

# Risk

# Management

In 2014, we have implemented most of the Enhanced Disclosure Task Force (EDTF) recommendations for improved bank risk disclosures<sup>1</sup>. For an overview of the recommendations and where we have incorporated the relevant disclosures, please refer to Appendix on page 115.

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

	RISK MANAGEMENT SECTION		OTHER LOCATIONS IN ANNUAL REPORT		PILLAR 3 QUANTITATIVE DISCLOSURES*
RISK OVERVIEW	1 Risk Taking and our Business Segments	89	Capital Management and Planning	118	1 Introduction 2 Capital Adequacy 3 Exposures and Risk Weighted Assets (RWA)
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CREDIT RISK	5.1 Credit Risk Management at DBS	96	<b>Note 14</b> Financial Assets and Liabilities subject to Netting Agreement	141	4.1 Credit Risk assessed using Internal Ratings-Based Approach 4.2 Credit Risk assessed using Standardised Approach 4.3 Credit Risk Mitigation 4.4 Counterparty Credit Risk-related Exposures 5 Equity Exposures under IRBA 6 Securitisation Exposures 7.1 Credit Exposures 7.2 Major Credit Exposures by Geography and Industry 7.3 Loans and Advances to Customers (by performing/non-performing) 7.4 Movements in Specific and General Allowances
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\* Please refer to [www.dbs.com/investor/financial-performance/default](http://www.dbs.com/investor/financial-performance/default), page for DBS' Pillar 3 Quantitative Disclosures

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

	RISK MANAGEMENT SECTION		OTHER LOCATIONS IN ANNUAL REPORT		PILLAR 3 QUANTITATIVE DISCLOSURES*			
MARKET RISK	6.1	Market Risk Management at DBS	105		7.6	Interest Rate Risk in the Banking Book		
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\* Please refer to [www.dbs.com/investor/financial-performance/default.page](http://www.dbs.com/investor/financial-performance/default.page) for DBS' Pillar 3 Quantitative Disclosures

## 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 SEGMENTS

We are focused on Asia and are committed to building lasting customer relationships as they expand across Asia. This naturally exposes us to a degree of concentration risk to the region. We manage our risks through diversification of industries and portfolios as well as concentration management of exposures. In addition, we focus on developing specialist knowledge of the regional markets and a deep understanding of our target segments within the consumer and institutional banking businesses; these target segments are further assessed using defined risk parameters.

We manage our risks along the dimensions of commercial banking versus investment banking; the former would largely arise from our consumer banking and institutional banking businesses and the latter from our treasury market making and warehousing activities. We allocate internal economic capital along these dimensions with a higher allocation to commercial banking given our profile as a commercial bank; we also maintain a buffer for other risks such as country risk, operational risk, reputational risk and model risk.

The chart below provides a high level overview of the risks arising from our business segments. The asset size gives an indication of the contribution of the business segments to the balance sheet, while the Risk Weighted Assets (RWA) reflects the relative size of the risks incurred in respect of each business segment.

Please refer to Note 44 to the Financial Statements on page 177 for more information on DBS' business segments.

	CONSUMER BANKING/WEALTH MANAGEMENT	INSTITUTIONAL BANKING	TREASURY	OTHERS <sup>(a)</sup>	TOTAL
SGD million					
<b>Assets<sup>(b)</sup></b>	84,451	225,504	90,586	35,008	435,549
<b>Risk Weighted Assets</b>	31,995	151,059	62,207	18,925	264,186
% of RWA					
<b>Credit Risk</b>	87%	94%	36%	74%	78%
<b>Market Risk</b>	0%	0%	61%	22%	16%
<b>Operational Risk</b>	13%	6%	3%	4%	6%

(a) Encompasses assets/RWA from capital and balance sheet management, funding and liquidity activities, DBS Vickers Group and The Islamic Bank of Asia Limited

(b) Before goodwill and intangibles

### 2 RISK OVERVIEW

In executing our strategy, 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.

<b>BUSINESS AND STRATEGIC</b>	<b>CREDIT</b>	<b>MARKET</b>	<b>LIQUIDITY</b>	<b>OPERATIONAL</b>	<b>REPUTATIONAL</b>
	Page 96	Page 105	Page 108	Page 111	Page 113

**BUSINESS AND STRATEGIC RISK**

is an over-arching risk that arises from changes in the business environment and from adverse decisions that can materially impact DBS' long term objectives. This risk is managed separately under other governance processes.

**CREDIT RISK**

is the risk of loss resulting from the failure of borrowers or counterparties to meet their debt or contractual obligations.

**MARKET RISK**

is the risk of loss arising from adverse changes in interest rates, foreign exchange rates, equity prices, credit spreads and commodity prices, as well as their correlations and implied volatilities.

**LIQUIDITY RISK**

is the risk arising from the inability of DBS 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.

**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 DBS' 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.

**Top and Emerging Risks**

As part of our risk management process, we proactively identify and monitor top and emerging risks which, if they materialise, may have a material impact on our business activities, financial results and reputation and affect our ability to deliver against our strategic priorities. Our identification process starts with a discussion among senior management about our key areas of focus and the risk outlook for the banking industry. It is also supplemented by discussions with the board and management risk committees. Periodic updates on action plans are provided to the relevant risk committees.

In 2014, we paid particular attention to the following top and emerging risks. These risks remain our key concerns in the coming year.

**CREDIT RISK**

Credit risk remains our most material risk and incurs the highest usage of capital; it is largely determined by the global macro-economic environment and the economic situation of the countries we operate in, as well as concentration risks we may run. We continue to monitor these situations actively and assess whether our positions continue to be in line with our risk appetite. Our portfolio concentration strategies are pro-actively managed and modified to mitigate potential portfolio threats.

The Indian economy marked a second straight year of slow growth. This, coupled with a business environment characterised by high debt levels and constrained liquidity, led to higher defaults and delinquencies in the India portfolio. We conducted stress tests and portfolio reviews and tightened our Target Market and

Risk Acceptance Criteria (TMRAC)<sup>(2)</sup> as well as strengthened our early warning monitoring. With a new majority government in place since the second half of 2014, declining inflation and reduced oil and commodity prices, we expect the Indian economy to show improvement in the near future.

The economic slowdown seen in China during the year was one of our key concerns. We considered the impact arising from our exposures to the local banks and the property sector in China. Our exposure is largely to the systemically important Chinese banks and we deal mainly in short-dated and trade-related transactions. In the Chinese property sector, we lend primarily to top local and international names. While we will continue to monitor the developments in China closely, we remain comfortable with our exposures.

After several rounds of cooling measures, the residential housing market in Singapore remained subdued, resulting in declining property price trends on reduced transaction volumes. We have stress tested our real estate portfolio rigorously and concluded that the portfolio is resilient. Notwithstanding the positive outcome, we will continue to monitor the portfolio proactively for signs of weaknesses and exercise prudence in client selection and the underwriting of new loans.

Commodity prices have been under pressure since 2014. We have conducted several scenario analyses across the commodity spectrum. We continue to enhance our due diligence and processes in this sector, as well as and pay close attention to structuring and collateralising individual trades.

### COUNTRY RISK

DBS' strategy is to be a regional bank in Asia. Consequently, we have large concentrations in a limited number of countries and the risks in those countries can also be correlated. Instability in and across our target markets, such as political and economic developments in China, India and Indonesia, may give rise to country risk events. This risk is mitigated by setting limits for the maximum transfer and convertibility risk ("transfer risk") exposure to each country. In addition, the potential loss is monitored on the basis of how the exposure is divided among short term and long term, trade and non-trade. It also takes into account wrong-way risk and offshore funding of local currency assets. Based on the outlook for macroeconomic and country transfer risk, the limits and exposures will be adjusted to stay within DBS' Risk Appetite.

### REGULATORY TRENDS

The global regulatory landscape continues to evolve, particularly in capital and liquidity management, posing risks and challenges to us as well as banks in our peer group. We continue to track international and domestic developments to ensure that we remain on top of trends and changes impacting our businesses. New requirements are promptly analysed and disseminated to the respective action parties and, where applicable, embedded into DBS' processes and systems.

We also recognise the importance of proactive engagement with regulators and we continue to contribute actively to industry and regulatory forums. Towards this end, we strive to build and maintain positive relationships with regulators that have oversight responsibilities in the locations where we operate.

One international trend which we continue to observe is a growing emphasis on financial markets conduct, a subject on which various regulators have published in 2014. We anticipate that international consensus will evolve in 2015 particularly in the area of conduct of business in the foreign exchange markets. As a participant in these markets, we will always seek to align with best practices as consensus develops.

For a bank with operations in multiple countries, risks from cross-border transactions are expected to increase as global regulatory reforms spur local policy and economic agenda. These risks are diverse and range from local licensing rules, to highly complex interaction between local laws in originating and booking centres. In 2015, we expect to focus a degree of effort to enhance our approach to cross-border transactions to ensure that we are in line with regulatory requirements notwithstanding the potential complexities involved.

Further, we have put in place a set of governance and operational standards in our overseas locations. We recognise the importance of maintaining consistency in the adoption and rollout of policies at overseas locations and will continue to maintain oversight in this area.

### CYBER SECURITY

The increasing threat of cyber attacks on financial institutions continues to be one of our top risk concerns. Cyber criminals, hackers, insiders and nation state sponsored adversaries are among those that may target financial computer systems. To monitor these evolving threats, we have in place a robust cyber security framework. We are continuously enhancing our security controls and surveillance to protect our assets and operations.

(2) We use Target Market (TM) to define industry/or geographical target markets and identify acceptable business/industry segments. Risk Acceptance Criteria (RAC) is used as a client screening tool to guide credit extension and how much risk is acceptable or tolerable.

**FINANCIAL CRIME**

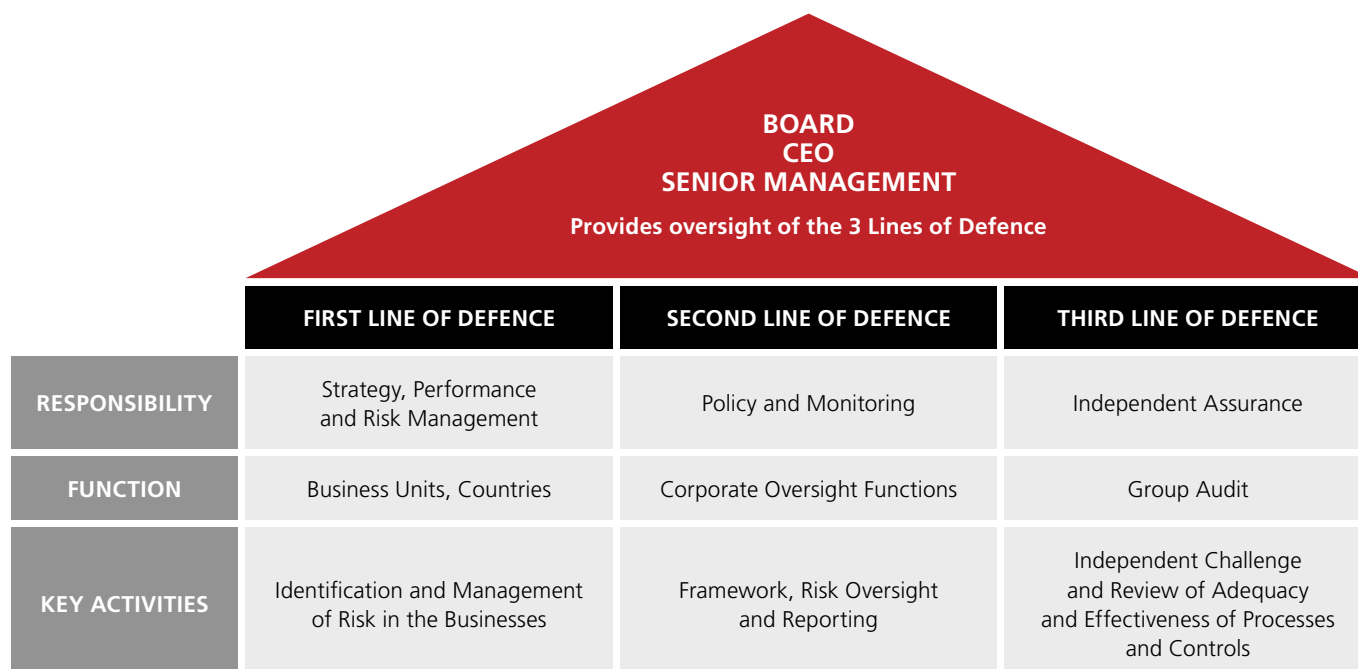
Financial crime risk is a focus area for many peer banks. This has been a trend for a number of years, with heightened penalties imposed by regulators for issues in sanctions and money laundering. Fraud and bribery/corruption are also issues that occupy significant amounts of space on a financial crime risk mitigation agenda. 2014 also saw focus being given to trade finance, and wealth management (particularly around tax evasion risk). We expect this trend, and the evolution of financial crime risk (together with the regulatory response), to continue.

Our financial crime risk mitigation controls include, without limitation, know-your-client policies, personnel advising on anti-money laundering/sanctions and anti-bribery/corruption policies, training, transaction screening and periodic testing. We have made several enhancements in our policies, systems and operations to address the way in which the risk is evolving, and have allocated additional resources for further work in 2015. We also conducted a specific review of tax evasion risk. These are closely aligned to regulatory developments and will ensure that we continue to benchmark well against international standards.

### 3 RISK GOVERNANCE

#### 3.1 Risk and Control

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



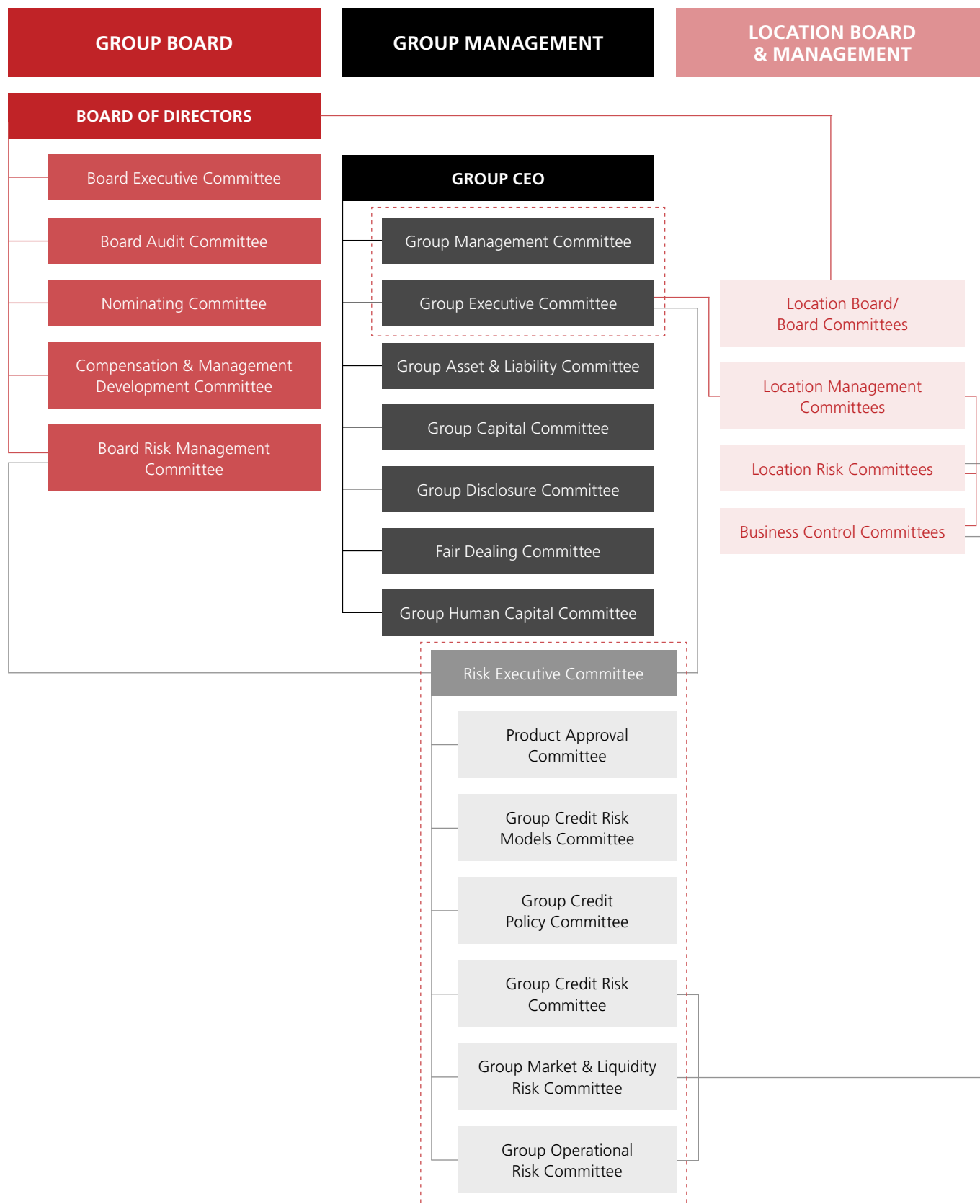
Working closely with the support units, our business units are our first line of defence with a clear responsibility for risk. This includes identification of risks and the reporting of any changes in the risk profile of the clients or positions.

As a second line of defence, corporate oversight functions such as Risk Management Group (RMG) and Group Compliance, are responsible for developing, overseeing and reporting on risk frameworks. In addition, RMG is responsible for identifying individual and portfolio risk; approving transactions and trades and ensuring that they are within approved limits; and monitoring and reporting on the portfolio, taking into account current and future potential developments through stress testing.

Finally, Group Audit forms the third line of defence, in providing an independent assessment and assurance to the Audit Committee on the robustness, adequacy and effectiveness of our internal controls related to processes, risk and control governance.

### 3.2 Governance Structure

Under DBS' risk management frameworks, the Board of Directors, through the Board Risk Management Committee (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 DBS.



Note: The lines reflect possible escalation protocol and are not reporting lines per se

The BRMC sets out the overall approaches for identification, monitoring, management and reporting of credit, market, liquidity, operational and reputational risks. To facilitate the 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 new product approvals – an important risk mitigation element within DBS.
Group Credit Risk Models Committee (GCRMC)*	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.
Group Credit Policy Committee (GCPC)*	
Group Credit Risk Committee (GCRC)	
Group Market and Liquidity Risk Committee (GMLRC)	
Group Operational Risk Committee (GORC)	
	<p>Key responsibilities:</p> <ul style="list-style-type: none"> <li>• Assess risk taking</li> <li>• Maintain oversight on effectiveness of DBS' risk management infrastructure, including frameworks, decision criteria, authorities, policies, people, processes, information, systems and methodologies</li> <li>• Approve risk model governance standards, stress testing scenarios, risk models and assess performance of the risk models</li> <li>• Assess the risk-return trade-offs across DBS</li> <li>• Identify specific concentrations of risk</li> </ul> <p>The members in these committees comprise representatives from RMG as well as key business and support units.</p>

The above committees (excluding those marked with an asterisk) are supported by local risk committees in all major locations. The local risk committees provide oversight of local risk positions across all businesses and support units and ensure compliance with limits set by the group risk committees. They also approve location-specific risk policies and ensure compliance with local regulatory risk limits and requirements.

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 reports to the Chairman of the BRMC and the CEO. The CRO is independent of business lines and is actively involved in key decision making processes.

The CRO also engages the 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 DBS; 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

## 4 RISK APPETITE

The pursuit of our strategic priorities and business opportunities inherently carries risk. The Board has established an overall Risk Appetite, which is supervised by the BRMC. Our risk strategy is to link our Risk Appetite with DBS' strategic and operational objectives.

The embedding of Risk Appetite in DBS starts with a formally defined Risk Appetite Statement set by the Board. We have established the Risk Appetite Framework which covers the governance processes to ensure adherence to the Risk Appetite Statement. The Framework also serves to reinforce our risk culture through 'tone from the top' articulation of the risks that we are willing to accept. A strong organisational risk culture, including an appropriate incentive framework (please refer to Remuneration Report section on page 77), helps to further embed Risk Appetite at DBS.

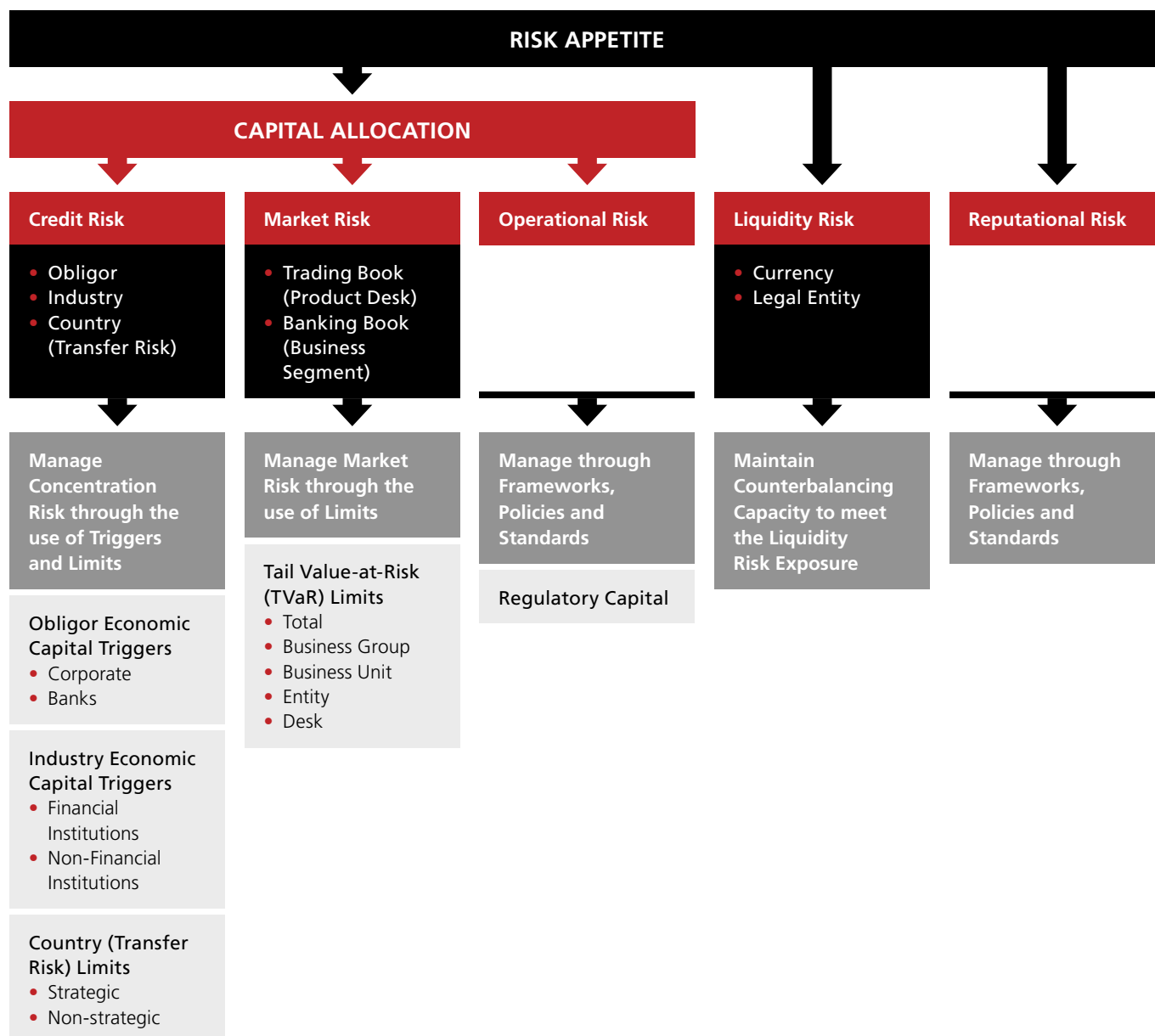
### 4.1 Risk Constraining Thresholds and Use of Economic Capital

Our Risk Appetite considers the various risk types and is operationalised via thresholds, 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.



In order to ensure that the thresholds emanating from the Risk Appetite are fully risk sensitive to individual risk drivers as well as portfolio effects, we have adopted Economic Capital (EC) as our primary risk metric. EC is also deployed as a core component in our Internal Capital Adequacy Assessment Process (ICAAP).

The following chart provides a broad overview of how we cascade Risk Appetite. Please refer to Sections 5 to 9 for more information on each risk type.



#### 4.2 Stress Testing

Stress testing is an integral part of DBS' risk management process. It alerts senior management to our potential vulnerability to exceptional but plausible adverse events. It enables us 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.

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.

To ensure that our overall risk and rewards are aligned with our Risk Appetite, we integrate ICAAP into our Risk Appetite setting. 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.

5 CREDIT RISK

Credit risk arises from 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 DBS.

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 DBS 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 are 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 DBS has performed its obligation under an exchange of cash or securities.

Please refer to Note 41.1 to the Financial Statements on page 169 for details on DBS' maximum exposure to credit risk.

5.1 Credit Risk Management at DBS

DBS' framework for credit risk management comprises the following building blocks:

POLICIES	RISK METHODOLOGIES	PROCESSES, SYSTEMS AND REPORTS
<p><b>POLICIES</b></p> <p>As established in the Group Credit Risk Management Framework, the dimensions of credit risk and the scope of its application are defined. Senior management sets the overall direction and policy for managing credit risk at the enterprise level. The Group Core Credit Risk Policy (CCRP) sets forth the principles by which DBS conducts its credit risk management and control activities. This policy, supplemented by a number of operational policies, ensures consistency in credit risk underwriting across DBS and provides guidance in the formulation of business-specific and/or location-specific credit risk policies. These latter policies are established to provide greater details on the implementation of the credit principles within the Group CCRP and are adapted to reflect different credit environments and portfolio risk profiles. The Group CCRP is considered and approved by the Risk ExCo based on recommendations from the GCPC.</p> <p><b>RISK METHODOLOGIES</b></p> <p>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. DBS uses an array of rating models in both the corporate and retail portfolios. Most are built internally using DBS' own loss data. Limits and "rules for the business" are driven from DBS' Risk Appetite Statement and TMRAC respectively. Significant deals are also reviewed and approved by the Group Credit Committee which is chaired by the Deputy CRO and comprises representatives from RMG and Institutional Banking Group.</p> <p>Retail exposures are typically managed on a portfolio basis and assessed based on credit scoring models, credit bureau records, internal and available external customers' behaviour records and supplemented by Risk Acceptance Criteria.</p>	<p>Wholesale exposures are assessed using approved credit models, reviewed and analysed by experienced credit risk managers taking into consideration the relevant credit risk factors. For portfolios within the SME segment, DBS also uses a programme-based approach for a balanced management of risks and rewards. 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.</p> <p>Please refer to Section 5.3 on page 99 for further discussion on our internal credit risk models.</p> <p>Derivatives pre-settlement credit risk arising from a counterparty's default is quantified by its current mark-to-market plus an appropriate add-on factor for potential future exposure. This methodology is used to calculate DBS' regulatory capital under the Current Exposure Method (CEM) and is included under DBS' overall credit limits to counterparties for internal risk management.</p> <p>Issuer default risk that may arise from derivatives and securities are generally measured based on jump-to-default computations.</p> <p>DBS 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. Specific wrong-way risk arises when the exposure to a particular counterparty is positively correlated with the probability of default of the counterparty due to the nature of transactions with the counterparty. DBS has a policy to guide the handling of specific wrong-way risk transactions and its risk measurement metric takes into account the higher risks associated with such transactions.</p>	

### Concentration Risk Management

DBS' risk management processes aim to ensure that an acceptable level of risk diversification is maintained across DBS in line with the Risk Appetite. For credit risk, we use EC as the measurement tool, since it combines the individual risk factors of Probability of Default (PD), Loss Given Default (LGD) and Exposure at Default (EAD) as well as portfolio concentration factors. We set granular EC thresholds to ensure that the allocated EC stays within the Risk Appetite. These thresholds are regularly monitored in respect of major industry groups and single counterparty exposures. In addition, we set notional limits for country exposures. Governance processes exist to ensure that exposures are regularly monitored against these thresholds and appropriate actions are taken if thresholds are breached. We continually monitor and assess the need to enhance the scope of thresholds.

### 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, exchange rate, economic, sovereign and transfer risks. In DBS, Country risk is managed as part of concentration risk management under the Risk Appetite Framework.

Transfer 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 transfer 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 DBS' Country Risk Management Framework. The framework includes an internal transfer risk and sovereign risk rating system where the assessments are made independent of

business decisions. Transfer risk limits are set in accordance to DBS' 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 acceptable potential loss versus the Risk Appetite. There are active discussions among 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 our strategic intent. All country limits are subject to approval by the BRMC.

### Stress Testing

We perform 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, capital adequacy and liquidity.

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

The stress testing programme 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.

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

<b>PILLAR 1 CREDIT STRESS TESTING</b>	DBS conducts Pillar 1 credit stress testing regularly as required by regulators. Under Pillar 1 credit stress testing, DBS assesses the impact of a mild stress scenario (at least two consecutive quarters of zero GDP growth) on Internal Ratings-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.
<b>PILLAR 2 CREDIT STRESS TESTING</b>	DBS conducts Pillar 2 credit stress testing once a year as part of the ICAAP. Under Pillar 2 credit stress testing, DBS assesses the impact of stress scenarios, with different levels of severity, on asset quality, earnings performance, internal and regulatory capital. The results of the credit stress tests form an 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 DBS.
<b>INDUSTRY-WIDE STRESS TESTING</b>	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 the regulator. Under the IWST, DBS is to assess the impact of adverse scenarios, provided by the regulator, on asset quality, earnings performance, and capital adequacy.
<b>SCENARIO ANALYSIS</b>	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. The purpose of these tests and analyses is to identify vulnerabilities for the purpose of developing and executing mitigating actions.

**PROCESSES, SYSTEMS AND REPORTS**

DBS 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 units, RMG, 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 DBS' 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 taken comply with Group-wide credit policies and guidelines. These functions ensure proper activation of approved limits and 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 judgemental 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**

DBS classifies its credit facilities as 'Performing Assets' or 'Non-Performing Assets' (NPA) in accordance with the Monetary Authority of Singapore' (MAS) Notice to Banks No. 612 "Credit Files, Grading and Provisioning" (MAS Notice 612). These guidelines require DBS 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 GRADE	DESCRIPTION
<b>Performing Assets</b>	
<b>Pass</b>	Indicates that the timely repayment of the outstanding credit facilities is not in doubt.
<b>Special mention</b>	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 DBS.
<b>Classified or NPA</b>	
<b>Substandard</b>	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. These credit facilities may be non-defaulting.
<b>Doubtful</b>	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.
<b>Loss</b>	Indicates that the amount of recovery is assessed to be insignificant.

The linkage between the above MAS categories and the DBS' internal ratings is shown in Section 5.3 on page 100.

Credit facilities are classified as restructured assets when we grant 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, and concessions granted/restructured terms are considered as non-commercial. 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.

Other than the above, we do not grant concession to borrowers in the normal course of business. In any restructuring of credit facilities, such borrowers are reviewed on a case by case basis and only on commercial terms.

In addition, it is not within DBS' business model to acquire debts that have been restructured at inception (e.g. distressed debts).

Please refer to Note 2.10 to the Financial Statements on page 132 for DBS' 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 DBS according to MAS 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 172. A breakdown of DBS' past due loans can also be found in the same note.

When required, DBS will take possession of the 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 173. Repossessed collateral is classified in the balance sheet as other assets. The amounts of such other assets for 2014 and 2013 were not material.

## 5.2 Credit Risk Mitigants

### Collateral Received

Where possible, DBS 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. We 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 exposures arising from derivative, repurchase agreement (repo) and other repo-style transactions with financial market counterparties, these are 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. These are governed by internal guidelines with respect to the eligibility of collateral. In the event of a default, the credit risk exposure is reduced by master netting arrangements where DBS is allowed to offset what we owe to a counterparty against what is due from that counterparty in a netting-eligible jurisdiction.

Collateral taken for commercial banking is revalued periodically, depending on the type of collateral. While real estate constitutes the largest percentage of collateral assets, we generally consider 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 collateral held by DBS. We also maintain a panel of agents and solicitors for the expeditious disposal of non-liquid assets and specialised equipment.

### Collateral Posted

DBS is required to post additional collateral in the event of a rating downgrade. As at 31 December 2014, for a one notch downgrade of its Standard & Poor's Ratings Services and Moody's Investors Services ratings, DBS Bank would have to post additional collateral amounting to SGD 106 million and SGD 35 million respectively.

### Other Risk Mitigants

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

## 5.3 Internal Credit Risk Models

DBS adopts rating systems for the different asset classes under the 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 GCRMC 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 PD, LGD and EAD. For portfolios under the Foundation IRBA, the supervisory LGD estimates are applied. For Advanced IRBA portfolios pertaining to Retail, internal estimates are used. 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 GCRMC, the Risk ExCo and the BRMC on a periodic basis. The monitoring programme 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.

### 5.3.1 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.

### 5.3.2 Wholesale Exposure Models

Wholesale exposures are assessed under the Foundation IRBA and include sovereign, bank, corporate and specialized lending exposures. 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. Factors relevant to country-specific macroeconomic risk, political risk, social risk and liquidity risk 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 DBS to actions such as realising security (if held)
- Technical default: Obligor is past due more than 90 days on any credit obligation to DBS

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" (MAS 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	

GRADE (ACRR)	DESCRIPTION OF RATING GRADE	CLASSIFICATION	EQUIVALENT EXTERNAL RATING	MAS CLASSIFICATION	
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	Performing Assets
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 MAS Notice 637).	Default	D	Sub-Standard and Below (Defaulting)	

### 5.3.3 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 MAS 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.

### 5.3.4 Securitisation Exposures

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

DBS 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 us. 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 DBS 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, we do not provide implicit support for any transactions we structure or in which we have invested.

We have processes in place to monitor the credit risk of our securitisation exposures.

- **Exposures to client asset-backed securitisations**

We invest in clients' securitisation transactions from time to time, and this may include securitisation transactions arranged by either us or other parties. We 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**

We continue 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, we have 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.



### 5.3.5 Credit Exposures Falling Outside of Internal Credit Risk Models

DBS 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 our overall governance framework and credit risk management practices. Under this framework, we continue to monitor the size and risk profile of these portfolios and will look to enhance risk measurement processes should these risk exposures become material.

We use external ratings for credit exposures under the SA, where relevant, and we only accept ratings from Standard & Poor's, Moody's and Fitch in such cases. We follow the process prescribed in MAS Notice 637 to map the ratings to the relevant risk weights.

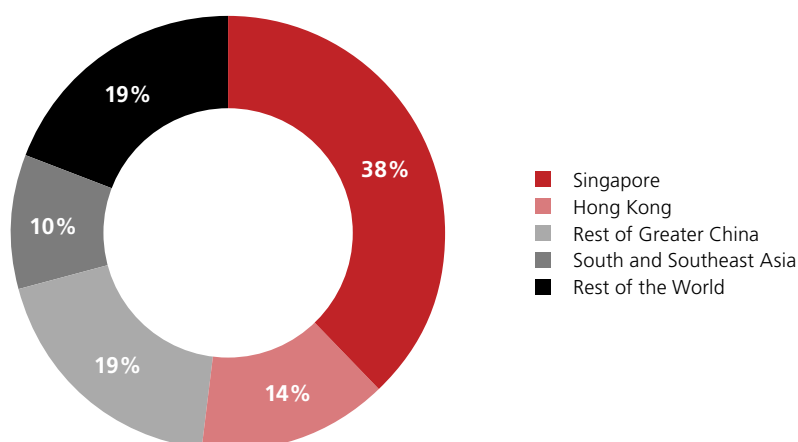
## 5.4 CREDIT RISK IN 2014

### Concentration Risk

Geographically, our exposure remains predominantly in our home market of Singapore accounting for 38% 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 19% of the overall portfolio by the end of 2014. We continue to look for opportunities to diversify out of the home market.

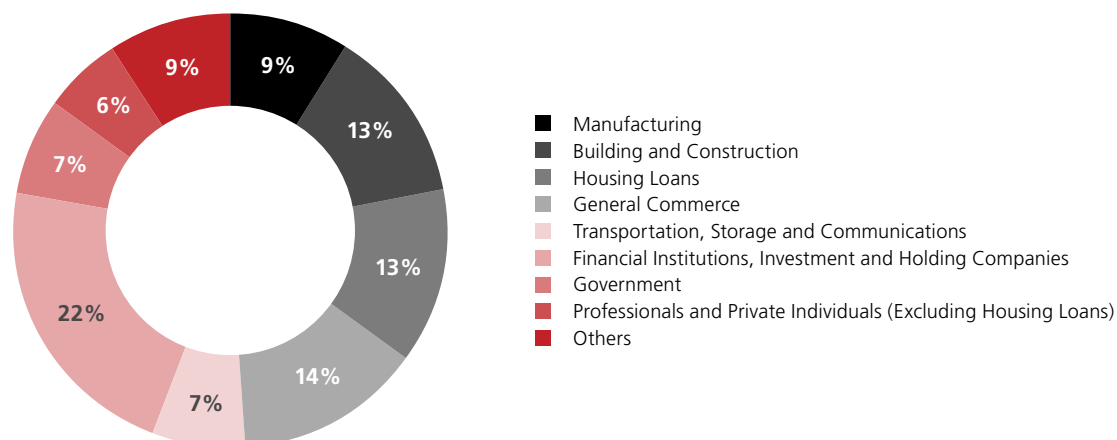
Our overall exposure is well distributed across various industries with General Commerce and Financial Institutions as the largest contributors in the wholesale portfolio.

### Geographical Concentration



\* Based on country of incorporation of customers

### Industry Concentration



\* Based on MAS Industry Code

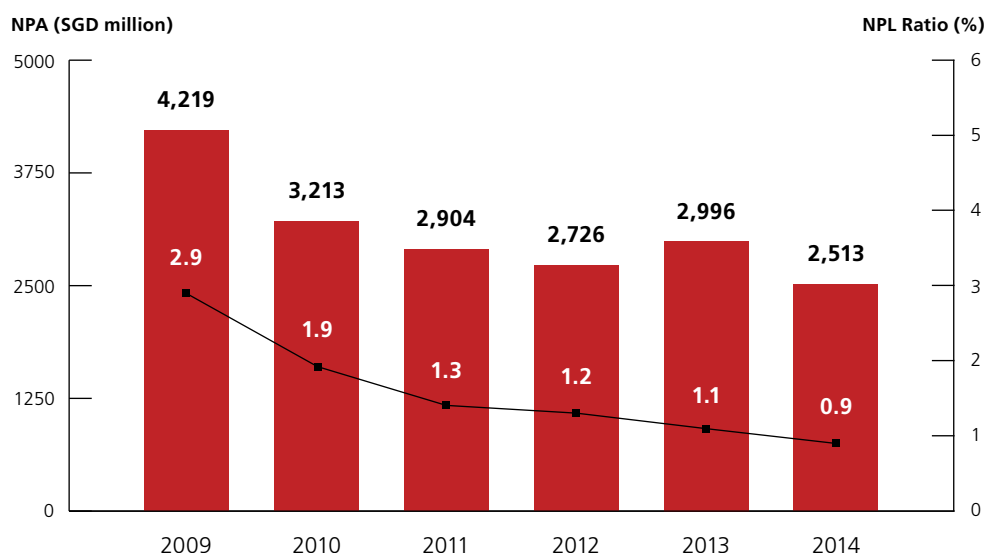
Please refer to Note 41.4 to the Financial Statements on page 174 for DBS' breakdown of concentration of credit risk.



### Non-Performing Assets

Our NPA, in absolute terms, have generally been on a declining trend since 2009, with exception of 2013 when customers of our India branch faced liquidity stress resulting in downgrades. During 2014, our portfolio in India continued to be impacted by adverse business environment. However, there was reduction in overall NPA due to asset sales, settlements and write offs during the year.

Since 2009, our NPL ratio had decreased consistently from 2.9% to 0.9% in 2014, aided initially by general improvement in the economic situation and by early identification as well as proactive management of problem accounts.



### Collateral Received

The tables below provide breakdowns by Loan-to-Value (LTV) bands for the borrowings secured by properties of the various market segments.

#### Residential Mortgages Loans

The LTV ratio is calculated using mortgage loans including undrawn commitments divided by the collateral value. Property valuations are determined by using a combination of professional appraisals and housing price indices.










The downward adjustments of property prices in Singapore have contributed to the increase in Singapore's exposures with LTV between 81% and 100%. Since February 2010, new loans are capped at LTV limits of up to 80%.

#### Percentage of Residential Mortgage Loans Breakdown by LTV Band

AS AT 31 DECEMBER 2014

LTV Band	Singapore	Hong Kong	Rest of Greater China
Up to 50%	24.3%	9.2%	3.2%
51% to 80%	54.2%	0.3%	3.4%
81% to 100%	4.6%	0%	0.8%

**AS AT 31 DECEMBER 2013**





















LTV Band	Singapore	Hong Kong	Rest of Greater China
Up to 50%	 27.1%	 10.5%	 3.8%
51% to 80%	 53.3%	 0.9%	 3.0%
81% to 100%	 0.9%	 0%	 0.4%

**Loans and Advances to Corporates Secured by Property**





















These loans are extended for the purpose of acquisition and/or development of real estate as well as for general working capital. More than 80% of our loans are fully collateralised, with the majority having LTV <80%.

The LTV ratio is calculated as loans and advances divided by the value of property, including tangible collaterals that secure the same facility. Tangible collaterals include cash, marketable securities and bank guarantees, vessels and aircrafts. Where collateral assets are shared by multiple loans and advances, the collateral value is pro-rated across the loans and advances protected by the collateral.

**Percentage of Loans and Advances to Corporates Secured by Property  
Breakdown by LTV Band****AS AT 31 DECEMBER 2014**

LTV Band	Singapore	Hong Kong	Rest of Greater China	South & Southeast Asia	Rest of the World
Up to 50%	 37.0%	 12.0%	 3.3%	 1.3%	 0.9%
51% to 80%	 21.1%	 1.8%	 1.2%	 1.3%	 0.7%
81% to 100%	 3.5%	 0.8%	 0.6%	 0.6%	 0.0%
Partially Collateralised	 4.7%	 4.8%	 1.6%	 2.8%	 0.0%

**AS AT 31 DECEMBER 2013**

LTV Band	Singapore	Hong Kong	Rest of Greater China	South & Southeast Asia	Rest of the World
Up to 50%	 35.1%	 12.4%	 3.3%	 1.2%	 0.8%
51% to 80%	 21.2%	 1.8%	 1.4%	 1.7%	 0.9%
81% to 100%	 4.5%	 0.6%	 0.3%	 0.8%	 0.0%
Partially Collateralised	 4.2%	 4.6%	 2.3%	 3.0%	 0.0%

### Loans and Advances to Banks

In line with market standards, Loans and Advances to Banks are typically unsecured. We manage the risk of such exposures by keeping a tight control on the exposure tenor, and the credit quality of the bank counterparties.

### Derivatives Counterparty Credit Risk by Markets and Settlement Methods

We continue to manage our derivatives counterparty risk exposures with netting and collateral arrangements to protect our balance sheet in the event of counterparty default.

A breakdown of our derivatives counterparty credit risk by markets (OTC vs exchange-traded) and settlement methods (cleared through a central counterparty vs settled bilaterally) can be found below.

### Notional OTC & Exchange Traded Products

IN NOTIONAL TERMS, SGD MILLION	AS AT 31 DEC 2014
OTC derivatives cleared through a central counterparty	222,011
OTC derivatives settled bilaterally	1,642,049
<b>Total OTC derivatives</b>	<b>1,864,060</b>
Exchange traded derivatives	13,097
<b>Total derivatives (only with external parties)</b>	<b>1,877,157</b>

Please refer to Note 37 to the Financial Statements on page 161 for a breakdown of the derivatives positions held by DBS.

## 6 MARKET RISK

Our 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 our 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 our strategic investments which are denominated in currencies other than the SGD.

### 6.1 Market Risk Management at DBS

DBS' framework for market risk management comprises the following building blocks:



#### POLICIES

The Market Risk Framework sets out DBS' overall approach towards market risk management. The Core Market Risk Policy (CMRP) establishes the base standards for market risk management within DBS. The Policy Implementation Guidance and Requirements (PIGR) complement the CMRP and set 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 DBS. The Market Risk Stress Test Framework sets out the overall approach, standards and controls governing market risk stress testing across the Group. The criteria for determining the positions to be included in the trading book are stipulated in the Trading Book Policy Statement.

**RISK METHODOLOGIES**

Value-at-Risk (VaR) is a method that computes the potential losses on risk positions as a result of movements in market rates and prices, over a specified time horizon and to a given level of confidence. Our VaR model is based on historical simulation with a one-day holding period and a 95% level of confidence. Tail VaR (TVaR), which is an average of the potential losses beyond the given 95% level of confidence, is used by DBS to monitor and limit market risk exposures. The market risk economic capital that is allocated by the BRMC is linked to TVaR by a multiplier. TVaR is supplemented by risk control metrics such as sensitivities to risk factors and loss triggers for management action.

We conduct backtesting to verify the predictiveness of the VaR model. Backtesting compares VaR calculated for positions at the close of each business day with the Profit and Loss (P&L) which actually arise on those positions on the following business day. The backtesting P&L exclude fees and commissions, and revenues from intra-day trading. For backtesting, VaR at the 99% level of confidence and over a one-day holding period is used. We adopt the standardised approach to compute market risk regulatory capital under MAS Notice 637 for the trading book positions. Given the above, VaR backtesting would not impact the regulatory capital for market risk.

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 our vulnerability to unexpected but plausible extreme market risk related events, we have 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.

**6.2 Market Risk in 2014**

DBS' TVaR considers the market risks of both the trading and banking books. Our TVaR is tabulated below, showing the period-end, average, high and low TVaR.

In SGD million	As at 31 Dec 2014	1 Jan 2014 to 31 Dec 2014		
		Average	High	Low
Total	68	85	124	49

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

DBS' major market risk driver is interest rate risk in the trading and banking books. The average TVaR for 2014 was higher than 2013 mainly due to more volatile rates scenarios for VaR calculation, changes of duration due to capital management, update of models for non-maturity deposits and increase in liquid assets.

TVaR is the key risk metric used to manage our assets and liabilities except for credit spread risk under Loans and Receivables where it is under the credit framework. We manage 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 risk and embedded optionality. Behavioural assumptions are applied in managing the interest rate risk of banking book deposits with indeterminate maturities. We measure interest rate risk in the banking book on a weekly basis.

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. We actively monitor our counterparty credit risk in credit derivative contracts. More than 90% of the gross notional value of our credit derivative positions as at 31 December 2014 is to 17 large, established names with which we maintain collateral agreements.

**PROCESSES, SYSTEMS AND REPORTS**

Robust internal control processes and systems are designed and implemented to support our 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.

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

In SGD million	As at 31 Dec 2014	1 Jan 2014 to 31 Dec 2014		
		Average	High	Low
Diversified	16	12	19	8
Interest Rates	9	10	17	7
Foreign Exchange	5	5	8	2
Equity	2	1	3	1
Credit Spread	14	6	14	4
Commodity	#	1	2	#

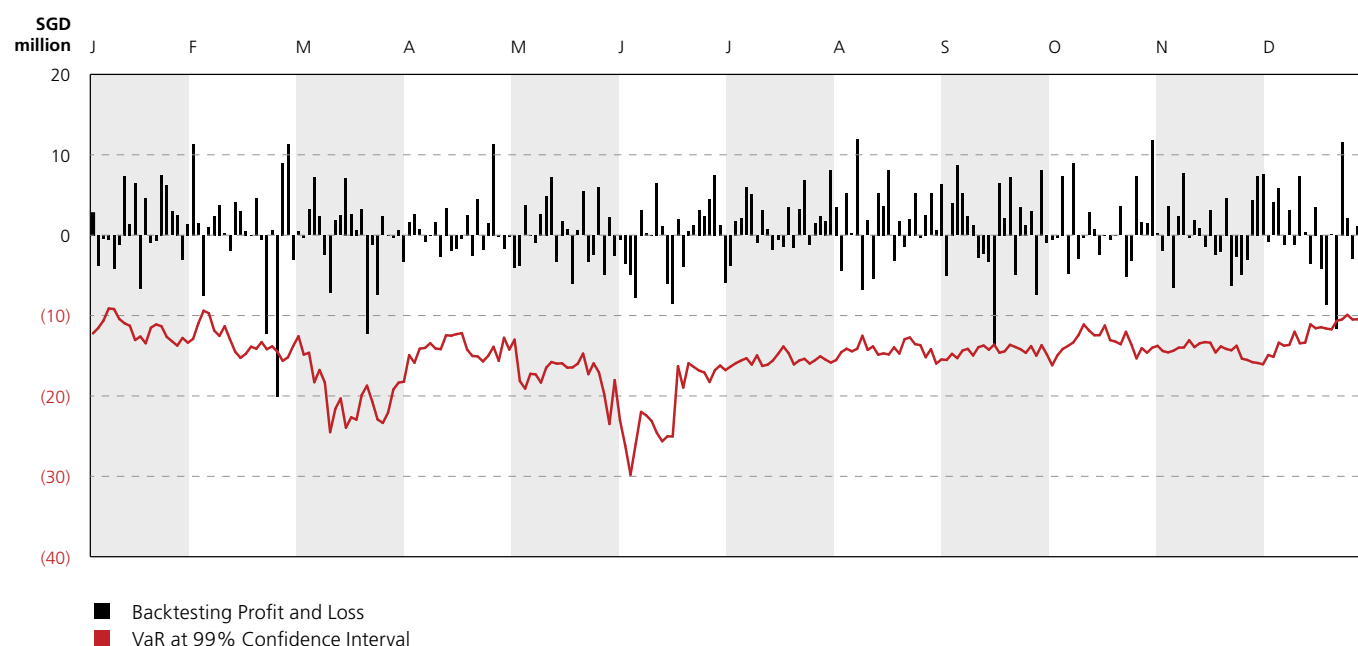
# Amount under SGD 500,000

In SGD million	As at 31 Dec 2013	1 Jan 2013 to 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	#
Credit Spread	4	4	5	3
Commodity	1	1	1	#

# Amount under SGD 500,000

In DBS, the main risk factors driving Treasury's trading portfolios in 2014 were interest rates, credit spreads and foreign exchange. Treasury's trading portfolios' average TVaR increased by SGD 2 million (20%) and this was driven partly by the recalibration of our own funding spread curve in February 2014.

Treasury's trading portfolio experienced three back-testing exceptions in 2014 compared with five in 2013. The exceptions occurred in February, September and December. Pronounced volatilities in foreign exchange and interest rate led to the exceptions in February and the second half of 2014 respectively.



The key market risk drivers of our 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 economic value changes are negative SGD 275 million and SGD 489 million (2013: negative SGD 288 million and SGD 532 million) based on parallel shifts to all yield curves of 100 basis points and 200 basis points respectively. The reported figures are based on the worse of an upward or downward parallel shift in the yield curves.

## 7 LIQUIDITY RISK

DBS' liquidity risk arises from its obligations to honour withdrawals of deposits, repayments of borrowed funds at maturity, and commitments to its customers to extend loans.

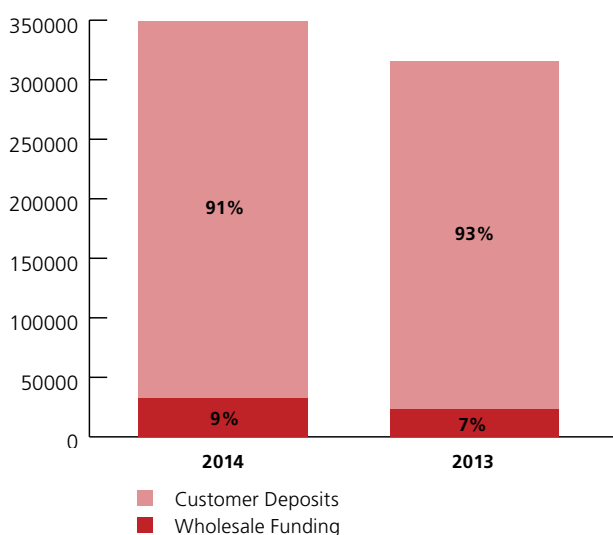
We seek to manage our liquidity in a manner that ensures that our liquidity obligations would continue to be honoured under normal as well as adverse circumstances.

### 7.1 Liquidity Risk Management at DBS

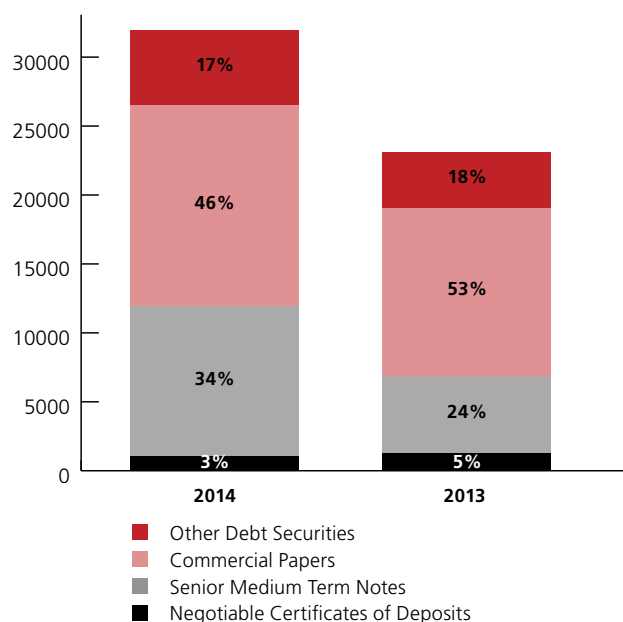
#### Liquidity Management and Funding Strategy

DBS strives to develop a diversified funding base with access to funding sources across retail and wholesale channels. The Group's funding strategy is anchored on strengthening our core deposit franchise, which constituted 91% of total funding sources as at 31 December 2014. Strong and sustainable growth of our customer deposit base in retail, wealth management, corporate and institutional segments across the markets that we operate in, is key to extending our long-term funding advantage.

**Funding Sources (SGD million)**

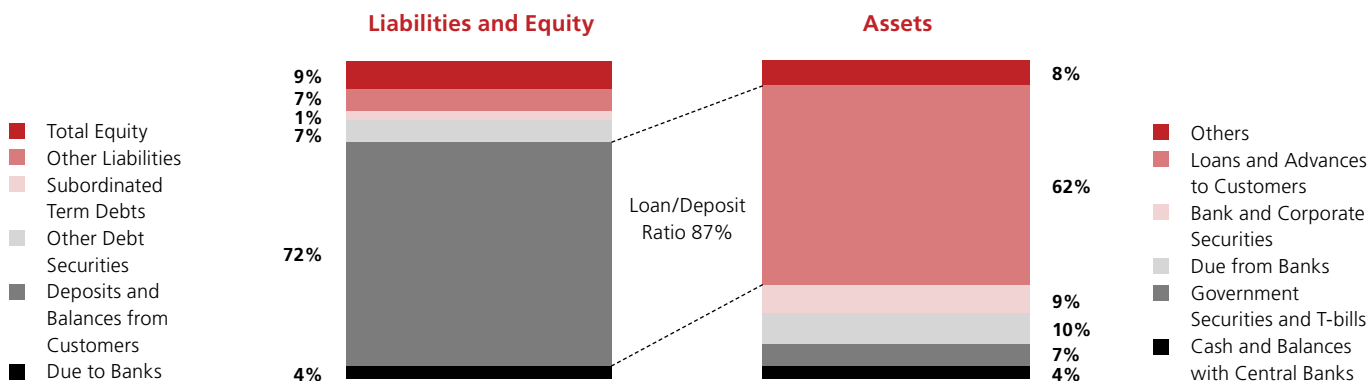


**Wholesale Funding Breakdown (SGD million)**



To complement core deposits, DBS has also focused on broadening our access to wholesale funding. This has been achieved by actively engaging and growing a diversified global base of high quality investors. Issuance of medium term notes, commercial papers, negotiable certificate of deposits and other debt securities as a secondary source of funding, enables greater flexibility and efficiency in liquidity management. 2014 saw growth in wholesale funding and a rebalancing of the wholesale funding mix from shorter-term commercial papers to medium term notes.

The diagrams below show our asset funding structure as at 31 December 2014.



Please refer to Note 30 to the Financial Statements on page 152 for more details of our wholesale funding sources and Note 42.1 on page 175 for the contractual maturity profile of our assets and liabilities.

With increasing diversification of funding sources, optimising the mismatch in fund deployment against sources with respect to pricing, size, currency and tenor remains challenging. To this end, where practicable and transferable without loss in value, DBS actively makes use of the swap markets in the conversion of funds across currencies to deploy surplus funds across locations. As the swaps are typically shorter in contractual maturity than the deployment in loans, we are exposed to potential cashflow mismatches arising from the risk that counterparties may not roll over maturing swaps with us to support the continual funding of loans. This risk is mitigated by the setting of triggers on the amount of swaps transacted with the market and conservative assumptions on the cashflow treatment of swaps under the behavioural profiling of DBS' cashflow maturity gap analysis (see Section 7.2 on page 110).

Overseas entities are encouraged but not required to centralise majority of their borrowing and deployment of funds with Head

Office, taking into account the relevant regulatory restrictions while maintaining a commensurate level of presence and participation in the local funding markets. These intra-group funding transactions are priced on an arm's length basis with reference to prevailing market rates and parameters set within the Group Funds Transfer Pricing policy.

During DBS' annual budget and planning process, each overseas location conducts an in-depth review on their projected loan and deposit growth as well as their net funding and liquidity profile for the next year. The consolidated Group funding and liquidity profiles are reviewed and revised as necessary by senior management. Each overseas location is required to provide justification if Head Office funding support is required.

The Group Assets and Liabilities Committee and respective Location Assets and Liabilities Committee regularly review balance sheet composition, growth in loans and deposits, utilisation of wholesale funding, momentum in business activities, market competition, economic outlook, market conditions and other factors that may affect liquidity in the continual refinement of DBS' funding strategy.

## Approach to Liquidity Risk Management

DBS' framework for liquidity risk management comprises the following building blocks:

### POLICIES

#### POLICIES

The Liquidity Risk Framework sets out our overall approach towards liquidity risk management. The Framework describes the range of strategies employed by DBS 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, DBS has in place a set of liquidity contingency and recovery plans to ensure that decisive actions are taken to ensure DBS maintains adequate liquidity.

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

### RISK METHODOLOGIES

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 on a group-wide basis. 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 name-specific in nature to assess vulnerability when run-offs in liabilities increase, rollovers of assets and/or liquidity assets buffers reduce. In addition, ad-hoc stress tests are performed as part of our recovery planning and ICAAP exercises.

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 locations.

## PROCESSES, SYSTEMS AND REPORTS

Robust internal control processes and systems underlie the overall approach to identifying, measuring, aggregating, controlling and monitoring liquidity risk across DBS. In 2014, we completed the development of an in-house integrated data platform that serves to aggregate relevant source data in a complete and accurate manner that facilitates timely and granular reporting of liquidity risk for internal and regulatory purposes.

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.

### 7.2 Liquidity Risk in 2014

For the purpose of risk management, we actively monitor and manage DBS' 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 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 175.

The table below shows DBS' behavioural net and cumulative maturity mismatch between assets and liabilities over a 1-year period under a normal scenario without incorporating growth projections. DBS' liquidity is observed to remain adequate under the maturity mismatch analysis, amidst sustained growth in loans supported largely by stable sources of funds from deposits gathering and the issuance of medium term notes and commercial papers.

In SGD million <sup>(a)</sup>	Less than 7 days	1 week to 1 month	1 to 3 months	3 to 6 months	6 months to 1 year
<b>As at 31 Dec 2014</b>					
<b>Net liquidity mismatch</b>	21,364	(6,553)	7,767	8,404	10,803
<b>Cumulative mismatch</b>	21,364	14,811	22,578	30,982	41,785
<b>As at 31 Dec 2013<sup>(b)</sup></b>					
<b>Net liquidity mismatch</b>	18,638	(2,642)	7,052	10,539	11,800
<b>Cumulative mismatch</b>	18,638	15,996	23,048	33,587	45,387

(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

### 7.3 Liquid Assets

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, among 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 DBS should be able to operationally monetise the pool of liquid assets to meet liquidity shortfalls under times of stress. A further requirement is that these liquid assets are unencumbered by being free of legal, regulatory, contractual or other restrictions.

In practice, liquid assets are maintained in key locations and currencies 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 DBS' liquid assets is centrally maintained in Singapore to support liquidity needs in smaller overseas subsidiaries and branches. Internally, DBS sets 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 DBS' 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 amount as at the balance sheet date.

In SGD million	Encumbered	Unencumbered	Liquid Assets	Average <sup>(c)</sup>	Others <sup>(d)</sup>	Total
			Total [1]		[2]	[1] + [2]
As at 31 Dec 2014						
Cash and balances with central banks <sup>(a)</sup>	7,666	7,347	15,013	13,633	4,504	19,517
Due from banks <sup>(b)</sup>	-	12,563	12,563	11,478	29,700	42,263
Government securities and treasury bills	2,093	27,331	29,424	31,032	270	29,694
Banks and corporate securities	623	23,300	23,923	22,405	13,840	37,763
Total	10,382	70,541	80,923	78,548	48,314	129,237

(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) Total liquid assets reflected on an average basis over the four quarters in 2014

(d) 'Others' refer to assets that are not recognised as part of the available pool of liquid assets for liquidity management under stress due to (but not limited to) inadequate or non-rated credit quality, operational challenges in monetisation (for example, holdings in physical scrips), among other considerations

In addition to the above table, collateral received in reverse repo transactions amounting to SGD 4,001 million are recognised for liquidity management under stress.

As can be observed from the table, DBS' funding strategy in the normal course of its business does not rely on collateralised 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 our internal measures.

## 7.4 Regulatory Requirements

On 28 November 2014, the MAS published MAS' Notice to Banks No. 649 "Minimum Liquid Assets (MLA) and Liquidity Coverage Ratio (LCR)" (MAS Notice 649), which sets out the implementation of the Basel III LCR in Singapore. DBS, as a bank incorporated and headquartered in Singapore, is required to comply with the LCR standards under MAS Notice 649 from 1 January 2015. We are well above the minimum LCR requirements under MAS Notice 649.

Based on our internal assessment and participation in the Quantitative Impact Studies by the Basel Committee on Banking Supervision, DBS is well-positioned to meet the minimum standards of the Basel III Net Stable Funding Ratio (NSFR). The international timeline targeted for implementation is January 2018.

## 8 OPERATIONAL RISK

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

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

### 8.1 Operational Risk Management at DBS

DBS' framework for operational risk management comprises the following building blocks:

#### POLICIES

#### RISK METHODOLOGIES

#### PROCESSES, SYSTEMS AND REPORTS

#### POLICIES

To govern operational risk management practices in a consistent manner, the Group Operational Risk Management Framework includes a set of Core Operational Risk Standards which provides guidance on the baseline controls to ensure a controlled and sound operating environment. There are also corporate operational risk policies which are owned by the respective corporate oversight

functions and include key subject-specific policies such as Technology Risk Management Framework, Group Compliance Policy, Fraud Management Policy and Group Anti-Money Laundering, Countering the Financing of Terrorism and Sanctions Policy, New Product Approval Policy and Outsourcing Risk Policy.

## RISK METHODOLOGIES

DBS adopts the standardised approach to compute operational risk regulatory capital. To manage and control operational risk, there are various tools including risk and control self-assessment, operational risk event management and key risk indicators monitoring. Risk and 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 for developing action plans and tracking 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 DBS' 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.

Additional methodologies are in place to address subject-specific risks, including but not limited to the following:

### Technology Risk

Information Technology (IT) risk is managed in accordance with 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 programmes. DBS has also established policies and standards to manage and address cyber security risk.

### Compliance Risk

Compliance risk is the risk of impairment to our ability to successfully conduct our business as a result of any failure to comply with law, regulatory requirement, industry code or standard of professional conduct applicable to the conduct of business in the financial sector. This includes, in particular, laws and regulations applicable to the licensing and conduct of banking or other financial businesses, financial crime such as anti-money laundering and countering the financing of terrorism, fraud and bribery/corruption.

We maintain a compliance programme designed to identify, assess and mitigate such risks through a combination of policy, and relevant systems and controls, coupled with the provision of relevant training and the execution of assurance processes. We also strongly believe in the need to promote a strong compliance culture. This is established through the leadership of our Board and senior management and aims to comply with the letter and spirit of the laws and regulatory standards in the environment in which we operate.

### Fraud Risk

We have established minimum standards for our business and support units to prevent, detect, investigate and remediate against fraud and related events. This includes 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 within DBS.

## Money Laundering, Financing of Terrorism and Sanctions Risks

There are minimum standards for our business and support units to mitigate and manage our actual and/or potential exposure to money laundering, terrorist financing, sanctions, corruption, or other illicit financial activity. Accountabilities have also been established for the protection of the assets and reputation of DBS and the interests of customers and shareholders.

### New Product and Outsourcing Risks

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.

### Mitigation Programmes

Business Continuity Management plays an integral role in DBS' risk mitigation programme to manage business disruptions. A robust crisis management and business continuity management programme is in place within essential business services during unforeseen events. Planning for business resilience includes identification of key business processes via Business Impact Analysis as well as the documentation and maintenance of Business Continuity Plan (BCP). Overall BCP objectives are aimed at minimising the impact of business interruption arising from severe loss scenarios and to provide a reasonable level of service until normal business operations are resumed. The Crisis Management structure encompasses the incident management process from the point of incident to crisis declaration and activation of the relevant committees or teams to manage the crisis. Exercises are conducted annually to test the BCPs and crisis management protocol simulating varying scenarios. Scenarios include incidents such as 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, DBS purchases group-wide insurance policies, under the Global Insurance Programme, from third-party insurers. These policies cover fraud and civil liability, property damage, general liability and directors' and officers' liability.

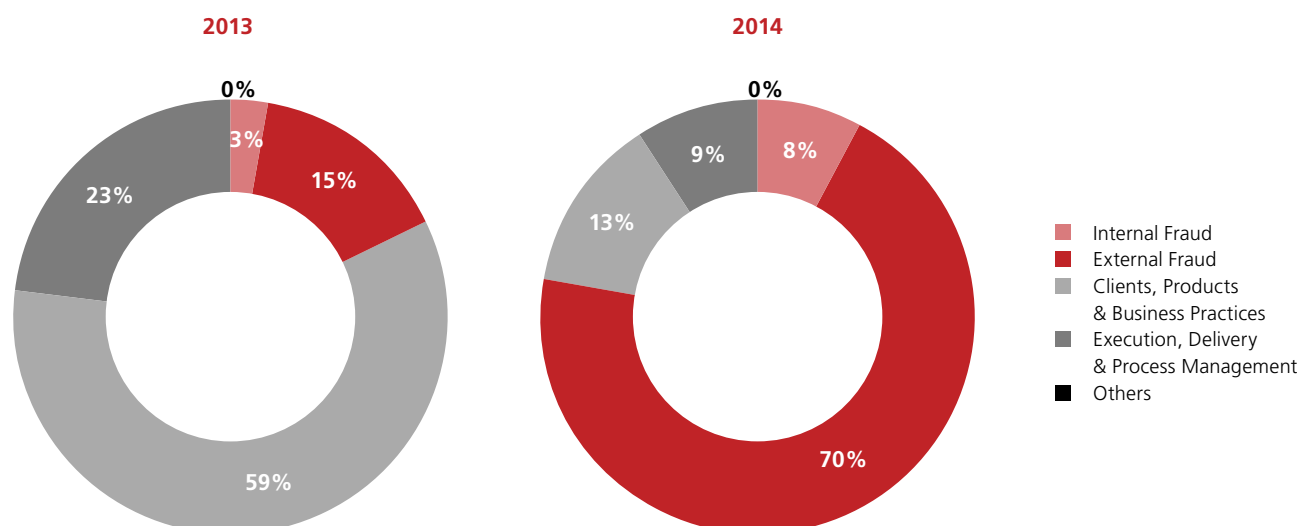
## PROCESSES, SYSTEMS AND REPORTS

Robust internal control process and system are integral to identifying, monitoring, managing and reporting operational risk. DBS has implemented a web-based system that supports multiple operational risk management processes and tools including operational risk event reporting, risk and 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 various frameworks and policies. RMG Operational Risk and other corporate oversight functions provide oversight and monitor the effectiveness of operational risk management, assess key operational risk issues with the units to determine the impact across DBS, report and/or escalate key operational risks to relevant senior management and Board-level committees with recommendations on appropriate risk mitigation strategies.

## 8.2 Operational Risk in 2014

The total value of operational risk losses in 2014 was 0.13% of the DBS' total operating income, compared to 0.20% in 2013. The loss profile (net loss greater than SGD 10,000 and based on the date of detection of the operational risk event), was mainly categorised into the following four Basel risk event categories: (i) internal fraud; (ii) external fraud; (iii) clients, products and business practices and (iv) execution, delivery and process management.



Note: Others include: (v) employment practices and workplace safety; (vi) damage to physical assets and (vii) business disruption, system failure

Save for an isolated incident, external fraud losses comprised mainly credit card fraud, in particular, Card Not Present (CNP) fraud which accounted for approximately 70% of the losses in this category. This is in line with industry trend that CNP fraud is the fastest growing area due to the meteoric growth of e-commerce in the Asia-Pacific region. CNP fraud losses are generally recoverable subject to card association rules. We have continued to increase our vigilance and implemented mitigating measures such as adjustment of fraud parameters, random generation of card numbers and review of the setting of alert thresholds for sending short messaging system (SMS).

In addition, reduction in losses was also noted for execution, delivery and process management due to continuing efforts to manage and mitigate operational risk including automating manual processes, enhancing risk and control training and established internal deals governance and control framework/controls. We also embarked on a transition from control self assessment to risk and control self assessment to help the units better identify and manage operational risk.

## 9 REPUTATIONAL RISK

We view reputational risk as a typical outcome of any failure to manage the risks in our day-to-day activities/decisions as well as from changes in the operating environment. These risks include:

- Financial risk (credit, market and liquidity risks), and
- Inherent risk (operational and business/ strategic risks)

## 9.1 Reputational Risk Management at DBS

DBS' framework for reputational risk management comprises the following building blocks:



### POLICIES

We adopt a four-step approach i.e. prevent, detect, escalate and respond to reputational risk events. As reputational risk is a consequence from the failure to manage other risk types, the definitions and framework for managing such risks are articulated in the respective risk frameworks and policies. These are reinforced by sound corporate values that embed ethical behaviours and practices throughout DBS.

Policies are in place to protect consistency of the DBS brand and to assist in safeguarding our corporate identity and reputation.

### RISK METHODOLOGIES

Under the various risk frameworks/ policies, DBS has established a number of mechanisms for ongoing risk monitoring for the various risk types. These take the form of risk limits, key risk indicators and other operating metrics, as well as the periodic risk and control self-assessment process. Apart from observations derived from internal sources, alerts from external parties/stakeholders also serve as an important source for detection of potential risk reputational risk events. In addition, there are policies relating to media

communications, social media and corporate social responsibility to protect DBS' reputation. There are also escalation and response mechanisms in place for managing reputational risk.

While the respective risk frameworks address the individual risk types, the Reputational Risk Policy focuses specifically on stakeholders' perception of how well DBS manages its reputational risks. Stakeholders include customers, government agencies and regulators, investors, rating agencies, business alliances, vendors, trade unions, media the general public, Board & senior management and employees. DBS recognises that creating a sense of shared value through engagement with key stakeholder groups is imperative for its brand and reputation.

### PROCESSES, SYSTEMS AND REPORTS

Units are responsible for the day-to-day management of reputational risk by ensuring that processes and procedures are in place to identify, assess and respond to reputational risk. Events of reputational risk impact are also featured in the reporting of risk profiles to senior management and Board-level committees.

## 9.2 Reputational Risk in 2014

DBS' priority is to prevent the occurrence of a reputational risk event rather than to take mitigating actions when it materialises. There were no significant reputational risk incidents which could endanger the DBS franchise in 2014.

## 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 87
2	Define the bank's risk terminology and risk measures and present key parameter values used.	Sections 2, 5.1, 6.1, 7.1, 8.1
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 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.	Section 7.4 Refer to Capital Management and Planning Section
<b>Risk Governance and Risk Management Strategies/Business Model</b>		
5	Summarise prominently the bank's risk management organisation, processes and key functions.	Section 3
6	Provide a description of the bank's risk culture, and how procedures and strategies are applied to support the culture.	Section 4
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 4
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 4.2, 5.1, 6.1, 7.1
<b>Capital Adequacy and Risk-Weighted Assets</b>		
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 Capital Management and Planning section and 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 Capital Management and Planning 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.	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.	Section 1

GENERAL RECOMMENDATIONS	WHERE HAVE WE DISCLOSED THIS? (IN RISK SECTION UNLESS OTHERWISE STATED)
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.	Section 6.1, 6.2
<b>Liquidity</b>	
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 7.1, 7.3
<b>Funding</b>	
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 7.3
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 7.2 Financial Statements Note 42.1
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 7.1
<b>Market Risk</b>	
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 6.1

GENERAL RECOMMENDATIONS		WHERE HAVE WE DISCLOSED THIS? (IN RISK SECTION UNLESS OTHERWISE STATED)
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 6.1, 6.2
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 6.1, 6.2
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 6.1, 6.2
<b>Credit Risk</b>		
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 5.1
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 5.1, 5.4 Financial Statements Note 41.2
29	Provide a quantitative and qualitative analysis of the bank's counterparty credit risk that arises from its derivatives transactions.	Section 5.1, 5.4
30	Provide qualitative information on credit risk mitigation, including collateral held for all sources of credit risk and quantitative information where meaningful.	Section 5.2, 5.4
<b>Other Risks</b>		
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, 8.1, 9
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.	Section 8.2