RISK MANAGEMENT

The table below gives an overview of the locations of our risk disclosures.

In 2013, we have implemented the majority of the Enhanced Disclosure Task Force (EDTF) recommendations for improved bank risk disclosures[1]. For an overview of the recommendations and where we have incorporated the relevant disclosures, please refer to Appendix on page 101.

1 See 'Enhancing the Risk Disclosure of Banks' published by the Financial Stability Board in October 2012

THE SECTIONS MARKED BY A GREY LINE IN THE LEFT MARGIN FORM PART OF THE GROUP'S AUDITED FINANCIAL STATEMENTS.

1. RISK TAKING AND OUR BUSINESS MODEL

DBS' focus on Asia has enabled us to grow our franchise successfully by allowing us to leverage on our key strengths in a region we know best. This Asian connectivity naturally exposes us to some degree of concentration risk to the region. However, through spreading our franchise across the expansive Asian region, our risk is diversified across many markets with differing macroeconomic fundamentals and growth drivers. Our strategic spread across many different industries and portfolios, as well as individual name concentration management, enables us to mitigate risk and withstand situations of economic stress. Whilst this diversification strategy has worked well over the years, it is really our specialist knowledge of the regional markets, clients and a keen understanding of their businesses that enable us to manage our risk.

We believe that focusing on the markets and customer segments we know well enables us to achieve a superior return by taking on sound credit risk. A strong focus on our private and corporate customers and on corporate lending – especially to small and medium-sized enterprises (SMEs) and in trade finance - in selected markets where we have built expertise has served us well.

2. RISK OVERVIEW

In carrying out our strategy and our nine strategic priorities we are faced with economic, financial and other types of risk. These risks are interdependent and require a holistic approach to risk management. Very broadly these risks can be aligned around the following risk categories.

Business and Strategic	Reputational	Credit	Market	Liquidity	Operational

Business and Strategic Risk is an over-arching risk that arises out of changes in the business environment and from adverse decisions that can materially impact the Group's long term objectives. This risk is managed separately under other governance processes.
Reputational Risk is the current or prospective risk to our shareholder value (including earnings and capital) arising from adverse perception of DBS' image on the part of its stakeholders. It affects the Group's ability to establish new relationships or services, or continue servicing existing relationships, and have continued access to sources of funding. Reputational risk is typically an outcome of failure to manage the other risk types.
Credit Risk is the risk of loss resulting from the failure of borrowers or counterparties to meet their debt or contractual obligations.
Market Risk affects the economic value of financial instruments held by the Group, arising from changes in interest rates, foreign exchange rates, equity prices, commodity prices, credit spreads and also changes in the correlations and volatilities of these risk factors.
Liquidity Risk is the risk arising from the inability of the Group to meet obligations when they become due.
Operational Risk is the risk of loss resulting from inadequate or failed internal processes, people or systems, or from external events, including legal risk, but does not include strategic or reputational risk.

TOP AND EMERGING RISKS

Amongst those risks discussed above, some are more salient and critical to our strategy whilst others are emerging as more critical risk due to changes in regulation, stakeholders' concerns or the nature of our businesses. We consider the following areas of uncertainties and risks as top and emerging in achieving our strategic priorities going forward, and have in place the appropriate risk mitigating initiatives to manage these. All these risks have the potential of impacting the Group's image negatively and hence have reputational risk implications.

CREDIT

Credit Risk and Concentration

Credit risk remains the Group's most material risk and usage of capital. Depending on severity, a prolonged weak economic environment, brought about by factors such as economic uncertainty in Asia and normalization of monetary policy in the United States, may impact our credit portfolios. We continue to monitor our risk appetite position closely. Risk acceptance criteria and policies are modified as necessary to pro-actively mitigate potential portfolio threats.

Country Risk

DBS has a stated strategy to be a regional bank in Asia. Consequently, the Group has large concentrations in a limited number of countries and the risks in those countries are correlated as well. Instability in and across our target markets, such as economic uncertainty in China and political-economic flux in India and Indonesia, may give rise to country risk events. This risk is mitigated by setting limits for the maximum exposure in each country. In addition the potential loss given transfer event is monitored on the basis of how the exposure is divided among short term and long term, trade and non-trade as well as wrong way risk in our derivatives portfolio. Based on the macro economic outlook, the country risk limits and exposures will be adjusted in order to stay within the Group's Risk Appetite.

LIQUIDITY

Liquidity Risk

From time to time, the Group may need to supplement its holdings of fungible currencies through the use of swaps (please refer to Section 7.2 on page 95 for details on our liquidity management and funding strategy). Consequently, the Group actively participates in the swap markets to convert its surplus SGD funds to USD for on-lending across locations. As the swaps are typically shorter in contractual maturity than the USD loans, the Group is exposed to potential cashflow mismatches arising from the risk that counterparties may not roll over maturing swaps with the Group to support the continual funding of USD loans.

This risk, i.e. the cashflow mismatch arising from the potential inability to roll over maturing swaps with counterparties, is mitigated by the setting of a trigger on the amount of SGD:USD swaps transacted with the market and conservative assumptions on the cashflow treatment of swaps under the behavioural profiling of the Group's cashflow maturity gap analysis. In addition, the Group continues to make inroads in growing, deepening and diversifying its USD deposit base across locations, through the expansion of its product suites and investments made in cash management capabilities, amongst other initiatives. The Group also maintains access to various wholesale funding instruments as supplementary funding sources (e.g. issuance of Euro Commercial Papers and Medium Term Notes).

OPERATIONAL

Regulatory Developments

The global regulatory landscape is evolving continuously. We continue to observe various regulatory bodies, both globally and regionally, issuing guidance with additional requirements related to a wide variety of topics. These range from risk appetite, internal models approaches as well as liquidity and capital requirements. The volume and depth of increasingly demanding regulatory requirements have the effect of pro-longing implementation timelines and increasing costs especially where regulatory approval is more uncertain.

As discussed in the 'Regulators' section of our Management Discussion on page 45, the Group remains vigilant in tracking international and domestic regulatory developments to ensure that it stays on top of changes applicable to its businesses. New requirements are promptly analysed and disseminated to the respective action parties and, where applicable, embedded into the Group's processes and systems. Standards of compliance behaviour expected of all staff are reinforced through training sessions, briefings and other means of communication and dissemination. In addition, individuals who perform certain activities may be required to fulfill specific training and examination standards.

The Group also recognises the importance of proactive engagement with regulators and we continue to steer industry and regulatory forums where possible. Towards this end, the Group strives to build and maintain positive relationships with regulators that have oversight responsibilities in the locations where we operate.

Financial Crime and Information Security

Fraud continues to be a risk for financial institutions particularly as criminals embrace the use of technology. The Group takes this threat seriously and has implemented a broad range of controls to identify and mitigate risk to customers and businesses. Traditional fraud such as card skimming and online fraud continue to present a risk for financial institutions globally. These risks are being mitigated mainly through the implementation of Europay, MasterCard and Visa (EMV) technology for card payments and multi factor authentication for online payments along with increased level of transaction monitoring. Physical security enhancements at point-of-sale terminals and self-service banking facilities are also acting as a deterrent to skimming attacks.

Regulators globally continue to focus on anti-money laundering and counter-terrorism financing to safeguard the financial system. Singapore recently designated tax evasion as a predicate offence to money laundering placing greater onus on financial institutions to understand the source of customer monies.

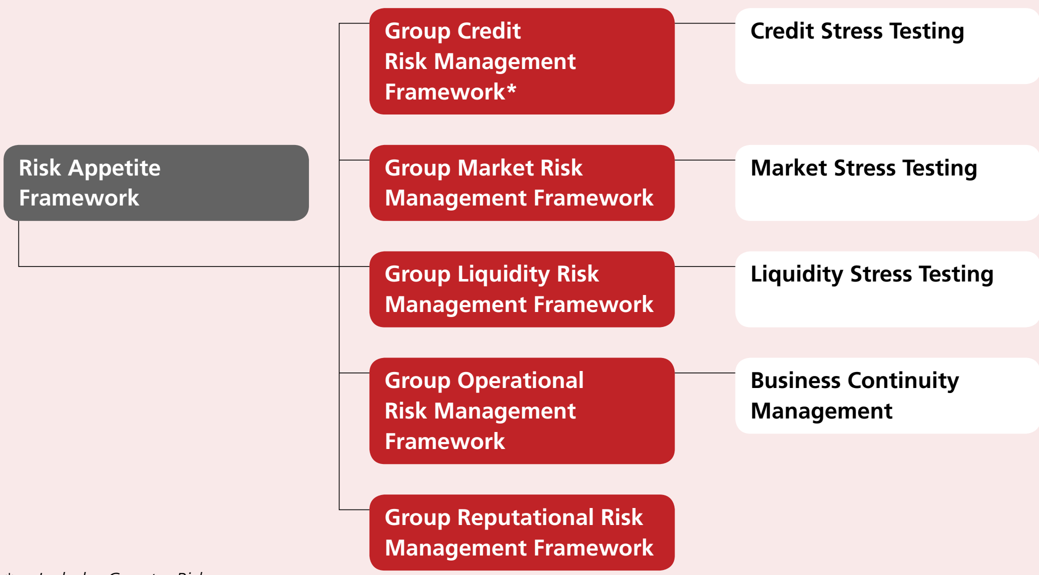
The Group takes the issue of financial system integrity most seriously and has robust policies and procedures in place to ensure use of the Group's infrastructure only for legitimate purposes. Systems are in place to detect suspicious transactions and report such transactions to the appropriate authorities.

3. DBS RISK APPETITE

As mentioned above, the pursuit of the Group's strategic priorities and business opportunities inherently carries risk. The Board has established an overall Risk Appetite which is supervised by the Board Risk Management Committee (BRMC). Our risk strategy is to link our Risk Appetite with the Group's strategic and operational needs across material risk types. The embedding of Risk Appetite in DBS starts with a formally defined Risk Appetite Statement set by the Group Board.

To this end, we have established the Risk Appetite Framework which covers the risk management measures put in place to ensure adherence with the Risk Appetite Statement. The Framework brings together various risk processes across Risk Management Group (RMG) and Finance onto a structured platform for effective enterprise risk management. The Framework serves to reinforce the risk culture, defined by the 'tone from the top', by providing a coherent understanding of risk across the Group. In addition, to embed Risk Appetite into our culture, the Group's remuneration policy (please refer to Corporate Governance section on page 58) is structured to align compensation to appropriate risk taking behaviour.

Underlying risk management frameworks are in turn developed for each risk type to ensure adherence with Risk Appetite.



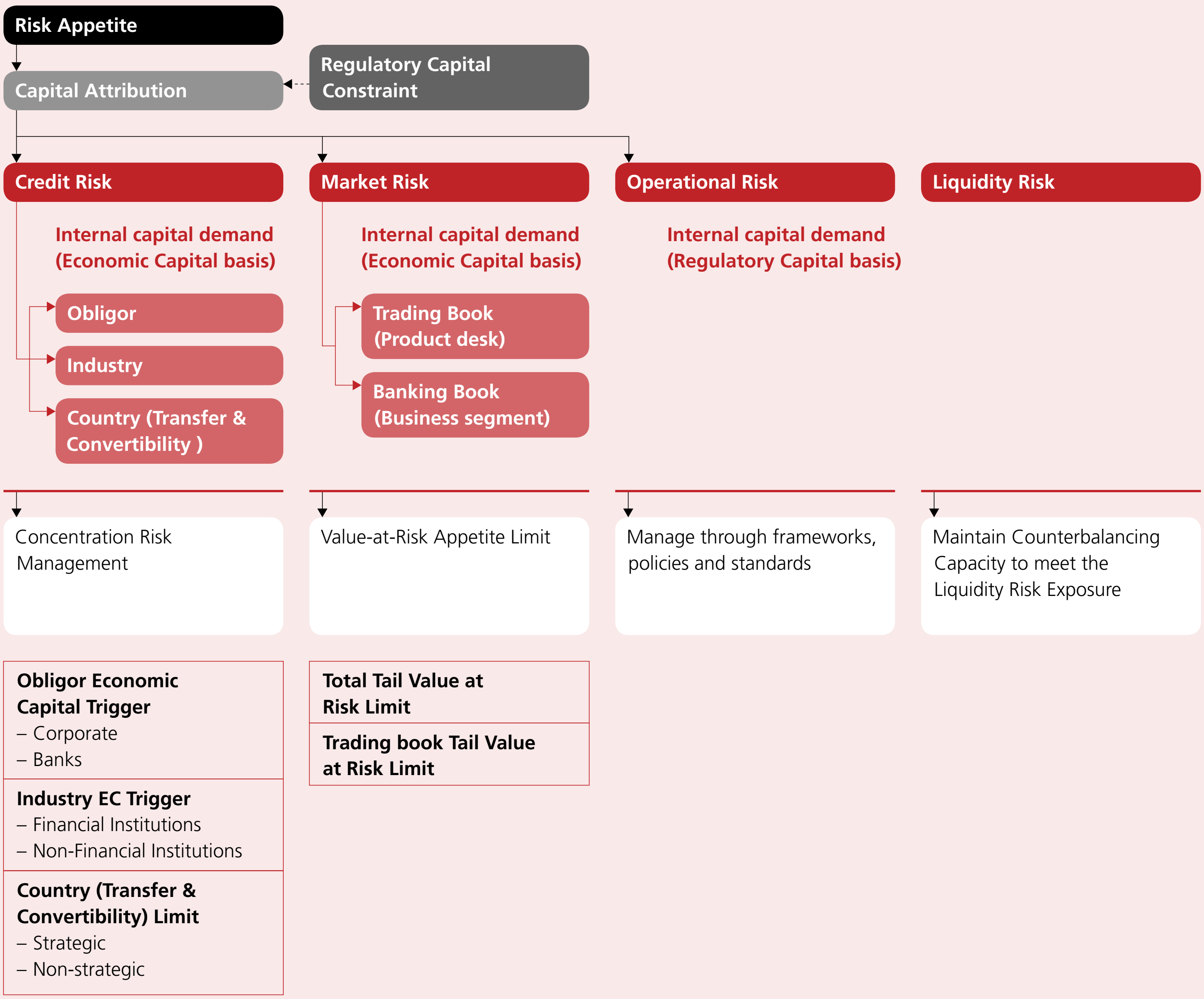
* *Includes Country Risk*

The key instruments that the Group uses to ensure proper risk identification and quantification include:

- A strategic planning process and continuous monitoring process against approved risk targets
- Regular risk reporting to management and the use of the risk reports for capital management purposes
- An Economic Capital (EC) and stress testing framework

3.1. RISK-LIMITING THRESHOLDS

The Risk Appetite considers the various risk types and is operationalised via limits, policies, processes and controls. The inclusion of threshold structures into the risk frameworks is integral in driving Risk Appetite into our businesses. Effective thresholds are essential in managing aggregate risks within acceptable levels. Portfolio risk limits for the quantifiable risk types are cascaded from Risk Appetite through a top down approach and operationalised through formal frameworks. Other significant risk aspects are guided by qualitative expression of principles.



Specific risk-limiting thresholds for the respective risk types are as follows.

- Credit Risk – EC triggers and country Transfer and Convertibility (T&C) limits are used to manage credit risk. Sector concentration triggers and Target Market Risk Acceptance Criteria are used to manage sector concentration risk. Obligor concentration triggers and Relationship Caps are used to limit concentrated borrower exposures. T&C limits are used to manage geographic exposures.

- Market Risk – Value-at-Risk (VaR) limits and EC limits are used to manage downside risk. Management stress triggers are used to manage combined exposures arising from combined positions in both trading and banking books.

- Liquidity Risk – Cashflow maturity mismatch analysis is the primary measure. This is complemented by other risk control measures such as liquidity-related ratios and balance sheet analysis.

- Operational and Reputational Risks – Operational and reputational risks are managed through frameworks, policies and standards.

3.2. STRESS TESTING

Stress testing is an integral part of the Group's risk management process. It alerts senior management to the Group's potential vulnerability to exceptional but plausible adverse events. It enables the Group to assess capital adequacy, identify potential risky portfolio segments, inherent systematic risks and provides an opportunity to define mitigating actions before the onset of an adverse event.

We have a rigorous stress testing regime which is conducted throughout the year, including the Internal Capital Adequacy Assessment Process (ICAAP), industry-wide stress test and Pillar 1 credit stress test. In addition, we also perform various sensitivity analyses under stress scenarios.

Appropriate stress testing is conducted at least annually or at suitable intervals given the reading of micro and macro economic conditions. All stress tests are documented, including contingency plans, exit strategies and mitigating actions appropriate to different scenarios. The results of the stress tests are also used to calibrate the thresholds and boundaries of the Risk Appetite.

3.3. INTERNAL CAPITAL ADEQUACY ASSESSMENT PROCESS

Through ICAAP, the capital planning process takes into account the demand for capital under a range of stress scenarios and compares them against the available supply of capital. Capital demand is in turn a function of growth plans and the target credit rating specified in the Risk Appetite Statement. Based on the assessment of capital needs, the corresponding risk capital for credit risk and market risk are defined. The planning process under ICAAP therefore ensures that the Group's overall risk and rewards are aligned with Risk Appetite.

3.4. USE OF ECONOMIC CAPITAL FOR CONCENTRATION RISK MANAGEMENT

While the Group firmly complies to regulatory capital requirements at all times, we recognise the need to have more robust methodologies to measure capital usage. Effective concentration management requires a robust metric that can accurately capture the portfolio risk characteristics including granular portfolio segment profile, risk concentrations and correlation of risks in the portfolio. The metric has to be sensitive to changes made to adjust the portfolio shape and direction of growth.

We have therefore adopted the EC metric as our primary concentration risk management tool and have integrated it into our risk processes. EC is deployed as a core component in our ICAAP and it also serves as a key metric in cascading Risk Appetite and limits setting.

4. RISK GOVERNANCE

4.1. RISK AND CONTROL

The Group has three lines of defence when it comes to risk taking where each line of defence has a clear responsibility.

BOARD
CEO
SENIOR MANAGEMENT
Provides oversight of the 3 Lines of Defence

FIRST LINE OF DEFENCE	SECOND LINE OF DEFENCE	THIRD LINE OF DEFENCE
Strategy, Performance and Risk Management	**Policy and Monitoring**	**Independent Assurance**
Business Units, Countries	**Corporate Oversight Functions**	**Group Audit**
Identification and Management of Risk in the businesses	**Framework, Risk Oversight and Reporting**	**Independent Challenge and Review of Adequacy and Effectiveness of Processes and Controls**

Working closely with the support functions, the first line of defence is the front office that has a clear responsibility for risk in terms of identifying risks and reporting on any changes in the risk profile of the clients or positions.

As a second line of defence, RMG and other control functions such as Group Compliance have their own responsibilities for developing, overseeing and reporting on risk frameworks. In addition, RMG is responsible for identifying individual and portfolio risk, approve transactions and trades and ensure that they are within approved limits and monitor and report on the portfolio, taking into account current and future potential developments through stress testing.

Finally, Group Audit forms the third line of defence as a completely independent check to ensure adherence to approved policies and procedures.

4.2. GOVERNANCE STRUCTURE

As discussed in Section 3.1, under the Group's risk management frameworks, the Board of Directors, through the BRMC, sets risk appetite, oversees the establishment of robust enterprise-wide risk management policies and processes, and sets risk limits to guide risk-taking within the Group.

DBS 3 Levels of Risk & Control Governance Structure

The Chief Risk Officer (CRO) has been appointed to oversee the risk management function. The CRO is a member of the Group Executive Committee and has a dual reporting line to the CEO and to the Board which is also responsible for the appointment, remuneration, resignation or dismissal of the CRO. The CRO is independent of business lines and is actively involved in key decision making processes.

The CRO also engages the Group's regulator(s) on a regular basis to discuss risk matters.

Working closely with the established risk and business committees, the CRO is responsible for the following:

- Management of the risks in the Group including developing and maintaining systems and processes to identify, approve, measure, monitor, control and report risks
- Engagement of senior management on material matters relating to the various types of risks and development of risk controls and mitigation processes
- Ensuring the effectiveness of risk management and adherence to the Risk Appetite established by the Board

To facilitate BRMC's risk oversight, risk management committees have been established as follows.

Risk Management Committees	
Risk Executive Committee (Risk ExCo)	The Risk ExCo provides comprehensive group-wide oversight and direction relating to the management of all risk types and is the overall executive body mandated by the BRMC on risk matters.
Product Approval Committee (PAC)	The PAC provides comprehensive group-wide oversight and direction relating to the new product approval - an important risk mitigation element within the Group.
Group Credit Risk Committee Group Market and Liquidity Risk Committee Group Operational Risk Committee	Each of these committees reporting to the Risk ExCo are broadly mandated – within the specific risk areas – to serve as an executive forum for discussion and decisions on all aspects of risk and its management. This includes: • Assessing risk taking • Maintaining oversight on effectiveness of the Group's risk management infrastructure, including framework, decision criteria, authorities, policies, people, processes, information, systems and methodologies • Approving risk model governance standards as well as stress testing scenarios • Assessing the risk-return trade-offs across the Group • Identifying specific concentrations of risk The members in these committees comprise representatives from RMG as well as key business and support units.

The above committees are supported in all major locations by local risk committees. The local risk committees provide oversight over local risk positions across all businesses and support units and ensure compliance with limits set by the group risk committees. They also approve country specific risk policies and ensure compliance with local regulatory risk limits and requirements.

5. CREDIT RISK

5.1. CREDIT RISK IN DBS

Credit risk arises out of our daily activities in various areas of business – lending to retail, corporate and institutional customers; trading activities such as foreign exchange, derivatives and debt securities; and settlement of transactions. Credit risk is one of the most significant measurable risks faced by the Group.

Lending exposures are typically represented by the notional value or principal amount of on-balance sheet financial instruments. Financial guarantees and standby letters of credit, which represent undertakings that the Group will make payments in the event that a customer cannot meet its obligations to third parties, carry the same credit risk as loans even though they are contingent in nature. Pre-settlement Credit Exposures (PCE) for trading and securities transactions is measured taking into account collateral and netting arrangements. Settlement risk is the risk of loss due to the counterparty's failure to perform its obligation after the Group has performed its obligation under an exchange of cash or securities.

Please refer to Note 41.1 to the Financial Statements on page 162 for details on the Group's maximum exposure to credit risk.

5.2. CREDIT RISK MANAGEMENT AT DBS

The Group's approach to credit risk management is formulated on the following building blocks:

Framework	Policies	Risk Methodologies	Processes, Systems and Reports

FRAMEWORK

The Credit Risk Management Framework, approved by the BRMC, defines credit risk and the scope of its application; establishes the dimensions of credit risk; and provides a consistent Group-wide framework for managing credit risk across the Group.

POLICIES

Senior management sets the overall direction and policy for managing credit risk at the enterprise level. A Core Credit Risk Policy sets forth the principles by which the Group conducts its credit risk management activities. This policy, supported by a number of operational policies, ensure consistency in credit risk underwriting across the Group and provide guidance in the formulation of business-specific and/or location-specific credit policies. The Core Credit Risk Policy is considered and approved by the Risk ExCo based on recommendations from the Group Credit Policy Committee. The business-specific and/or location-specific credit policies are established to provide greater details on the implementation of the credit principles within the Core Credit Risk Policy and are adapted to reflect different credit environments and portfolio risk profiles.

RISK METHODOLOGIES

Managing credit risk is performed through our deep understanding of our customers, the businesses they are in and the economies in which they operate. This is facilitated through the use of credit ratings and lending limits. The Group uses an array of rating models in both the corporate and retail space. Most are built internally using the Group's own loss data. Limits and "rules for the business" are driven from the Group's Risk Appetite Statement and Target Market Risk Acceptance Criteria respectively.

Retail exposures are typically managed on a portfolio basis and assessed based on credit scoring models, credit bureau record, internal and available external customers' behaviour records and supplemented by risk acceptance criteria.

Wholesale exposures are assessed using approved credit models, reviewed and analysed by experienced credit risk managers taking into consideration the relevant credit risk factors. Credit extensions are proposed by the business unit and are approved by the credit risk function based on independent credit assessment, while also taking into account the business strategies determined by senior management.

Please refer to section 5.5 on page 89 for further discussion on our internal credit risk models.

Counterparty risk that may arise from traded products and securities is measured on a loan equivalent basis and included under the Group's overall credit limits to counterparties. Issuer Default Risk that may arise from traded products and securities are generally measured based on jump-to-default computations.

The Group actively monitors and manages its exposure to counterparties in over-the-counter (OTC) derivative trades to protect its balance sheet in the event of a counterparty default. Counterparty risk exposures which may be materially and adversely affected by market risk events are identified, reviewed and acted upon by management and highlighted to the appropriate risk committees. In addition, the Group's risk measurement methodology takes into account the higher risks associated with transactions that exhibit a strong relationship between the creditworthiness of a counterparty and the expected future replacement value of a relevant transaction (so called wrong-way risk) as identified during the trade booking process. The current exposure method is used for calculating the Group's net credit exposure and regulatory capital for counterparty exposures, using the mark-to-market exposures with an appropriate add-on factor for potential future exposures.

Concentration Risk Management

The Group's risk management processes aim to ensure that an acceptable level of risk diversification is maintained across the Group on an ongoing basis. Limits are established and regularly monitored in respect of country exposures and major industry groups, as well as for single counterparty exposures. Control structures exist to ensure that appropriate limits are in place, exposures are monitored against these limits, and appropriate actions are taken if limits are breached.

Country Risk

Country risk is the risk of loss which is specifically attributed to events in a specific country (or a group of countries). It includes political risk, exchange rate risk, economic risk, sovereign risk and transfer & convertibility (T&C) risk. In DBS, Country Risk is managed as part of concentration risk management under the Risk Appetite Framework.

T&C risk is the risk that capital and foreign exchange controls may be imposed by government authorities that would prevent or materially impede the conversion of local currency into foreign currency and/or transfer funds to non-residents. A T&C risk event could therefore lead to a default of an otherwise solvent borrower. The principles and approach in the management of transfer risk are set out in the Group's Country Risk Management Framework. The framework includes an internal T&C risk and sovereign risk rating system where the assessments are made independent of business decisions. T&C risk limits are set in accordance to the Group's Risk Appetite Framework. Limits for non-strategic countries are set using a model-based approach. Limits for strategic countries are set based on country-specific strategic business considerations and the extent of potential loss versus the Risk Appetite. There are active discussions amongst the senior management and credit management in right-sizing transfer risk exposures to take into account not only risks and rewards, but also whether such exposures are in line with the strategic intent of the Group. All country limits are subject to Board approval.

Stress Testing

The Group performs various types of credit stress tests which are directed by the regulators or driven by internal requirements and management. Credit stress tests are performed at a portfolio or sub-portfolio level and are generally meant to assess the impact of changing economic conditions on asset quality, earnings performance, and capital adequacy and liquidity.

A credit stress test working group is responsible for developing and maintaining a robust stress testing program to include the execution of the stress testing process and effective analysis of program results. Stress test results are reported and discussed in Group Credit Risk Committee, Risk ExCo and the BRMC.

The stress testing program is comprehensive in nature spanning all major functions and areas of business. It brings together an expert view of the macro-economics, market, and portfolio information with the specific purpose of driving model and expert oriented stress testing results.

The Group generally performs the following types of credit stress testing at a minimum and others as necessary:

Pillar 1 Credit Stress Testing	DBS conducts Pillar 1 credit stress test regularly as required by regulators. Under the Pillar 1 credit stress test, DBS assesses the impact of a mild stress scenario (at least 2 consecutive quarters of zero GDP growth) on internal rating based (IRB) estimates (i.e. Probability of Default, Loss Given Default and Exposure at Default) and the impact on regulatory capital. The purpose of the Pillar 1 credit stress test is to assess the robustness of internal credit risk models and the cushion above minimum regulatory capital.
Pillar 2 Credit Stress Testing	DBS conducts Pillar 2 credit stress test once a year as part of the ICAAP. Under the Pillar 2 credit stress test, DBS assesses the impact of stress scenarios, with different severity, on asset quality, earnings performance, internal and regulatory capital. The results of the credit stress tests will also form the input to the capital planning process under ICAAP. The purpose of the Pillar 2 credit stress testing is to examine, in a rigorous and forward-looking manner, the possible events or changes in market conditions that could adversely impact the Group.
Industry-Wide Stress Testing	DBS participates in the industry-wide stress test (IWST) undertaken annually. This is a supervisory driven stress test conducted as part of the supervisory process and ongoing assessment of financial stability by regulator. Under the IWST, the Group is to assess the impact of adverse scenarios, provided by the regulator, on asset quality, earnings performance, and capital adequacy.
Other Stress Testing	DBS also conducts multiple independent credit stress tests and sensitivity analyses on its portfolio or a sub-portfolio to evaluate the impact of the economic environment or specific risk factors to identify vulnerabilities for the purpose of developing and executing mitigating actions.

PROCESSES, SYSTEMS AND REPORTS

The Group continues to invest in systems to support risk monitoring and reporting for both the wholesale and consumer businesses. The end-to-end credit process is constantly subject to review and improvement through various front-to-back initiatives involving the Business, Risk Management, Operations and other key stakeholders.

Day-to-day monitoring of credit exposures, portfolio performance and the external environment that may have an impact on credit risk profiles is key to the Group's philosophy of effective credit risk management. Risk reporting on credit trends, which may include industry analysis, early warning alerts and key weak credits, is provided to the various credit committees, and key strategies and action plans are formulated and tracked.

Credit control functions ensure that credit risks are being taken and maintained in compliance with Group-wide credit policies and guidelines. These functions ensure proper activation of approved limits, ensure appropriate endorsement of excesses and policy exceptions, and monitor compliance with credit standards and credit covenants established by management and regulators.

An independent credit risk review team conducts regular reviews of credit exposures and judgmental credit risk management processes. It also conducts independent validation of internal credit risk rating processes on an annual basis. These reviews provide senior management with objective and timely assessments of the effectiveness of credit risk management practices and ensure Group-wide policies, internal rating models and guidelines are being adopted consistently across different business units including relevant subsidiaries.

Non-Performing Assets

The Group classifies its credit facilities as 'Performing Assets' or 'Non-Performing Assets' (NPA) in accordance with the MAS' Notice to Banks No. 612 "Credit Files, Grading and Provisioning" (Notice 612). These guidelines require the Group to categorise its credit portfolios according to its assessment of a borrower's ability to repay a credit facility from the borrower's normal sources of income. There are five categories of assets as follows:

Classification	Description
Performing Assets	
Pass grade	Indicates that the timely repayment of the outstanding credit facilities is not in doubt.
Special mention grade	Indicates that the credit facilities exhibit potential weaknesses that, if not corrected in a timely manner, may adversely affect future repayments and warrant close attention by the Group.
Classified or NPA	
Substandard grade	Indicates that the credit facilities exhibit definable weaknesses either in respect of business, cash flow or financial position of the borrower that may jeopardise repayment on existing terms.
Doubtful grade	Indicates that the credit facilities exhibit severe weaknesses such that the prospect of full recovery of the outstanding credit facilities is questionable and the prospect of a loss is high, but the exact amount remains undeterminable.
Loss grade	Indicates the amount of recovery is assessed to be insignificant.

The linkage between the above MAS categories and the Group's internal ratings is shown in Section 5.5.

Credit facilities are classified as restructured assets when the Group grants concessions to a borrower because of deterioration in the financial position of the borrower or the inability of the borrower to meet the original repayment schedule. A restructured credit facility is classified into the appropriate non-performing grade depending on the assessment of the financial condition of the borrower and the ability of the borrower to repay based on the restructured terms. Such credit facilities are not returned to the performing status until there are reasonable grounds to conclude that the borrower will be able to service all future principal and interest payments on the credit facility in accordance with the restructured terms.

Please refer to Note 2.11 to the Financial Statements on page 119 for the Group's accounting policies on the assessment of specific and general allowances for credit losses. In general, specific allowances are recognised for defaulting credit exposures rated sub-standard and below. The breakdown of NPA for the Group according to Notice 612 requirements by loan grading and industry and the related amounts of specific allowances recognised can be found in Note 41.2 to the Financial Statements on page 165. A breakdown of Group's past due loans can also be found in the same note.

When required, the Group will take possession of collateral it holds as securities and will dispose of them as soon as practicable, with the proceeds used to reduce the outstanding indebtedness. A breakdown of collateral held for NPA is shown in Note 41.2 to the Financial Statements on page 166. Repossessed collateral is classified in the balance sheet as other assets. The amounts of such other assets for 2013 and 2012 were not material.

5.3. CREDIT RISK MITIGANTS

Collateral
Where possible, the Group takes collateral as a secondary recourse to the borrower. Collateral includes cash, marketable securities, properties, trade receivables, inventory and equipment and other physical and financial collateral. The Group may also take fixed and floating charges on the assets of borrowers. It has put in place policies to determine the eligibility of collateral for credit risk mitigation, which include requiring specific collaterals to meet minimum operational requirements in order to be considered as effective risk mitigants.

When a collateral arrangement is in place for financial market counterparties covered under market standard documentation (such as Master Repurchase Agreements and International Swaps and Derivatives Association (ISDA) agreements), collateral received is marked to market on a frequency mutually agreed with the counterparties.

The Group is required to post additional collateral in the event of a rating downgrade. As at 31 December 2013, for a one notch downgrade of its Standard & Poor's Ratings Services and Moody's Investors Services ratings, the Group would have to post additional collateral amounting to SGD 363 million and SGD 63 million respectively.

Collateral taken for commercial banking is revalued periodically, depending on the type of collateral. While real estate properties constitute the largest percentage of collateral assets, the Group generally considers the collateral assets to be diversified.

Helping our customers to restructure repayment liabilities, in times of difficulty, is our preferred approach. However, should the need arise, expeditious disposal and recovery processes are in place for disposal of collaterals held by the Group. The Group also maintains a panel of agents and solicitors for the expeditious disposal of non-liquid assets and specialized equipment.

Other Risk Mitigants

The Group manages its credit exposure from derivatives, repo and other repo-style transactions by entering into netting and collateral arrangements with counterparties where it is appropriate and feasible to do so. The credit risk associated with outstanding contracts with positive mark to market is reduced by master netting arrangements to the extent that if an event of default occurs, all amounts with a single counterparty in a netting-eligible jurisdiction are settled on a net basis.

The Group may also enter into agreements which govern the posting of collateral with derivative counterparties for credit risk mitigation (e.g. Credit Support Annexes under ISDA master agreements). These are governed by internal guidelines with respect to the eligibility of collateral types and the frequency of collateral calls.

In addition, the Group also uses guarantees as credit risk mitigants. While the Group may accept guarantees from any counterparty, it sets internal thresholds for considering guarantors to be eligible for credit risk mitigation.

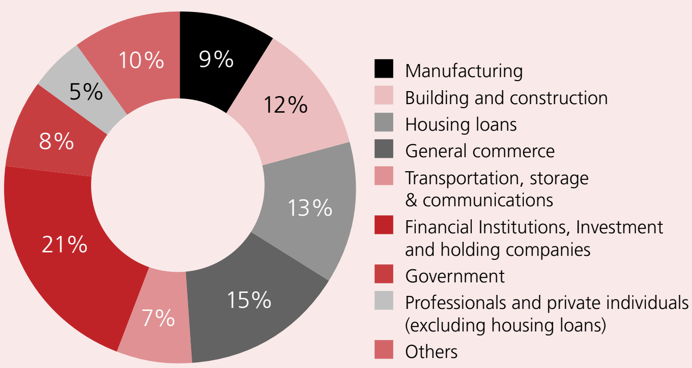
5.4. CREDIT RISK IN 2013

Concentration Risk

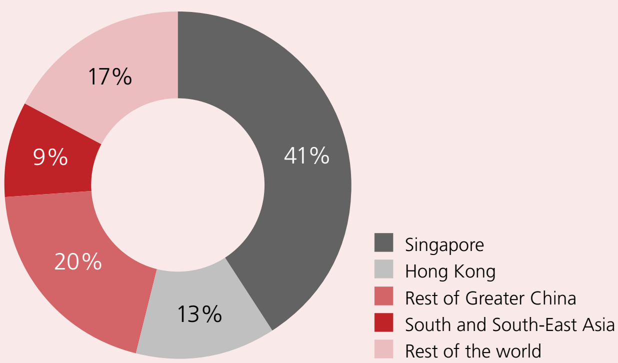
Geographically, our exposure remains predominantly in our home market of Singapore accounting for 41% of the portfolio. Our exposure to customers in Greater China ex-Hong Kong has grown steadily over the years as we continue to rebalance the geographic mix of our business and accounts for 20% of the overall portfolio by the end of 2013. We continue to look for opportunities to diversify out of the home market.

Our overall exposure is well distributed across various industries with General Commerce and Financial Institutions as the largest contributors in the wholesale portfolio.

Industry Concentration

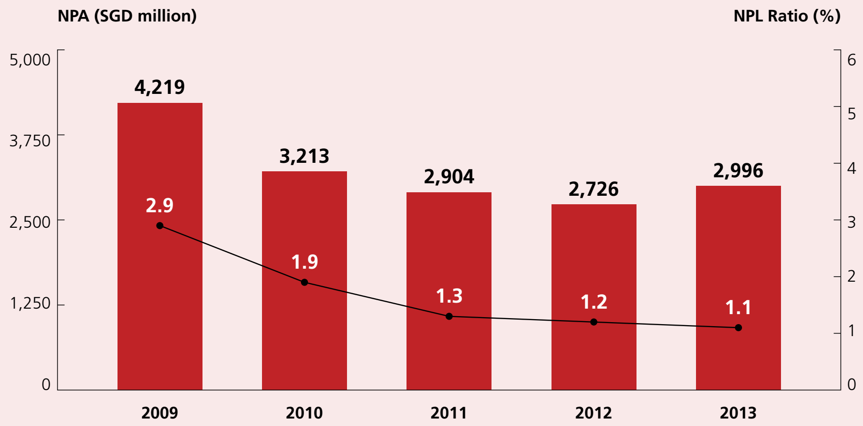


Geographical Concentration



Please refer to Note 41.4 to the Financial Statements on page 167 for the Group's breakdown of concentration of credit risk.

Non-Performing Assets



The Group's NPA have generally been on a declining trend since 2009. This reflects the general improvement in the regional and global economic situation. However, NPA crept up in 2013, largely due to stress on the Group's portfolio in India driven by the adverse macro-economic environment in the country which had caused some of our customers to encounter liquidity stress, leading to more downgrades. To some extent, the increase in the NPA in 2013 was also due to the early recognition and classification of some potential problem assets as non-defaulting NPA.

Corresponding improvements in the Group's Non-Performing Loan (NPL) Ratio have also been noted, improving from 2.9% in 2009 to 1.2% in 2012. In 2013, despite the increase in NPA, NPL Ratio remained relatively stable at 1.1%, cushioned by healthy growth in the loan portfolio.

5.5. INTERNAL CREDIT RISK MODELS

The Group adopts rating systems for the different asset classes under Internal Ratings Based Approach (IRBA). There is a robust governance process for the development, independent validation and approval of a credit risk model. The models are placed through a rigorous review process prior to endorsement by the Group Credit Risk Committee and the Risk ExCo and have to be approved by the BRMC before use.

The key risk measures generated by the internal credit risk rating models to quantify regulatory capital include probability of default (PD), loss given default (LGD) and exposure at default (EAD). For portfolios under the Foundation IRBA, the supervisory LGD estimates are applied. For its Advanced IRBA portfolios, the Group uses internal estimates. In addition, the ratings from the credit models are used as the basis to support the underwriting of credit, monitor the performance of the portfolios and determine business strategies.

To ensure the adequacy and robustness of these rating systems on an ongoing basis, performance monitoring is run regularly with results reported to the Group Credit Risk Committee, the Risk ExCO and the BRMC on a periodic basis. The monitoring program serves to highlight material deterioration in the credit risk systems for management attention. In addition, an independent risk unit conducts formal validations annually for the respective rating systems. The validation processes are also subject to an independent review by Group Audit.

5.5.1. Retail Exposure Models

Retail portfolios are categorised into asset classes under the Advanced IRBA, namely residential mortgages, qualifying revolving retail exposures and other retail exposures, including vehicle loans extended to individuals.

Within each asset class, exposures are managed on a portfolio basis. Each account is assigned to a risk pool, taking into consideration factors such as borrower characteristics and collateral type. Loss estimates are based on historical default and realised losses within a defined period. The definition of default is applied at the level of a particular facility, rather than at the level of the obligor.

Business-specific credit risk policies and procedures including underwriting criteria, scoring models, approving authorities, frequency of asset quality and business strategy reviews, as well as systems, processes and techniques to monitor portfolio performance against benchmarks are in place. Credit risk models for secured and unsecured portfolios are used to update the risk level of each loan on a monthly basis, reflecting the broad usage of risk models in portfolio quality reviews.

5.5.2. Wholesale Exposure Models

Wholesale exposures are assessed under the Foundation IRBA. The risk ratings for the wholesale exposures (other than securitisation exposures) have been mapped to likely corresponding external rating equivalents. A description of the rating grades is provided in the table to give a qualitative explanation of the risk benchmarks.

Sovereign exposures are risk rated using internal risk rating models and guidelines in line with IRBA portfolios. Country-specific macroeconomic risk factors, political risk factors, social risk factors and liquidity risk factors are reviewed objectively in the sovereign rating models to assess the sovereign credit risk in a disciplined and systematic approach.

Bank exposures are assessed using a bank rating model covering various credit risk factors such as capital levels and liquidity, asset quality, earnings, management and market sensitivity. The risk ratings derived are benchmarked against external credit risk ratings to ensure that the internal rating systems are well aligned and appropriately calibrated.

Large corporate credits are assessed using approved models and reviewed by designated credit approvers. Credit factors considered in the risk assessment process include the counterparty's financial standing and specific non-quantitative factors such as industry risk, access to funding, market standing and management strength.

The counterparty risk rating assigned to smaller business borrowers is primarily based on the counterparty's financial position and strength.

Credit ratings under the IRBA portfolios are, at a minimum, reviewed on an annual basis unless credit conditions require more frequent assessment. The counterparty risk rating process is reinforced by the facility risk rating system, which considers other exposure risk mitigants, such as collateral and third party guarantees.

A default is considered to have occurred with regard to a particular obligor when either or both of the two following events have taken place:

- Subjective default: Obligor is unlikely to pay its credit obligations in full, without recourse by the Group to actions such as realising security (if held)
- Technical default: Obligor is past due more than 90 days on any credit obligation to the Group

This is consistent with the guidance provided under the MAS' Notice to Banks No.637 "Notice on Risk Based Capital Adequacy Requirements for Banks incorporated in Singapore" (Notice 637).

A description of the internal ratings used and corresponding external ratings and MAS classification for the various portfolios is as follows:

Grade (ACRR)	Description of Rating Grade	Classification	Equivalent External Rating	MAS Classification	
PD Grade 1	Taking into account the impact of relevant economic, social or geopolitical conditions, capacity to meet its financial commitment is exceptional.	Exceptional	AAA	Passed	Performing Assets
PD Grade 2	Taking into account the impact of the relevant economic, social or geopolitical conditions, capacity to meet its financial commitment is excellent.	Excellent	AA+, AA, AA-	Passed	
PD Grade 3	More susceptible to adverse economic, social, geopolitical conditions and other circumstances. Capacity to meet its financial commitment is strong.	Strong	A+, A, A-	Passed	
PD Grade 4A/4B	Adequate protection against adverse economic, social or geopolitical conditions or changing circumstances. More likely to lead to a weakened capacity of the obligor to meet its financial commitment.	Good	BBB+/BBB	Passed	
PD Grade 5	Relatively worse off than an obligor rated "4B" but exhibits adequate protection parameters.	Satisfactory	BBB-	Passed	
PD Grade 6A/6B	Satisfactory capacity to meet its financial commitment but capacity may become inadequate due to adverse business, financial, economic, social or geopolitical conditions and changing circumstances.	Acceptable	BB+/BB	Passed	
PD Grade 7A/7B	Marginal capacity to meet its financial commitment but capacity may become inadequate or uncertain due to adverse business, financial, economic, social or geopolitical conditions and changing circumstances.	Marginal	BB-	Passed	
PD Grade 8A	Sub-marginal capacity to meet its financial commitment. Adverse business, financial, or economic conditions will likely impair the obligor's capacity or willingness to meet its financial commitment.	Sub-Marginal	B+	Passed	
PD Grade 8B/8C	Low capacity to meet its financial commitment. Adverse business, financial, or economic conditions will likely impair the obligor's capacity or willingness to meet its financial commitment.	Special Caution	B/B-	Special Mention	
PD Grade 9	Vulnerable to non-payment and is dependent upon favourable business, financial, and economic conditions for the obligor to meet its financial commitment. Likely to have little capacity to meet its financial commitment under adverse conditions.	Sub-Performing	CCC-C	Sub-Standard (Non-Defaulting)	Classified or NPA
PD Grade 10 and Above	An obligor rated '10' and above is in default (as defined under Notice 637).	Default	D	Sub-Standard and Below (Defaulting)	

5.5.3. Specialised Lending Exposures

Specialised lending IRBA portfolios, consisting of income-producing real estate, project finance, object finance, hotel finance and commodities finance, adopt the supervisory slotting criteria specified under Annex 7v of Notice 637. The supervisory slotting criteria guidelines under the supervisory rating categories are used to determine the risk weights to calculate the credit risk-weighted exposures.

5.5.4. Securitisation Exposures

The Group is not active in securitisation activities that are motivated by credit risk transfer or other strategic considerations. As a result, the Group does not securitise its own assets, nor does it acquire assets with a view to securitising them.

The Group arranges securitisations for clients and earns fees for arranging such transactions and placing the securities issued into the market. These transactions do not involve special purpose entities that are controlled by the Group. For transactions that are not underwritten, no securitisation exposures are assumed as a direct consequence of arranging the transactions. Any decision to invest in any such arranged transaction is subject to independent risk assessment. Where the Group provides an underwriting commitment, any securitisation exposure arising will be held in the trading book to be traded or sold down in accordance with internal policy and risk limits. In addition, the Group does not provide implicit support for any transactions it structures or in which it has invested.

The Group has processes in place to monitor the credit risk of the Group's securitisation exposures.

- ***Exposures to client asset-backed securitisations***
  The Group invests in clients' securitisation transactions from time to time, and this may include securitisation transactions arranged by either the Group or by other parties. The Group may also act as liquidity facility provider, working capital facility provider or swap counterparty. Such exposures require the approval of the independent risk function prior to being assumed and are subject to regular risk review thereafter, taking into account the underlying risk characteristics of the assets.

- ***Investment in collateralised debt obligations and asset-backed securitisations***
  The Group continues to hold certain investments in collateralised debt obligations (CDOs) and asset-backed securitisations that were made before 2008. Allowances for credit losses have been made for the total exposures arising from investments in CDOs. The remaining exposures are reviewed regularly by the independent risk function. Other than these legacy exposures, the Group has invested in asset-backed securitisations in order to meet policy lending requirements in a certain jurisdiction. They require the approval of the independent risk function prior to being assumed and are subject to regular risk review thereafter, taking into account the underlying risk characteristics of the assets.

5.5.5. Credit Exposures Falling Outside of Internal Credit Risk Models

The Group applies the Standardised Approach (SA) for portfolios which are individually immaterial in terms of both size and risk profile and for transitioning portfolios. These portfolios include:

- IRBA-transitioning retail and wholesale exposures
- IRBA-exempt retail exposures
- IRBA-exempt wholesale exposures

The transitioning retail and wholesale exposures are expected to transit to the Advanced IRBA and Foundation IRBA respectively over the next few years, subject to certification by MAS. In the meantime, the SA has been applied.

The portfolios under the SA are subject to the Group's overall governance framework and credit risk management practices. Under this framework, the Group continues to monitor the size and risk profile of these portfolios and will look to enhance risk measurement processes should these risk exposures become material.

The Group uses external ratings for credit exposures under the SA, where relevant, and the Group only accepts ratings from Standard & Poor's, Moody's and Fitch in such cases. The Group follows the process prescribed in Notice 637 to map the ratings to the relevant risk weights.

6. MARKET RISK

6.1. MARKET RISK IN DBS

The Group's exposure to market risk is categorised into:

- **Trading portfolios:** Arising from positions taken for (i) market-making, (ii) client-facilitation and (iii) benefiting from market opportunities.
- **Non-trading portfolios:** Arising from (i) positions taken to manage the interest rate risk of the Group's retail and commercial banking assets and liabilities, (ii) equity investments comprising of investments held for yield and/or long-term capital gains, (iii) strategic stakes in entities and (iv) structural foreign exchange risk arising mainly from the Group's strategic investments which are denominated in currencies other than the Singapore dollar.

6.2. MARKET RISK MANAGEMENT AT DBS

The Group's approach to market risk management is formulated on the following building blocks:

Framework	Policies	Risk Methodologies	Processes, Systems and Reports

FRAMEWORK

The Market Risk Framework, approved by the BRMC, sets out the Group's overall approach towards market risk management.

POLICIES

The Core Market Risk Policy (CMRP) establishes the base standards for market risk management within the Group. The Policy Implementation Guidance and Requirements (PIGR) complements the CMRP and sets out guidance and requirements with more details for specific subject matters. Both CMRP and PIGR facilitate the identification, measurement, control, monitoring and reporting of market risk in a consistent manner within the Group.

RISK METHODOLOGIES

The Group's market risk appetite framework links market risk EC by a multiplier to Tail Value-at-Risk (TVaR) metric as a tool to monitor and limit market risk exposures. TVaR, or more commonly referenced as Expected Shortfall, is calculated using the historical simulation VaR approach and averaging the losses beyond the 95% confidence interval, over a one-day holding period. TVaR is supplemented by risk control metrics such as sensitivities to risk factors and loss triggers for management action.

The Group conducts backtesting to verify the predictiveness of the VaR model. Backtesting compares 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. The backtesting revenues exclude fees and commissions, and revenues from intra-day trading. For backtesting, VaR at the 99% confidence interval and over a one-day holding period is derived from the same TVaR potential loss distribution.

VaR models such as historical simulation VaR permit the estimation of the aggregate portfolio market risk potential loss due to a range of market risk factors and instruments. VaR models have limitations which include but are not limited to: (i) past changes in market risk factors may not provide accurate predictions of the future market movements and (ii) may understate the risk arising from severe market risk related events.

To monitor the Group's vulnerability to unexpected but plausible extreme market risk related events, the Group has implemented an extensive stress testing policy for market risk where regular and multiple stress tests were run covering trading and non-trading portfolios through a combination of historical and hypothetical scenarios depicting risk factors movement.

TVaR is the key risk metric used to manage the Group's assets and liabilities' except for credit spread risk under Loans and Receivables where it is under the credit framework. The Group manages banking book interest rate risk arising from mismatches in the interest rate profile of assets, liabilities and capital instruments (and associated hedges), including basis risk arising from different interest rate benchmarks, interest rate re-pricing risk, yield curve risks and embedded optionality. Behavioural assumptions are applied in managing the interest rate risk of banking book deposits with indeterminate maturities.

Credit derivatives are used in the trading book with single name or index underlyings to support business strategy in building a regional Fixed Income franchise. The Group actively monitors its counterparty credit risk in credit derivative contracts. More than 90% of the gross notional value of the Group's credit derivative positions as at 31 December 2013 is to 13 large, established names with which the Group maintains collateral agreements.

PROCESSES, SYSTEMS AND REPORTS

Robust internal control processes and systems are designed and implemented to support the Group's approach for market risk management. Additionally, regular reviews of these control processes and systems are conducted. These reviews provide senior management with objective and timely assessments of the control processes and systems' appropriateness and effectiveness.

The day-to-day market risk monitoring, control and analysis is managed by the RMG Market and Liquidity Risk unit – an independent market risk management function that reports to the CRO. This group comprises risk control, risk analytics, production and reporting teams.

6.3. MARKET RISK IN 2013

The Group level TVaR considers both trading and non-trading portfolios. The Group level TVaR is tabulated below, showing the period-end, average, high and low TVaR.

		1 Jan 2013 to 31 Dec 2013		
In SGD million	**As at 31 Dec 2013**	**Average**	**High**	**Low**
Total	87	66	89	31

		1 Jan 2012 to 31 Dec 2012		
In SGD million	**As at 31 Dec 2012**	**Average**	**High**	**Low**
Total	40	52	62	38

The Group level TVaR as at 31 December 2013 was significantly higher than at 31 December 2012, due to (i) exceptional volatility of June-August 2013 coming into the one-year time series data used in the TVaR calculation and (ii) growth in the Group's commercial loan book.

The following table shows for Treasury's trading portfolios, the period-end, average, high and low diversified TVaR and TVaR by risk class:

		1 Jan 2013 to 31 Dec 2013		
In SGD million	**As at 31 Dec 2013**	**Average**	**High**	**Low**
Diversified	11	10	14	8
Interest Rates	9	9	11	7
Foreign Exchange	4	6	9	3
Equity	1	1	1	0
Credit Spread	4	4	5	3
Commodity	1	1	1	0

In SGD million	As at 31 Dec 2012	1 Jan 2012 to 31 Dec 2012 Average	High	Low
Diversified	8	15	24	8
Interest Rates	6	10	15	6
Foreign Exchange	3	4	5	3
Equity	1	2	3	1
Credit Spread	5	11	19	5
Commodity	0	1	2	0

With effect from fourth quarter 2013, the table excludes structural foreign exchange positions. The definitions in this table have been realigned to follow the demarcation of the banking and trading books based on intent and in-use risk management measures based on TVaR. The structural foreign exchange positions are captured in non-trading book TVaR. If the structural foreign exchange positions were to be included in the above two tables, the diversified TVaR as of 31 Dec 2013 would be SGD 24 million (2012: SGD 14 million). The average, highest and lowest TVaR would be SGD 20 million, SGD 26 million, SGD 13 million respectively (2012: SGD 20 million, SGD 30 million and SGD 13 million).

In the Group, the main risk factors driving Treasury's trading portfolios in 2013 were interest rates, foreign exchange and credit spreads. Treasury's trading portfolios' average TVaR decreased by SGD 5 million (33%), contributed largely by credit spreads falling by SGD 6 million (60%). Increased G7 exposures by the foreign exchange trading desk led to an increase in foreign exchange average TVaR by SGD 2 million (50%). The diversification effect observed for 2013 (average of SGD 11 million) is similar to that observed for 2012 (average of SGD 13 million).

Treasury's trading portfolio experienced five back-testing exceptions in 2013 compared with none in 2012. The exceptions occurred in June and July, when there was pronounced market volatility.

The key market risk drivers of the Group's non-trading portfolios are SGD and USD interest rate positions. The economic value impact of changes in interest rates is simulated under various assumptions for the non-trading risk portfolio. The simulated economic value changes are negative SGD 288 million and SGD 532 million (2012: negative SGD 449 million and SGD 848 million) based on parallel shocks to all yield curves of 100 basis points and 200 basis points respectively. The reported figures are based on the worst case of an upward and downward parallel shift in the yield curves.

LIQUIDITY RISK

7.1. LIQUIDITY RISK IN DBS

The Group's liquidity risk arises from its obligations to honour withdrawals of deposits, repayments of borrowed funds at maturity, and commitments to extend credit and support working capital needs.

The Group seeks to manage its liquidity in a manner that ensures that its liquidity obligations would continue to be honoured under normal as well as adverse circumstances.

7.2. LIQUIDITY RISK MANAGEMENT AT DBS

Liquidity Management and Funding Strategy

The Group strives to develop a diversified funding base with access to funding sources across retail and wholesale channels. In particular, the Group has continuously made inroads in growing, deepening and diversifying its deposit base, spanning retail, wealth management, corporate and institutional customers across markets that it operates in. Supplementing the deposit base, the Group continues to maintain access to wholesale channels, to support the growth of its investor base, as well as to increase flexibility and reduce funding cost in capitalising on business opportunities.

In deploying the funds, the Group aims to predominantly fund its lending activities via customer deposits and wholesale borrowings. In the event where market conditions lead to insufficient or prohibitively expensive customer funding, flexibility is maintained to fund lending growth with duration matched wholesale funding. With increasing diversification of funding sources, optimising the mismatch in fund deployments against sources with respect to pricing, size, currency and tenor remains challenging. To this end, where practicable and transferable without loss, the Group actively makes use of the swap markets in the conversion of funds across currencies to deploy surplus funds across locations in value.

The Group Assets and Liabilities Committee regularly reviews the growth in loans and deposits, momentum in business activities, market competition, economic outlooks, market conditions and other factors that may affect liquidity in the continual refinement of the Group's funding strategy.

Approach to Liquidity Risk Management

The Group's approach to liquidity risk management is formulated on the following building blocks:

Framework	Policies	Risk Methodologies	Processes, Systems and Reports

FRAMEWORK

The Liquidity Risk Framework, approved by the BRMC, sets out the Group's overall approach towards liquidity risk management. The Framework describes the range of strategies employed by the Group to manage its liquidity. These include maintaining an adequate counterbalancing capacity (comprising liquid assets, the capacity to borrow from the money markets as well as forms of managerial interventions that improve liquidity) to address potential cashflow shortfalls and maintaining diversified sources of liquidity. In the event of a potential or actual crisis, the Group has in place a set of liquidity contingency and recovery plans to ensure that decisive actions are taken to ensure the Group maintains adequate liquidity.

POLICIES

The Core Liquidity Risk Policy establishes the baseline standards for liquidity risk management within the Group. Policies and guidance documents communicate the base standards and detailed requirements throughout the Group and enhance the ability of the Group to manage its liquidity risk.

RISK METHODOLOGIES

The primary measure used to manage liquidity within the tolerance defined by the Board is the cashflow maturity mismatch analysis. The analysis is performed on a regular basis under normal and adverse scenarios, and assesses the adequacy of the counterbalancing capacity to fund or mitigate any cashflow shortfalls that may occur as forecasted in the cashflow movements across successive time bands. To ensure that liquidity is managed in line with the risk appetite, core parameters underpinning the performance of the analysis, such as the types of scenarios, the survival period and the minimum level of liquid assets, are pre-specified for monitoring and control at the Group. Any occurrences of forecasted shortfalls that cannot be covered by the counterbalancing capacity would be escalated to the relevant committees for deliberation and actions.

Stress testing is performed mainly under the cashflow maturity mismatch analysis, and covers adverse scenarios involving shocks that are general market and/or Group-specific in nature to assess the Group's vulnerability when run-offs in liabilities increase, rollovers of assets and/or liquidity assets buffer reduce. In addition, ad-hoc stress tests are performed as part of the Group's recovery plan and ICAAP.

Liquidity risk control measures, such as liquidity-related ratios and balance sheet analysis, are complementary tools to the cashflow maturity mismatch analysis and are performed regularly to obtain deeper insights and finer control over the liquidity profile across the Group.

PROCESSES, SYSTEMS AND REPORTS

Robust internal control processes and systems underlie the overall approach to identifying, measuring, aggregating, controlling and monitoring liquidity risk across the Group.

The day-to-day liquidity risk monitoring, control reporting and analysis are managed by the RMG Market and Liquidity Risk unit – an independent liquidity risk management function that reports to the CRO. This group comprises risk control, risk analytics, production and reporting teams.

7.3. LIQUIDITY RISK IN 2013

For the purpose of risk management, the Group actively monitors and manages its liquidity profile based on the cashflow maturity mismatch analysis.

In forecasting the cashflows under the analysis, behavioural profiling is necessary in cases where a product has indeterminate maturity or the contractual maturity does not realistically reflect the expected cashflows. An example would be maturity-indeterminate savings and current account deposits which are generally viewed as a source of stable funding for commercial banks and consistently exhibited stability even under historical periods of stress.

A conservative view is therefore adopted in the Group's behavioural profiling of assets, liabilities and off-balance sheet commitments that have exhibited cashflow patterns that differ significantly from the contractual maturity profile shown under Note 42.1 of our Financial Statements on page 169.

The table below shows the Group's behavioural net and cumulative maturity mismatch between assets and liabilities over a 1-year period under a normal scenario without incorporating growth projections:

In SGD million[(a)]	Less than 7 days	1 week to 1 month	1 to 3 months	3 to 6 months	6 months to 1 year
2013					
Net liquidity mismatch	18,638	(2,642)	7,052	10,539	11,800
Cumulative mismatch	18,638	15,995	23,048	33,587	45,387
2012[(b)]					
Net liquidity mismatch	18,190	(6,941)	2,199	8,134	2,321
Cumulative mismatch	18,190	11,249	13,448	21,582	23,903

(a) Positive indicates a position of liquidity surplus. Negative indicates a liquidity shortfall that has to be funded
(b) As the behavioural assumptions used to determine the maturity mismatch between assets and liabilities are updated from time to time, the liquidity mismatches may not be directly comparable across past balance sheet dates

Net liquidity of the Group is observed to have improved from end 2012, which is consistent with the Group's efforts in increasing its stable sources of funds from deposit gathering and medium term notes issuances to support overall growth in customer loans.

7.4. LIQUID ASSETS

In DBS, liquid assets are assets that are readily available and can be easily monetised to meet liquidity shortfalls under times of stress. Such assets are internally defined under the governance of the relevant oversight committees, taking into account asset class, issuer type and credit rating, amongst other criteria, before they are reflected as available funds under the cashflow maturity mismatch analysis used to manage liquidity risk within the risk tolerance.

In addition to the characteristics of the liquid assets, the treasury function within the Group should be able to operationally monetise the pool of liquid assets to meet liquidity shortfalls under times of stress. A key operational requirement is that the Group should only view as available funds the liquid assets that are unencumbered. "Unencumbered" means free of legal, regulatory, contractual or other restrictions that may impede the Group's ability to monetise the asset under times of stress.

In practice, liquid assets are maintained in key locations and to different significant currency levels to ensure that operating entities in such locations possess a degree of self-sufficiency to support business needs as well as protect against contingencies. The main portion of the Group's liquid assets is centrally maintained under DBS Bank to support liquidity needs in smaller overseas subsidiaries and branches. Internally, the Group sets on itself a requirement to maintain its pool of liquid assets above a minimum level as a source of contingent funds, taking into account projected stress shortfalls under its cashflow maturity mismatch analysis and other factors.

The table below shows the Group's encumbered and unencumbered liquid assets by instrument and counterparty against other assets in the same category under the balance sheet. Figures are based on the carrying value as at the balance sheet date.

	Liquid assets		Others[d]	Total
In SGD million	**Encumbered**	**Unencumbered**		
2013				
Cash and balances with central banks[a]	7,777	5,878	5,071	18,726
Placements with and loans to banks[b]	–	8,576	31,241	39,817
Financial Investments[c]	2,076	42,810	16,157	61,043
Total	9,853	57,264	52,469	119,586

(a) Unencumbered balances with central banks comprise holdings that are unrestricted and available overnight. The encumbered portion represents the mandatory balances held with central banks
(b) Liquid assets comprise nostro accounts and eligible certificates of deposits
(c) Financial investments comprise government securities and treasury bills, and bank and corporate securities. Liquid assets comprise securities issued or guaranteed by sovereigns and central banks, and other corporate securities that are internally assessed to be liquid under times of stress
(d) 'Others' refer to assets that are not recognised as part of the available pool of liquid assets for liquidity management under stress

In addition to the above table, collateral received in reverse repo transactions amounting to SGD 3,055 million are recognised for liquidity management under stress.

As can be observed from the table, the Group's funding strategy in the normal course of its business does not rely on collaterised wholesale funding. Instead, liquid assets are maintained as a source of contingent funds to meet potential shortfalls that may arise under times of stress, as assessed under regulatory standards and the Group's internal measures.

7.5. REGULATORY REQUIREMENTS

Based on its internal assessment and participation in the Quantitative Impact Studies by the Basel Committee on Banking Supervision, the Group is well-positioned to meet the minimum standards of the Basel III liquidity-related requirements.

8. OPERATIONAL RISK

8.1. OPERATIONAL RISK IN DBS

Operational risk include processing errors, fraudulent acts, inappropriate behaviour of staff, vendors' misperformance, system failure and natural disasters. Operational risk is inherent in most of the Group's businesses and activities.

Our objective is to keep operational risk at appropriate levels, taking into account the markets the Group operates in, the characteristics of the businesses as well as the competitive and regulatory environment the Group is subject to.

8.2. OPERATIONAL RISK MANAGEMENT AT DBS

The Group's approach to operational risk management is formulated on the following building blocks:

Framework	Policies	Risk Methodologies	Processes, Systems and Reports

FRAMEWORK

The Operational Risk Management Framework (the "Framework"), approved by the BRMC, has been developed with the objective to ensure that operational risks within the Group are identified, monitored, managed and reported in a structured, systematic and consistent manner.

POLICIES

A key component of the Framework is a set of Core Operational Risk Standards which provides guidance on the baseline controls to ensure a controlled and sound operating environment. Each new product or service introduced or outsourcing initiative is subject to a risk review and sign-off process where relevant risks are identified and assessed by departments independent of the risk-taking unit proposing the product or service. Variations of existing products or services and outsourcing initiatives are also subject to a similar process.

Information Technology (IT) risk is managed in accordance to a Technology Risk Management Framework (which covers risk governance, communication, monitoring, assessment, mitigation and acceptance), supported by a set of IT policies and standards, control processes and risk mitigation programs.

Compliance risk is the risk of impairment to the Group's ability to successfully conduct its business as a result of any failure to comply with applicable regulatory requirement, industry code or standard of professional conduct. The Group Compliance Policy is a key tool to help management, employees and stakeholders understand the Group's approach to compliance risk, which includes the responsibility, guiding principles and processes involved in managing compliance risk. To address compliance risk, the Group strongly believes in the need to inculcate a strong compliance culture in its employees, mindset and DNA, and in its processes and systems. The Group seeks to establish a strong compliance culture through the leadership of its Board and senior management and aims to comply with the letter and spirit of the laws and regulatory standards in the environment in which it operates.

The Group has a Fraud Management Policy which establishes minimum standards for its businesses and functional units to prevent, detect, investigate and remediate against fraud and related events. This Policy also establishes the components, key roles and the framework of the Fraud Management Programme through which the standards are to be implemented on a unit and geographical level. These standards aim to provide end-to-end management of fraud and related issues for the Group.

The Group Anti Money Laundering, Countering the Financing of Terrorism and Sanctions Policy establishes minimum standards for the business and functional units to mitigate and manage actual and/or potential exposure of the Group to money laundering, terrorist financing, sanctions, corruption, or other illicit financial activity. The Policy also establishes accountabilities for the protection of the assets and reputation of the Group and the interests of customers and shareholders.

RISK METHODOLOGIES

To manage and control operational risk, the Framework encompasses various tools including control self-assessment, operational risk event management and key risk indicators monitoring. Control self-assessment is used by each business or support unit to identify key operational risk and assess the degree of effectiveness of the internal controls. For those control issues identified, the units are responsible to develop action plans and track the timely resolution of these issues. Operational risk events are classified in accordance with Basel standards. Such events, including any significant incidents that may impact the Group's reputation, are required to be reported based on certain established thresholds. Key risk indicators with pre-defined escalation triggers are employed to facilitate risk monitoring in a forward looking manner.

Major operational risk mitigation programmes include Business Continuity Management and Global Insurance Programme. A robust crisis management and business continuity management program is in place within the Group to oversee the continuity of essential business services during unforeseen events. Types of incidents being managed include technology incidents having enterprise-wide impact on essential banking services, natural disasters with wide geographical area impact, safety-at-risk incidents e.g. terrorism and other events leading to significant business disruption. Senior management provides an attestation to the BRMC on an annual basis including the state of business continuity readiness, extent of alignment to regulatory guidelines and disclosure of residual risks.

To mitigate losses from specific unexpected and significant event risks, the Group purchases group-wide insurance policies, under the Global Insurance Programme, from third-party insurers. These policies cover fraud and civil liability, property damage and general liability and directors' and officers' liability.

PROCESSES, SYSTEMS AND REPORTS

The Group has implemented a web-based system that supports multiple operational risk management processes and tools including operational risk event reporting, control self-assessment, key risk indicators, tracking of issues or action plans and operational risk reporting.

Units are responsible for the day-to-day management of operational risk in their products, processes, systems and activities in accordance with the Framework and policies. RMG Operational Risk provides oversight and monitors the effectiveness of operational risk management, assesses key operational risk issues with units to determine the impact across the Group, and reports and/or escalates key operational risks to relevant senior management and Board-level committees with recommendations on appropriate risk mitigation strategies.

8.3. OPERATIONAL RISK IN 2013

Loss resulting from Operational Risk may result in reduced revenue or in settlement claims and or fines. Claims and fines are recorded as "Other Expenses". For the Financial Year 2013 we have not recorded any such losses that in themselves were material to the Group.

APPENDIX

General recommendations		Where have we disclosed this? (in Risk Section unless otherwise stated)
1	Present all related risk information together in any particular report.	Please refer to the table on page 75
2	Define the bank's risk terminology and risk measures and present key parameter values used.	Sections 2, 5.2, 6.2, 7.2, 8.2
3	Describe and discuss top and emerging risks, incorporating relevant information in the bank's external reports on a timely basis.	Section 2
4	Once the applicable rules are finalized, 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.	Not applicable The rules are not yet adopted in Singapore
Risk governance and risk management strategies/business model		
5	Summarise prominently the bank's risk management organisation, processes and key functions.	Section 4
6	Provide a description of the bank's risk culture, and how procedures and strategies are applied to support the culture.	Section 3
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.	Sections 1, 2 and 3
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.	Sections 3.2, 5.2, 6.2, 7.2
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.	Refer to Pillar 3 disclosures published on DBS website
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.	Refer to Pillar 3 disclosures published on DBS website
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.	Refer to Pillar 3 disclosures published on DBS website

General recommendations		Where have we disclosed this? (in Risk Section unless otherwise stated)
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.	Refer to Capital Management and Planning section
13	Provide granular information to explain how risk-weighted assets (RWAs) relate to business activities and related risks.	Not Implemented
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.	Refer to Pillar 3 disclosures published on DBS website
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 for Basel asset classes and major portfolios within the Basel asset classes at a suitable level of granularity based on internal ratings grades.	Refer to Pillar 3 disclosures published on DBS website
16	Present a flow statement that reconciles movements in RWAs for the period for each RWA risk type.	Not implemented
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.	Refer to Pillar 3 disclosures published on DBS website
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.	Sections 7.2, 7.4
Funding		
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.	Section 7.4
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.	Section 7.4 Financial Statements Note 42.1

General recommendations		Where have we disclosed this? (in Risk Section unless otherwise stated)
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.	Section 7.2
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.	Section 6.2
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.	Sections 6.2, 6.3
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.	Sections 6.2, 6.3
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.	Sections 6.2 , 6.3
Credit risk		
26	Provide information that facilitates users' understanding of the bank's credit risk profile, including any significant credit risk concentrations.	Section 5.4 Financial Statements Note 41.4
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.	Section 5.2
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. Disclosures should include an explanation of the effects of loan acquisitions on ratio trends, and qualitative and quantitative information about restructured loans.	Sections 5.2, 5.4 Financial Statements Note 41.2

General recommendations		Where have we disclosed this? (in Risk Section unless otherwise stated)
29	Provide a quantitative and qualitative analysis of the bank's counterparty credit risk that arises from its derivatives transactions.	Section 5.2 Financial Statements Note 37
30	Provide qualitative information on credit risk mitigation, including collateral held for all sources of credit risk and quantitative information where meaningful.	Section 5.3
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.	Section 2
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.	Not applicable