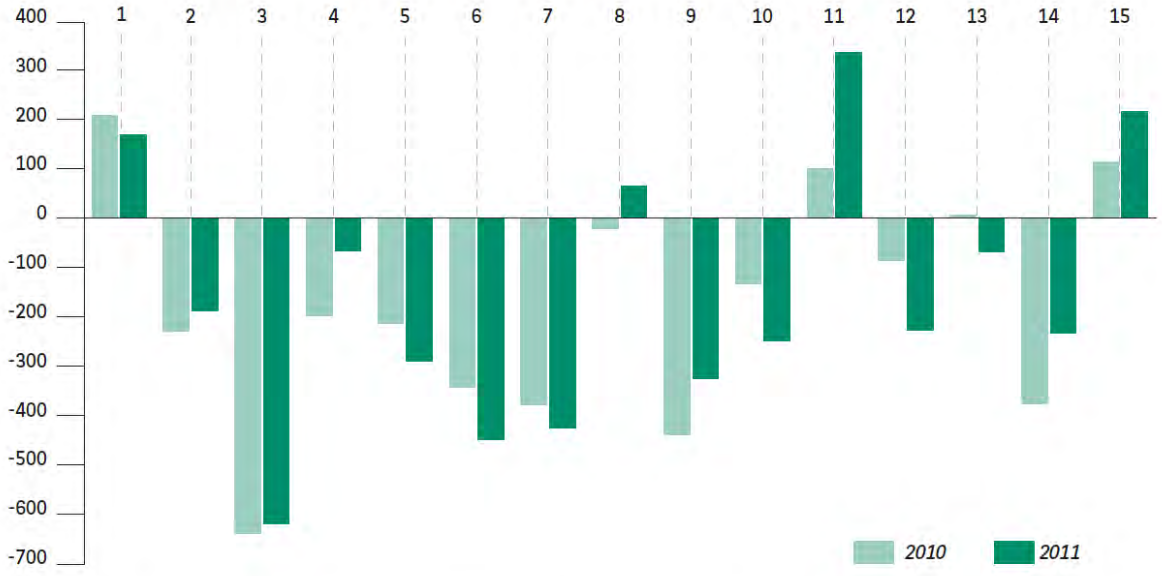
The Group performs a range of stress tests to simulate the impact of extreme market conditions on the value of trading portfolios at the global level of the Group. Stress tests cover all market activities: Fixed Income, Forex, Equity Derivatives, Commodities and Treasury (except banking portfolios of sovereign debt) and a range of different market conditions. These 'top down' macro scenarios are referred to as "Global CMRC" scenarios and they are presented to and reviewed by the CMRC at each meeting.

The "Global CMRC" stress scenarios currently comprise a range of fifteen different stress tests.

- scenario 1: sharp increase in inflation expectations, driving rates higher with a steepening of the interest rate curve;
- scenario 2: unexpected rate hike by central banks, driving short-term rates higher with a flattening of the interest rate curve;
- scenario 3: stock market crash, coupled with a flight to quality and central bank intervention, leading to a drop and a steepening of the interest rate curve;
- scenario 4: emerging market crisis driven from Asia;
- scenario 5: emerging markets crisis driven from Latin America;
- scenario 6: credit crunch, leading to a general risk aversion;
- scenario 7: Hedge Fund systemic crisis, leading to sharp moves in all markets where hedge funds are active (CDO correlation, convertibles, etc.);
- scenario 8: Euro confidence crisis;
- scenario 9: Middle East crisis with severe consequences on energy markets;
- scenario 10: major terrorist attack in Western countries;
- scenario 11: change in Japanese monetary policy, with surge and flattening of the JPY interest rate curve and a strongly negative impact on the JPY currency;
- scenario 12: major earthquake in California with consequences on EUR/USD exchange rate and interest rate differentials;
- scenario 13: collapse of US dollar;
- scenario 14: eruption of flu pandemic leading to a general risk aversion and sharp fall in equity and credit markets;
- scenario 15: mild rally in equity and emerging markets, low realised volatility and drop in implied volatility in all markets.

Risk-IM also produces 'bottom up' stress tests which quantify the risk coming from specific portfolios or concentrations of risk. These 'micro' scenarios can capture more complicated market movements which may not occur in the global level macro scenarios (such as a dislocation of a particular point on an interest rate curve or one market credit sector behaving differently to another whereas both would usually have a strong correlation.

➤ **AVERAGE ANNUAL DECREASE IN 2010 AND 2011 REVENUES FROM MARKET ACTIVITIES TRADING PORTFOLIOS AS A RESULT OF EACH OF THE 15 STRESS SCENARIOS (IN MILLIONS OF EUROS)**



Results of the micro and macro market risk stress testing scenarios can be used to construct an adverse case for the BNP Paribas trading books.

Source : BNP Paribas 2011 Annual Report, pages 270 and 271.

Credit risk

27. *Credit risk by industry*

Note 38 Credit Risk (continued)

Maximum Exposure to Credit Risk by Industry and Asset Class before Collateral Held or Other Credit Enhancements

The below tables detail the concentration of credit exposure assets by significant geographical locations and counterparty types. Disclosures do not take into account collateral held and other credit enhancements.

	Group At 30 June 2012									
	Sovereign $M	Agri-culture $M	Bank & Other Financial $M	Home Loans $M	Constr-uction $M	Personal $M	Asset Financing $M	Other Comm & Indust. $M	Other $M	Total $M
Australia										
Credit risk exposures relating to on balance sheet assets:										
Cash and liquid assets	-	-	7,519	-	-	-	-	-	-	7,519
Receivables due from other financial institutions	-	-	6,135	-	-	-	-	-	-	6,135
Assets at fair value through Income Statement:										
Trading	5,560	-	975	-	-	-	-	2,416	-	8,951
Insurance [1]	929	-	8,476	-	-	-	-	3,413	-	12,818
Other	-	-	6	-	-	-	-	-	-	6
Derivative assets	311	66	29,508	-	31	-	-	4,846	-	34,762
Available-for-sale investments	25,639	-	26,604	-	-	-	-	479	-	52,722
Loans, bills discounted and other receivables [2]	1,619	5,250	10,225	320,570	2,796	21,772	8,214	106,679	-	477,125
Bank acceptances	3	2,886	191	-	603	-	-	6,032	-	9,715
Other assets [3]	37	61	184	1,165	11	32	17	480	14,023	16,010
Total on balance sheet Australia	34,098	8,263	89,823	321,735	3,441	21,804	8,231	124,345	14,023	625,763
Credit risk exposures relating to off balance sheet assets:										
Guarantees	1,241	34	258	14	903	-	-	2,766	-	5,216
Loan commitments	1,117	814	2,082	57,158	1,903	18,923	-	32,674	-	114,671
Other commitments	96	13	1,770	4	725	-	-	2,042	-	4,650
Total Australia	36,552	9,124	93,933	378,911	6,972	40,727	8,231	161,827	14,023	750,300
Overseas										
Credit risk exposures relating to on balance sheet assets:										
Cash and liquid assets	-	-	12,147	-	-	-	-	-	-	12,147
Receivables due from other financial institutions	-	-	4,751	-	-	-	-	-	-	4,751
Assets at fair value through Income Statement:										
Trading	407	-	859	-	-	-	-	3,599	-	4,865
Insurance [1]	-	-	1,707	-	-	-	-	-	-	1,707
Other	967	-	7	-	-	-	-	-	-	974
Derivative assets	225	1	3,157	-	-	-	-	792	-	4,175
Available-for-sale investments	6,948	-	1,156	-	-	-	-	1	-	8,105
Loans, bills discounted and other receivables [2]	10,235	5,198	3,156	30,063	345	656	468	5,134	-	55,255
Bank acceptances	-	-	-	-	-	-	-	2	-	2
Other assets [3]	19	1	5,378	1	-	-	1	37	1,746	7,183
Total on balance sheet overseas	18,801	5,200	32,318	30,064	345	656	469	9,565	1,746	99,164
Credit risk exposures relating to off balance sheet assets:										
Guarantees	-	1	2	-	12	-	-	127	-	142
Loan commitments	392	375	197	3,849	168	1,172	-	7,009	-	13,162
Other commitments	71	1	-	-	3	-	-	1,032	-	1,107
Total overseas	19,264	5,577	32,517	33,913	528	1,828	469	17,733	1,746	113,575
Total gross credit risk	55,816	14,701	126,450	412,824	7,500	42,555	8,700	179,560	15,769	863,875

(1) In most cases the credit risk of insurance assets is borne by policyholders. However, on certain insurance contracts the Group retains exposure to credit risk.
(2) Loans, bills discounted and other receivables is presented gross of provisions for impairment and unearned income on lease receivables in line with Note 13.
(3) Other assets predominantly comprises assets which do not give rise to credit exposure, including intangible assets, property and plant and equipment, which are shown in "Other" for the purpose of reconciling to the Balance Sheet.

Source: Commonwealth Bank of Australia 2012 Annual Report, page 182.

28. *Credit exposure by business division*

Audited

Credit exposure by business division

	Wealth Management & Swiss Bank		Wealth Management Americas		Investment Bank		Other[1]		UBS	
CHF million	31.12.11	31.12.10	31.12.11	31.12.10	31.12.11	31.12.10	31.12.11	31.12.10	31.12.11	31.12.10
Balances with central banks	3,370	10,727	2,161		31,743	13,732	1,290		38,565	24,459
Due from banks	4,395	2,678	1,594	2,157	18,182	13,924	655	315	24,826	19,075
Loans	210,375	201,942	27,894	22,472	18,552[2]	17,679[2]	155	158	256,977[2]	242,250[2]
Guarantees	11,797	10,505	406	370	5,551	4,820	129	123	17,884	15,819
Loan commitments	7,955	7,276	1,076	1,066	46,927	46,216			55,958	54,558
Banking products[3]	237,893	233,128	33,131	26,065	120,955	96,371	2,229	596	394,209	356,161
OTC derivatives	5,709	4,048	74	56	45,759	47,452	330	284	51,871	51,840
Exchange-traded derivatives	984	978	877	1,114	7,938	14,599			9,799	16,691
Securities financing transactions			155	156	20,051	20,279			20,206	20,435
Traded products	6,693	5,026	1,106	1,326	73,748	82,330	330	284	81,877	88,966
Total credit exposure	244,585	238,155	34,238	27,391	194,703	178,701	2,559	880	476,086	445,127
Total credit exposure, net[4]	243,476	236,488	34,235	27,389	163,057	143,364	2,559	876	443,328	408,117

1 Includes Global Asset Management and Corporate Center. 2 Does not include reclassified securities and similar acquired securities. 3 Excludes loans designated at fair value. 4 Net of allowances, provisions, CVA and hedges.

Source: UBS 2011 Annual Report, page 119.

29. *Risk of credit-related losses*

We may suffer additional credit-related losses in the future if our borrowers are unable to repay their loans as expected or if the measures we take in reaction to, or in anticipation of, our borrowers' deteriorating repayment abilities prove inappropriate or insufficient.

When we lend money or commit to lend money, we incur credit risk, or the risk of losses if our borrowers do not repay their loans. We may incur significant credit losses or have to provide for a significant amount of additional allowance for credit losses if:

- large borrowers become insolvent or must be restructured;
- domestic or global economic conditions, either generally or in particular industries in which large borrowers operate, deteriorate;
- the value of the collateral we hold, such as real estate or securities, declines; or
- we are adversely affected by corporate credibility issues among our borrowers, to an extent that is worse than anticipated.

As a percentage of total loans, nonaccrual and restructured loans and accruing loans contractually past due 90 days or more ranged from 1.70% to 2.36% as of the five recent fiscal year-ends, reaching its highest level of 2.36% as of March 31, 2011 and 2012. Nonaccrual and restructured loans and accruing loans contractually past due 90 days or more increased to ¥2.2 trillion at March 31, 2012, from ¥2.1 trillion at March 31, 2011, primarily due to an increase in such loans in our domestic loan portfolio. If the recession in Japan worsens again, our problem loans and credit-related expenses may increase. An increase in problem loans and credit-related expenses would adversely affect our results of operations, weaken our financial condition and erode our capital base. For a discussion of our problem loans, see "Item 5.B. Operating and Financial Review and Prospects—Liquidity and Capital Resources—Financial Condition" and "Selected Statistical Data—Loan Portfolio."

Source: Mitsubishi UFJ Financial Group 2012 Annual Report, pages 8 and 9.

30. *Impairment and cash loss projections*

Impairment and cash loss projections
(Unaudited)

At each reporting date, management undertakes a stress analysis. This exercise comprises a shift of projections of future loss severities, default rates and prepayment rates. The results of the analysis at 30 June 2011 indicated that further impairment charges of US$900m and expected cash losses of US$400m could arise over the next two to three years.

This exercise was re-performed at 31 December 2011 and the results remain consistent with the June 2011 guidance.

For the purposes of identifying impairment at the reporting date, the future projected cash flows reflect the effect of loss events that have occurred at or prior to the reporting date. For the purposes of performing stress tests to estimate potential future impairment charges, the projected future cash flows reflect additional assumptions about future loss events after the balance sheet date.

This analysis makes assumptions in respect of the future behaviour of loss severities, default rates and prepayment rates. Movements in the parameters are not independent of each other. For example, increased default rates and increased loss severities, which would imply greater impairments, generally arise under economic conditions that give rise to reduced levels of prepayment, reducing the potential for impairment charges. Conversely, economic conditions which increase the rates of prepayment are generally associated with reduced default rates and decreased loss severities.

At 31 December 2011, the incurred and projected impairment charges, measured in accordance with accounting requirements, significantly exceeded the expected cash losses on the securities. Over the lives of the available-for-sale ABSs the cumulative impairment charges will converge towards the level of cash losses. In respect of the SICs, in particular, the capital notes held by third parties are expected to absorb the cash losses arising in the vehicles.

Source: HSBC Holdings 2011 Annual Report, page 151.

31. *Quantitative information on undrawn amounts*

Table 4.1 Specification of on-balance sheet and off-balance sheet items for the Nordea Group, 31 December 2011

EURm On-balance	Balance sheet (accounting)	Items related to market risk	Repos, derivatives, securities lending	Life insurance operations	Other	Original Exposure	Credit Conversion Factor %	Exposure
On-balance sheet items								
Cash and balances with central banks	3,765			–1		3,764	100%	3,764
Treasury bills, other interest-bearing securities and pledged instruments	100,746	–26,019		–23,419		51,308	100%	51,308
Loans to credit institutions[1]	51,865		–5,513		–563	45,789	100%	45,789
Loans to the public[2]	337,203		–26,784	–878	2,747	312,288	100%	312,049
Derivatives	171,943		–171,929	–14				
Intangible assets	3,321			–335	–2,986			
Other assets and prepaid expenses	47,361	–20,122	–30	–20,073	–443	6,693	100%	6,693
Total	**716,204**	**–46,141**	**–204,256**	**–44,720**	**–1,245**	**419,842**		**419,603**

Off-balance	Off-balance sheet (accounting)	Life insurance operations	Included in derivatives & sec fin	Included in CRD off-balance
Off-balance sheet items in Annual Report				
Assets pledged as security for own liabilities	146,894	–21,755	–125,139	
Other assets pledged	6,090	0	–6,090	
Contingent liabilities	24,468	–176		24,292
Commitments	86,970	–201	–996	85,773
Total	**264,422**	**–22,132**	**–132,225**	**110,065**

	Included in CRD off bal (from AR)	Included in CRD (not in AR)[3]	Original Exposure	Credit Conversion Factor %	Exposure
Off-balance items in CRD					
Credit facilities	47,600	5,557	53,157	48%	25,343
Checking accounts	25,038		25,038	23%	5,636
Loan commitments	13,112	1,674	14,786	41%	6,085
Guarantees	23,114	1	23,115	62%	14,315
Other (leasing and documentary credits)	1,201		1,201	28%	340
Total	**110,065**	**7,232**	**117,297**		**51,719**

Derivatives and Securities Financing	Original Exposure	Credit Conversion Factor %	Exposure
Derivatives	42,962	100%	42,959
Securities Financing Transactions & Long Settlement Transactions	2,084	100%	2,084
Total credit risk (CRD definition)	**582,185**		**516,365**

1) Corresponding figure before allowances EUR 51,919m
2) Corresponding figure before allowances EUR 339,646m
3) Off-balance exposures included in the CRD but not included in the Annual Report (AR), such as exposures related to undrawn credit facilities which are unconditionally cancellable.

Source: Nordea Group 2011 Pillar 3 Report, page 15.

32. *Renegotiated loans and forbearance*

Renegotiated loans and forbearance
(Audited)

Current policies and procedures regarding renegotiated loans and forbearance are described in the Appendix to Risk on page 188.

The contractual terms of a loan may be modified for a number of reasons including changing market conditions, customer retention and other factors not related to the current or potential credit deterioration of a customer. When the contractual payment terms of a loan have been modified because we have significant concerns about the borrower's ability to meet contractual payments when due, these loans are classified as 'renegotiated loans'. For the purposes of this disclosure the term 'forbearance' is synonymous with the renegotiation of loans for these purposes.

In the *Annual Report and Accounts 2011*, the Group has separately presented all renegotiated loans by credit quality classification and has adopted a more stringent impaired loan disclosure convention for portfolios with significant levels of forbearance as described on page 133.

The following tables show the Group's holdings of renegotiated loans and advances to customers by industry sector, geography and credit quality classification.

Renegotiated loans and advances to customers
(Audited)

	At 31 December 2011				At 31 December 2010			
	Neither past due nor impaired US$m	**Past due but not impaired US$m**	**Impaired US$m**	**Total US$m**	Neither past due nor impaired US$m	Past due but not impaired US$m	Impaired US$m	Total US$m
Retail	**8,133**	**4,401**	**19,125**	**31,659**	7,690	4,339	23,406	35,435
Residential Mortgages	**5,916**	**3,560**	**15,932**	**25,408**	5,244	3,381	18,137	26,762
Other personal	**2,217**	**841**	**3,193**	**6,251**	2,446	958	5,269	8,673
Commercial real estate	**2,793**	**9**	**3,248**	**6,050**	2,877	12	2,401	5,290
Corporate and commercial	**3,432**	**461**	**3,376**	**7,269**	4,125	186	2,501	6,812
Financial	**249**	**–**	**491**	**740**	17	–	565	582
Governments	**113**	**2**	**132**	**247**	51	–	7	58
	14,720	**4,873**	**26,372**	**45,965**	14,760	4,537	28,880	48,177
Total renegotiated loans and advances to customers as a percentage of total gross loans and advances to customers				**4.8%**				5.0%

Renegotiated loans and advances to customers by geography
(Unaudited)

	2011 US$m	2010 US$m
Europe	**11,464**	10,692
Hong Kong	**447**	420
Rest of Asia-Pacific	**448**	679
Middle East and North Africa	**2,655**	1,866
North America	**28,475**	31,990
Latin America	**2,476**	2,530
Total	**45,965**	48,177
Total impairment allowances on renegotiated loans	**7,670**	7,482
Individually assessed	**2,311**	1,657
Collectively assessed	**5,359**	5,825

2011 compared with 2010
(Unaudited)

Renegotiated loans totalled US$46.0bn at 31 December 2011 (2010: US$48.1bn). The most significant volume of renegotiation activity took place in North America and, at 31 December 2011, amounted to US$28.5bn or 62% of total renegotiated loans (2010: US$32.0bn or 66%), substantially all of which were retail loans held by HSBC Finance. Of the total renegotiated loans in North America, US$17.8bn were presented as impaired at 31 December 2011 (2010: US$22.0bn), and the ratio of total impairment allowances to impaired loans at 31 December 2011 was 28% (2010: 25%).

Europe was the next largest region for renegotiation activity which, at 31 December 2011, amounted to US$11.5bn (2010: US$10.7bn), constituting 25% of total renegotiated loans (2010: 22%). Of the total renegotiated loans in Europe, US$6.0bn were presented as impaired at 31 December 2011 (2010: US$4.8bn), and the ratio of total impairment allowances to impaired loans at 31 December 2011 was 30% (2010: 28%). The renegotiated loans in Europe were largely concentrated in the commercial real estate sector 41% (2010: 39%) and the corporate and commercial sector 32% (2010: 31%). The commercial real estate sector, particularly in the UK, faced a weakening in property values and a reduction in institutions funding commercial real estate lending. The commercial real estate mid-market sector continued to experience higher levels of renegotiation activity than is evident with larger corporates, where borrowers are generally better capitalised and have access to wider funding market opportunities. In all cases, in assessing the acceptability of renegotiated loans, we consider the ability to service interest as a

Source: HSBC Holdings 2011 Annual Report, pages 129 and 130.

32. *Renegotiated loans and forbearance* *(continued)*

minimum and reduce capital repayments as available. Despite Europe, and the UK in particular, holding the single largest retail lending portfolio in the Group, renegotiations of retail loans in this region were limited due to the quality of the residential mortgage book.

Forbearance activity within the Middle East and Latin America (primarily in Mexico and Brazil) was predominately undertaken in the commercial real estate and corporate and commercial sectors. Forbearance activity within Hong Kong and Rest of Asia-Pacific was insignificant.

HSBC Finance loan modifications and re-ageing
(Unaudited)

HSBC Finance maintains loan modification and re-age ('loan renegotiation') programmes in order to manage customer relationships, improve collection opportunities and, if possible, avoid foreclosure.

Since 2006, HSBC Finance has implemented an extensive loan renegotiation programme, and a significant portion of its loan portfolio has been subject to renegotiation at some stage in the life of the customer relationship as a consequence of the economic conditions in the US and the nature of HSBC Finance's customer base.

From late 2009 and continuing into 2011, the volume of loans that qualify for a new modification has reduced significantly. We expect this to continue to decline as HSBC Finance believes a decreasing percentage of its customers with unmodified loans would benefit from loan modification in a way that would avoid non-payment of future cash flows. In addition, volumes of new loan modifications are expected to decrease due to improvements in economic conditions over the long-term, the cessation of new real estate secured and personal non-credit card receivables originations, the continued run-off of the portfolio and, beginning in the second quarter of 2010, more stringent qualifying payment requirements for loan modifications.

Overview by type of loan renegotiation programme in HSBC Finance

- A temporary modification is a change to the contractual terms of a loan that results in the giving up of a right to contractual cash flows over a pre-defined period of time. With a temporary modification the loan is expected to revert back to the original contractual terms including the interest rate charged after the modification period. An example is reduced interest payments.

  A substantial number of HSBC Finance modifications involve interest rate reductions. These modifications lower the amount of interest income HSBC Finance is contractually entitled to receive in future periods. Historically, modifications have generally been for a period of six months although extended modification periods are now more common.

  Loans that have been temporarily modified within HSBC Finance remain classified as impaired until they have demonstrated a history of payment performance against the original terms for typically 18 months after the modification date.
- A permanent modification is a change to the contractual terms of a loan that results in giving up a right to contractual cash flows over the life of the loan. An example is a permanent reduction in the interest rate charged.

  Permanent or very long-term modifications, which are due to an underlying hardship event, remain classified as impaired for their full life.
- The term 're-age' is a renegotiation whereby the contractual delinquency status of a loan is reset to current after demonstrating payment performance. The overdue principal and/or interest is deferred and paid at a later date. Loan re-ages enable customers who have been unable to make a small number of payments to have their loan delinquency status reset to current, thus remediating overdue balances that affect their credit score.

  Loans that have been re-aged remain classified as impaired until they have demonstrated a history of payment performance against the original contractual terms for at least 12 months.

  A temporary or permanent modification may also lead to a re-ageing of the loan although a loan may be re-aged without any modification to the original terms and conditions of the loan.

Qualifying criteria

For an account to qualify for renegotiation it must meet certain criteria. However, HSBC Finance retains the right to decline a renegotiation. The extent to which HSBC Finance renegotiates accounts that are eligible under its existing policies will vary depending upon its view of prevailing economic conditions and other factors which may change from year to year. In addition, exceptions to policies and practices may be made in specific situations in response to legal or regulatory agreements or orders.

Source: HSBC Holdings 2011 Annual Report, page 131.

32. *Renegotiated loans and forbearance (continued)*

Renegotiated real estate secured and personal non-credit card receivables are not eligible for a subsequent renegotiation until 12 or 6 months, respectively, with a maximum of five renegotiation actions within a five-year period. Borrowers must be approved for a modification and generally make two minimum qualifying monthly payments within 60 days to activate a modification.

In certain circumstances where the debt has been restructured in bankruptcy proceedings, fewer or no payments may be required. Accounts whose borrowers are subject to a Chapter 13 plan filed with a bankruptcy court generally may be re-aged upon receipt of one qualifying payment, whereas accounts whose borrowers have filed for Chapter 7 bankruptcy protection may be re-aged upon receipt of a signed reaffirmation agreement. In addition, for some products, accounts may be re-aged without receipt of a payment in certain special circumstances (e.g. in the event of a natural disaster or a hardship programme).

Review of loan classification methodology

In the third quarter of 2011, HSBC Finance undertook a review of its loan classification methodology to provide greater differentiation of loans based on their credit risk characteristics. This review was performed partly as a result of updated US guidance on 'troubled debt restructurings' and because an increasing percentage of the portfolio has been subject to forbearance in recent years, with the closure of the portfolio to new business. The review involved extensive statistical analysis of actual default experience in the portfolio. Amongst other improvements, this review resulted in changes to further differentiate the credit characteristics of forbearance cases, including those which return to performing status following forbearance. The review included consideration of the application of the Group's accounting policy for the recognition of impairment allowances for the CML portfolio, and changes to improve assumptions about default and severity rates for the purposes of measuring impairment allowances. The consequent changes did not result in a material change to impairment allowances recorded by HSBC Finance under IFRSs. However, the Group's revised impaired loan disclosure convention was adopted.

At 31 December 2011, renegotiated real estate secured accounts represented 86% (2010: 85%) of North America's total renegotiated loans, and US$16bn (2010: US$18.2bn) of renegotiated real estate secured loans in HSBC Finance were classified as impaired. Further details of HSBC Finance's real estate secured accounts and renegotiation programmes are provided below.

Gross loan portfolio of HSBC Finance real estate secured accounts
(Unaudited)

	Re-aged[22] US$m	Modified and re-aged US$m	Modified US$m	Total re-negotiated loans US$m	Total non-renegotiated loans US$m	Total gross loans US$m	Total impair-ment allowances US$m	Impair-ment allowances/ gross loans %
31 December 2011	**10,265**	**12,829**	**1,494**	**24,588**	**19,540**	**44,128**	**5,088**	**12**
31 December 2010	10,693	14,053	2,286	27,032	23,902	50,934	4,311	8

For footnote, see page 185.

Number of renegotiated real estate secured accounts remaining in HSBC Finance's portfolio
(Unaudited)

	Number of renegotiated loans			
	Re-aged (000s)	Modified and re-aged (000s)	Modified (000s)	Total (000s)
31 December 2011	**121**	**112**	**14**	**246**
31 December 2010	123	115	20	258

During 2011, the aggregate number of renegotiated loans reduced, despite renegotiation activity continuing, due to the run-off of the portfolio. Within the constraints of our Group credit policy, HSBC Finance's policies allow for multiple renegotiations under certain circumstances, and a number of accounts received a second (or further) renegotiation during the year which did not appear in the statistics presented above. These statistics present a loan as an addition to the volume of renegotiated loans on its first renegotiation only. At 31 December 2011, renegotiated loans were 56% (2010: 53%) of HSBC Finance's real estate secured accounts.

Source: HSBC Holdings 2011 Annual Report, page 132.

33. *Impairment information*

Note 6: Loans and Allowance for Credit Losses *(continued)*

The allowance for credit losses consists of the allowance for loan losses and the allowance for unfunded credit commitments. Changes in the allowance for credit losses were:

				Year ended December 31,	
(in millions)	**2011**	2010	2009	2008	2007
Balance, beginning of year	**$ 23,463**	25,031	21,711	5,518	3,964
Provision for credit losses	**7,899**	15,753	21,668	15,979	4,939
Interest income on certain impaired loans (1)	**(332)**	(266)	-	-	-
Loan charge-offs:					
Commercial:					
Commercial and industrial	**(1,598)**	(2,775)	(3,365)	(1,653)	(629)
Real estate mortgage	**(636)**	(1,151)	(670)	(29)	(6)
Real estate construction	**(351)**	(1,189)	(1,063)	(178)	(14)
Lease financing	**(38)**	(120)	(229)	(65)	(33)
Foreign	**(173)**	(198)	(237)	(245)	(265)
Total commercial	**(2,796)**	(5,433)	(5,564)	(2,170)	(947)
Consumer:					
Real estate 1-4 family first mortgage	**(3,883)**	(4,900)	(3,318)	(540)	(109)
Real estate 1-4 family junior lien mortgage	**(3,763)**	(4,934)	(4,812)	(2,204)	(648)
Credit card	**(1,449)**	(2,396)	(2,708)	(1,563)	(832)
Other revolving credit and installment	**(1,724)**	(2,437)	(3,423)	(2,300)	(1,913)
Total consumer	**(10,819)**	(14,667)	(14,261)	(6,607)	(3,502)
Total loan charge-offs	**(13,615)**	(20,100)	(19,825)	(8,777)	(4,449)
Loan recoveries:					
Commercial:					
Commercial and industrial	**419**	427	254	114	119
Real estate mortgage	**143**	68	33	5	8
Real estate construction	**146**	110	16	3	2
Lease financing	**24**	20	20	13	17
Foreign	**45**	53	40	49	65
Total commercial	**777**	678	363	184	211
Consumer:					
Real estate 1-4 family first mortgage	**405**	522	185	37	22
Real estate 1-4 family junior lien mortgage	**218**	211	174	89	53
Credit card	**251**	218	180	147	120
Other revolving credit and installment	**665**	718	755	481	504
Total consumer	**1,539**	1,669	1,294	754	699
Total loan recoveries	**2,316**	2,347	1,657	938	910
Net loan charge-offs (2)	**(11,299)**	(17,753)	(18,168)	(7,839)	(3,539)
Allowances related to business combinations/other (3)	**(63)**	698	(180)	8,053	154
Balance, end of year	**$ 19,668**	23,463	25,031	21,711	5,518
Components:					
Allowance for loan losses	**$ 19,372**	23,022	24,516	21,013	5,307
Allowance for unfunded credit commitments	**296**	441	515	698	211
Allowance for credit losses (4)	**$ 19,668**	23,463	25,031	21,711	5,518
Net loan charge-offs as a percentage of average total loans (2)	**1.49 %**	2.30	2.21	1.97	1.03
Allowance for loan losses as a percentage of total loans (4)	**2.52**	3.04	3.13	2.43	1.39
Allowance for credit losses as a percentage of total loans (4)	**2.56**	3.10	3.20	2.51	1.44

(1) Certain impaired loans with an allowance calculated by discounting expected cash flows using the loan's effective interest rate over the remaining life of the loan recognize reductions in allowance as interest income.
(2) For PCI loans, charge-offs are only recorded to the extent that losses exceed the purchase accounting estimates.
(3) Includes $693 million for the year ended December 31, 2010, related to the adoption of consolidation accounting guidance on January 1, 2010.
(4) The allowance for credit losses includes $231 million, $298 million and $333 million at December 31, 2011, 2010 and 2009, respectively, related to PCI loans acquired from Wachovia. Loans acquired from Wachovia are included in total loans net of related purchase accounting net write-downs.

Source: Wells Fargo 2011 Annual Report, page 144.

34. *Quantitative disclosure on derivatives*

Counterparty risk - collaterals

(€ '000)

COUNTERPARTY RISK - COLLATERALS	EAD AMOUNT AS AT 12.31.2011	EAD AMOUNT AS AT 12.31.2010
Standardized approach		
- derivatives contracts	154,600	105,516
- SFT transactions and long settlement transactions	41,088,017	40,383,622

Counterparty risk

(€ '000)

COUNTERPARTY RISK	EAD AMOUNT AS AT 12.31.2011	WEIGHTED AMOUNT AS AT 12.31.2011	EAD AMOUNT AS AT 12.31.2010	WEIGHTED AMOUNT AS AT 12.31.2010
Standardized approach				
- derivatives contracts	10,116,366	2,951,936	7,170,250	3,023,302
- SFT transactions and long settlement transactions	8,335,646	801,009	3,584,579	851,530
- contractual cross product netting	185,152	88,090	149,234	51,676
IRB approaches				
- derivatives contracts	37,471,015	14,741,638	34,600,302	13,191,256
- SFT transactions and long settlement transactions	22,422,073	781,187	17,266,403	561,472
- contractual cross product netting	1,205,953	806,596	1,560,100	865,016

Regulatory trading portfolio: end of period notional amounts

(€ '000)

	AMOUNTS AS AT 12.31.2011		AMOUNTS AS AT 12.31.2010	
DERIVATIVE INSTRUMENT TYPES/UNDERLYINGS	OVER THE COUNTER	CLEARING HOUSE	OVER THE COUNTER	CLEARING HOUSE
1. Debt securities and interest rate indexes	**2,788,920,415**	**129,818,988**	**2,783,798,699**	**124,183,006**
a) Options	485,235,976	59,935,000	460,532,927	127,000
b) Swap	2,130,239,046	162,034	2,101,719,708	-
c) Forward	76,225,278	-	106,230,045	-
d) Futures	34,393	69,721,954	119,665	124,056,006
e) Others	97,185,722	-	115,196,354	-
2. Equity instruments and stock indexes	**77,502,727**	**37,880,312**	**87,522,480**	**53,743,814**
a) Options	64,749,878	32,188,310	67,574,121	49,068,627
b) Swap	11,931,000	-	19,464,522	-
c) Forward	8,292	-	4,688	-
d) Futures	54,095	5,691,854	30,079	4,675,064
e) Others	759,462	148	449,070	123
3. Gold and currencies	**583,716,358**	**102,702**	**629,445,644**	**602,483**
a) Options	105,846,192	-	102,931,682	-
b) Swap	222,136,546	-	219,844,708	-
c) Forward	255,733,620	-	306,602,774	-
d) Futures	-	102,702	-	602,483
e) Others	-	-	66,480	-
4. Commodities	**3,697,013**	**1,147,178**	**3,028,501**	**1,491,426**
5. Other underlyings	**2,524,207**	**-**	**4,034,675**	**-**
Total	**3,456,360,720**	**168,949,180**	**3,507,829,999**	**180,020,729**

Source: UniCredit 2011 Pillar 3 Report, page 179.

35. *Quantitative disclosure on derivatives*

Update on Key Credit Market Exposures

The following is an update on the development of certain credit positions (including protection purchased from monoline insurers) of certain CB&S businesses on which we have previously provided additional risk disclosures. There have been no significant developments since December 31, 2011, with respect to our commercial paper holdings in Ocala or those mortgage related exposures described in our 2011 Financial Report – Management Report: Operating and Financial Review. Our gross exposure to U.S. subprime and Alt-A RMBS and CDO declined from € 2.4 billion at December 31, 2011 to € 2.3 billion at March 31, 2012. Net of hedges and other protection purchased, we had negative exposures (i.e., we would recognize a gain were all of the gross positions to default) of € 146 million at December 31, 2011 and € 62 million at March 31, 2012.

The following is an update on the development on protection purchased from monoline insurers.

Monoline exposure related to U.S. residential mortgages[1,2]	Mar 31, 2012				Dec 31, 2011			
in € m.	Notional amount	Fair value prior to CVA[3]	CVA[3]	Fair value after CVA[3]	Notional amount	Fair value prior to CVA[3]	CVA[3]	Fair value after CVA[3]
AA Monolines:[4]								
Other subprime	118	63	(17)	46	124	65	(20)	45
Alt-A	3,335	1,519	(255)	1,264	3,662	1,608	(353)	1,255
Total AA Monolines	3,453	1,582	(272)	1,310	3,786	1,673	(373)	1,300

Source: Deutsche Bank 31 March 2012 Interim Report, page 20.

Other risks

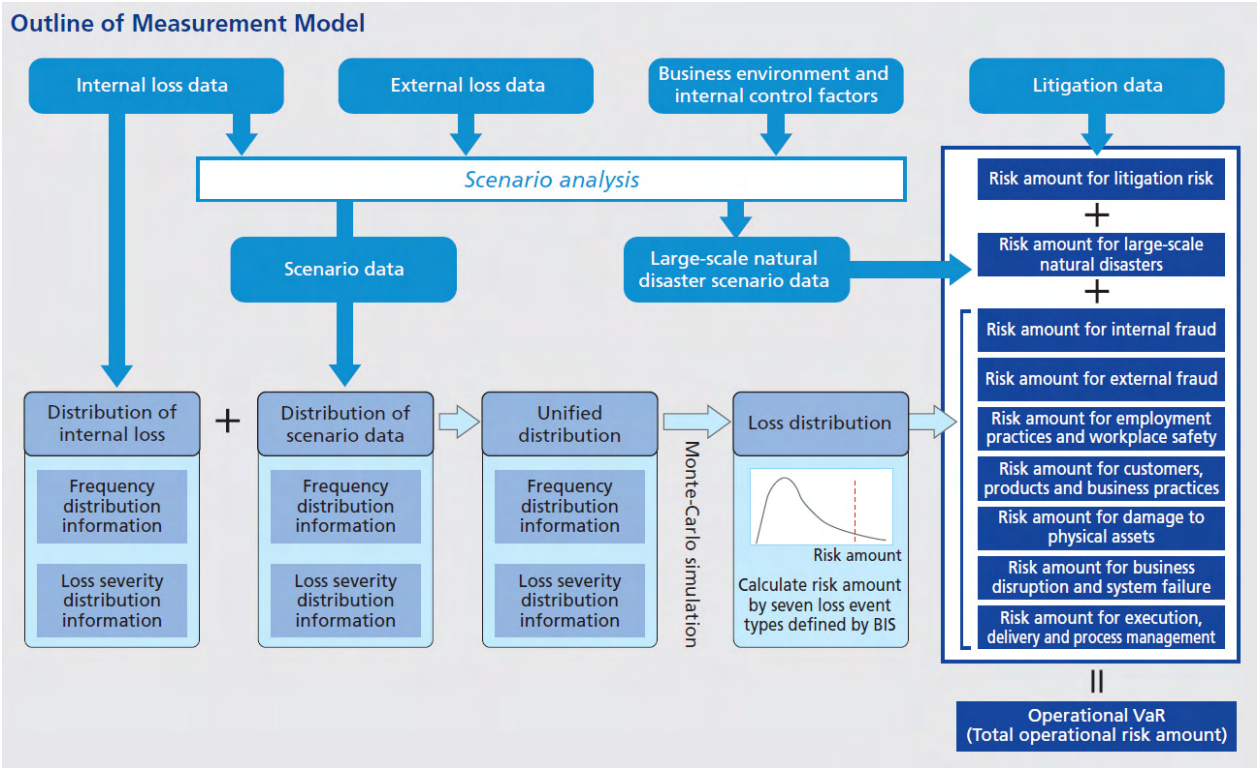
36. *Definition of operational risks*

	Definition	Principal Risk Management Methods
Information Technology Risk	Risk that customers may suffer service disruptions, or that customers or the group may incur losses arising from system defects such as failures, faults, or incompleteness in computer operations, or illegal or unauthorized use of computer systems.	• Identify and evaluate the risk by setting specific standards that need to be complied with and implementing measures tailored based on evaluation results to reduce the risk. • Ensure ongoing project management in systems development and quality control. • Strengthen security to prevent information leaks. • Improve effectiveness of emergency responses by improving backup systems and holding drills.
Operations Risk	Risk that customers may suffer service disruptions, as well as the risk that customers or the group may incur losses because senior executives or employees fail to fulfill their tasks properly, cause accidents or otherwise act improperly.	• Establish clearly defined procedures for handling operations. • Periodically check the status of operational processes. • Conduct training and development programs by headquarters. • Introduce information technology, office automation and centralization for operations. • Improve the effectiveness of emergency responses by holding drills.
Legal Risk	Risk that the group may incur losses due to violation of laws and regulations, breach of contract, entering into improper contracts or other legal factors.	• Review and confirm legal issues, including the legality of material decisions, agreements and external documents, etc. • Collect and distribute legal information and conduct internal training programs. • Analyze and manage issues related to lawsuits.
Human Resources Risk	Risk that the group may incur losses due to drain or loss of personnel, deterioration of morale, inadequate development of human resources, inappropriate working schedule, inappropriate working and safety environment, inequality or inequity in human resource management or discriminatory conduct.	• Conduct employee satisfaction surveys. • Understand the status of vacation days taken by personnel. • Understand the status of voluntary resignations.
Tangible Asset Risk	Risk that the group may incur losses from damage to tangible assets or a decline in the quality of working environment as a result of disasters, criminal actions or defects in asset maintenance.	• Manage the planning and implementation of construction projects related to the repair and replacement of facilities. • Identify and evaluate the status of damage to tangible assets caused by natural disasters, etc., and respond appropriately to such damage.
Regulatory Change Risk	Risk that the group may incur losses due to changes in various regulations or systems, such as those related to law, taxation and accounting.	• Understand important changes in regulations or systems that have significant influence on our business operations or financial condition in a timely and accurate manner. • Analyze degree of influence of regulatory changes and establish countermeasures. • Continuously monitor our regulatory change risk management mentioned above.
Reputational Risk	Risk that the group may incur losses due to damage to our credibility or the value of the "Mizuho" brand when market participants or others learn about, or the media reports on, various adverse events, including actual materialization of risks or false rumors.	• Establish framework to identify and manage, on an integrated basis, information that may have a serious impact on group management and respond to such risk in a manner appropriate to its scale and nature. • Swiftly identify rumors and devise appropriate responses depending on the urgency and possible impact of the situation to minimize possible losses.

We also recognize and manage "Information Security Risk" and "Compliance Risk", which constitute a combination of more than one of the above components of operational risk, as operational risk.

Source: Mizuho Financial Group 2011 Annual Report, page 67.

37. *Operational risk management model*



Source: Mizuho Financial Group 2011 Annual Report, page 68.

Appendix C: Financial Stability Board press release (10 May 2012)

FSB FINANCIAL STABILITY BOARD

Press release

Press enquiries:
+41 76 350 8055

Press@bis.org

Ref no: 29/2012

10 May 2012

Formation of the Enhanced Disclosure Task Force

The importance to market confidence of useful disclosure by financial institutions of their risk exposures and risk management practices has been underscored in recent years, and the FSB mentioned, in its press release on 20 March 2012, that it will facilitate the formation of a private-sector task force to develop principles for improved disclosures.

The FSB is pleased to announce that the Enhanced Disclosure Task Force (EDTF) has been established. The co-chairs of the EDTF are: Hugo Bänziger, Chief Risk Officer and Member of the Management Board, Deutsche Bank; Russell Picot, Group General Manager and Group Chief Accounting Officer, HSBC Holdings plc; and Christian Stracke, Managing Director, Member of Investment Committee, and Global Head of Credit Research Group, PIMCO. In addition to the co-chairs, the EDTF initially has 25 senior officials and experts representing financial institutions, investors and analysts, credit rating agencies, and external auditors. Summary biographies of the co-chairs and a listing of the task force's initial participants are shown in the annex to this press release.

The primary objectives of the EDTF are (i) to develop principles for enhanced disclosures, based on current market conditions and risks, including ways to enhance the comparability of disclosures, and (ii) to identify leading practice risk disclosures presented in annual reports for end-year 2011 based on broad risk areas such as those identified in the summary of the first FSB roundtable on risk disclosures held in December 2011.

The EDTF will have dialogue with standard-setting bodies, such as the International Organisation of Securities Commissions, the Basel Committee on Banking Supervision, the International Association of Insurance Supervisors, the International Accounting Standards Board, the US Financial Accounting Standards Board, and the International Auditing and Assurance Standards Board, at key stages as it develops its recommendations.

The recommendations of the EDTF are expected to be reported to the FSB and published during October 2012. The FSB will consider holding another international roundtable by end-2012 to facilitate further discussion by investors, financial institutions, auditors, standard setters, regulators and supervisors on market conditions and risks at that time and the progress toward improving the transparency of risks and risk management through relevant disclosures.

Mark Carney, Chairman, FSB, said "We welcome the formation of the Enhanced Disclosure Task Force". He added "The FSB supports these efforts which, together with the activities of standard setters, are expected to result in improved risk disclosure practices by financial institutions that will provide timely and useful information to investors".

Notes to editors

The 20 March 2012 FSB press release on Improving Financial Institution Risk Disclosures and Next Steps is available at www.financialstabilityboard.org/press/pr_120320.pdf .

The FSB has been established to coordinate at the international level the work of national financial authorities and international standard setting bodies and to develop and promote the implementation of effective regulatory, supervisory and other financial sector policies in the interest of financial stability. It brings together national authorities responsible for financial stability in 24 countries and jurisdictions, international financial institutions, sector-specific international groupings of regulators and supervisors, and committees of central bank experts.

The FSB is chaired by Mark Carney, Governor of the Bank of Canada. Its Secretariat is located in Basel, Switzerland, and hosted by the Bank for International Settlements. For further information on the FSB, visit the FSB website, www.financialstabilityboard.org

Appendix D: Members of the Enhanced Disclosure Task Force

Co-Chairs

Eurex Group	**Hugo Bänziger** Chairman of the Supervisory Board
HSBC	**Russell Picot** Group General Manager and Group Chief Accounting Officer
PIMCO	**Christian Stracke** Managing Director, Member of Investment Committee and Global Head of Credit Research Group

Other Members

Allianz SE	**Tom Wilson** Chief Risk Officer
Barclays Capital	**Simon Samuels** Managing Director
BlackRock	**Lauritz Ringdal** Managing Director and Co-head of Global Credit for Model-Based Fixed Income Portfolio Management Group
BNP Paribas	**Gérard Gil** Senior Advisor
CFA Institute	**Vincent Papa** Director, Financial Reporting Policy
Commonwealth Bank of Australia	**Greg Mizon** Chief Risk Officer, International Institutional Banking and Markets Risk Management
DBS	**Elbert J. Pattijn** Chief Risk Officer and Group Executive Committee Member
Deloitte	**Mark Rhys*** Global IFRS for Banking Co-Leader
Deutsche Bank	**Ralf Leiber** Managing Director and Head of Finance Group Risk Control
Ernst & Young	**Karen Golz*** Global Vice Chair, Professional Practice
Fidelity Management and Research	**Kana Norimoto** Research Analyst, Fixed Income
Fitch Ratings	**Bridget Gandy** Managing Director, Co-head EMEA Financial Institutions

* *Workstream leader*

ING Group	**Patrick Flynn** Group Chief Financial Officer, Member, Executive Board ING
Institutional Investment Advisors Limited	**Crispin J. Southgate** Director
International Banking Federation (IBFed)	**Dirk Jaeger*** Managing Director – Banking Supervision, Accounting, Association of German Banks; Chairman of Accounting Working Group of IBFed
International Corporate Governance Network (ICGN)	**Paul Lee** Co-Chairman, Shareholder Responsibilities Committee; Director, Hermes Equity Ownership Services Ltd
JPMorgan Chase	**Robin Doyle** Senior Vice President, CFO Risk
KPMG	**Martin Wardle*** Partner, Financial Services, KPMG China
M&G Investment Management	**James Alexander** Head of Research
Mitsubishi UFJ Financial Group	**Akihiko Kagawa** Managing Director, Group Chief Risk Officer and Chief Compliance Officer
PGGM	**Eloy Lindeijer** Chief Investment Management, Member of Executive Committee PGGM
Pricewaterhouse Coopers	**Robert P. Sullivan*** Global Banking and Capital Markets Leader; Global Regulatory Leader
Royal Bank of Canada	**Morten Friis** Chief Risk Officer
Santander	**Mr. José Corral** Deputy Chief Risk Officer
Société Générale Corporate and Investment Banking	**Sebastien Lemaire** Equity analyst – Banks
Standard & Poor's	**Rob Jones** Managing Director, Financial Services Ratings Research Group
UBS/ Institute of International Finance (IIF)	**William Widdowson*** CFO Wealth Management & Retail & Corporate and Swiss Bank, UBS Chairman, Senior Accounting Group, IIF

** Workstream leader*

Appendix E: Abbreviations

The following abbreviations are used in this report:

BCBS	Basel Committee on Banking Supervision
CCP	Central counterparty
CDS	Credit default swap
CET1	Core tier 1
EAD	Exposure at default
EBA	European Banking Authority
EDTF	Enhanced Disclosure Task Force
EU	European Union
FSB	Financial Stability Board
G-SIB	Globally Systemically Important Bank
IRB	Internal ratings based
LGD	Loss given default
NSFR	Net stable funding ratio
OTC	Over-the-counter
PD	Probability of default
RWA	Risk-weighted asset
US	United States of America
VaR	Value at risk