Risk Management

RISK EXPOSURE AND RISK MANAGEMENT PRACTICE

The main aim of OCBC Group's risk management practice is to protect the Group against extraordinary or exceptional losses that could arise from taking risks beyond its risk appetite. The Group's philosophy on risk management is that all risks must be properly understood, monitored, controlled and managed. In addition, risk management processes must be closely aligned to the Group's business strategy, to enable the Group to maximise its risk-adjusted return on capital.

The Group's primary business activity is commercial banking, which is essentially a customer-driven activity where the substantial risk is the credit risks of its corporate, institutional and retail customers. To a lesser extent, commercial banking activities also expose the Group to market risk arising from re-pricing, maturity and currency mismatches of assets and liabilities. These mismatches give rise to interest rate, liquidity and foreign exchange risks.

Compared to the commercial banking businesses, the current extent of treasury and investment banking activities, which include sales and trading in money market, foreign exchange and other treasury products and the underwriting of equities and debt instruments, is relatively less significant. However, these activities also expose the Group to credit risks and market risks, including interest rate, currency and equity risks.

In the course of conducting its businesses, the Group handles a large number of financial transactions. It is inherently exposed to operational risks arising from failure of internal processes and systems, deficiencies in people and management, or operational failure arising from external events. The provision of financial advisory services to customers for wealth management products, including the sale of unit trusts and life insurance, also exposes the Group to operational and fiduciary risks arising from the failure to meet the general standards expected of such financial advisory activities.

RISK ORGANISATION

OCBC Group believes that risk management is most effective when it is a shared responsibility between risk takers and risk controllers, with the Board of Directors providing general oversight. The risk organisation is structured such that there is segregation of duties and reporting lines between risk-taking and risk-controlling units. These principles are applied across the major risk areas, including credit, market and operational risks. Accordingly, the Group Risk Management Head has a dual reporting line, one to the Chief Executive Officer ("CEO") and one to the Executive Committee which represents the Board in overseeing risk management.

The Group has, in recent years, been building its resources and capabilities in risk management so as to keep pace with business developments. As banking products invariably contain a varying mix of risks from different risk categories, the management of risk must be looked at holistically. The establishment of the Group Risk Management Division in 2000 recognises the need for an integrated risk management framework and capability.

The Group Risk Management Division is tasked with the primary responsibility of managing credit, market and operational risks. The Division is staffed with officers dedicated to risk policy setting, risk measurement methodology and model development, and the measurement and monitoring of the OCBC Group's risk profiles and concentrations. In the case of credit risk, dedicated officers are also involved in transaction approval and remedial loan management. Besides the Group Risk Management Division, other functions in the Bank that support the risk management framework include Legal and Compliance, Internal Audit, Operations, Finance and the respective business units where risk is taken or generated.

CREDIT RISK MANAGEMENT

The Credit Risk Management Committee ("CRMC") is the principal senior management committee that supports the CEO and the Board in general credit risk management oversight. The CRMC reviews and recommends credit risk policies for the approval of the CEO or the Board. It is also responsible for ensuring that sound credit risk methodologies and effective credit risk management processes are established.

The CRMC includes representatives from major business units, where credit risk is generated, as well as independent credit risk controlling units. This joint effort in setting risk policy seeks to ensure understanding of and commitment to the credit risk management process. The CRMC is supported by the Credit Risk Management ("CRM") departments within Group Risk Management Division. Dedicated CRM units perform the roles of developing risk policies, guidelines and procedures and putting in place the monitoring, reporting and control systems.

Credit Approval Process

The foundation of the credit approval structure is a designation process that delegates lending authority to individual credit signers according to their own credit skills, knowledge, experience, training and track record.

Credit extensions to corporate and institutional customers are generally required to meet pre-defined target markets and risk acceptance criteria. Individual credit signers from the business units make underwriting decisions jointly with those from the credit risk management units. This "co-grantor" approval approach is designed to ensure objectivity and appropriate check and balance.

In the business of lending to mass markets, principally in the consumer and small business sectors where transactions are numerous and of smaller amounts, loans are underwritten under pre-approved credit programmes by Credit Underwriters who report to the Group Risk Management Division. These programmes focus on credit extensions to individual customers with similar characteristics and/or product needs.

A New Product Approval Committee (NPAC) has been formed in 2003 to review and approve all new products including credit programmes. The NPAC consists of senior representatives from the Bank's business, support and risk management units. The representation of key stakeholders in the membership of the NPAC is to ensure objectivity and independence in, and to inject functional expertise into, the decision-making process. The NPAC is also reviewing existing programmes on a regular basis.

Credit Risk Review

Credit risk review was established in 2003 to strengthen the risk oriented credit culture in OCBC. The Credit Risk Review manual was approved by the Audit Committee of the Board of Directors in March 2003, and the first credit risk review took place in April. As of December, 21 business units in Singapore, Malaysia and International have undergone credit risk reviews.

Concurrent with the implementation of Credit Risk Review, a training programme was established for staff in business units to improve their understanding of the credit risk process and to prepare them for credit risk process reviews. The workshops covered areas such as SME lending, early warning recognition and remedial management and were generally structured around case studies demonstrating the various elements of the credit risk process. As of December, a total of 526 bank officers with credit-related jobs have attended the course.

Credit Portfolio Management

The Group is continuing to develop credit risk grading models to enable it to better differentiate risks in the various segments of its credit portfolio for better decision making and monitoring of risks. Efforts are ongoing to validate these models. The Group is also continuing to develop a centralised credit risk database to store key credit risk data for the Group to more efficiently monitor its credit portfolios.

Country Risk

A country risk framework is in place, covering the assessment and rating of countries, country review frequency, as well as the maximum cross-border transfer risk limit that can be granted to any one country based on its risk rating. Cross-border transfer risk covers all cross border transactions including onshore non-local currency transactions. Limits are allocated into maturity time-bands and vary according to the risk rating of the country concerned and the political and economic outlook.

Credit Concentration

The Group seeks to spread its risk exposure amongst the growing economic sectors of the major markets in which it operates. Limits are set on specific customer or industry segments in order to avoid over-concentration of credit risks. Prudent limits have also been placed on exposures to single customer groups.

Special Asset Management Unit

The Special Asset Management unit continues to manage all NPLs due from Business Banking customers within the Group, with a purview that extends to OCBC Malaysia and overseas branches. These NPLs are managed either directly by active account management, or where warranted (e.g. overseas branches), through the oversight and supervision of the relevant business units' management. The Special Asset Management unit is target driven, with the expressed objective of efficient NPL reduction and maximising loan recovery. The unit maintains its focus through a systematic loan management process that formulates work plans to achieve timely NPL resolution and its senior management team is actively involved in all stages of the process to ensure that the agreed plans for NPL resolution are achieved within agreed timeframes.

The results for the year show an overall reduction of Group NPLs of S$522 million and a resulting NPL ratio of 6.9%.

Loan Classification and Provisioning Policies

Loan classification

The Group classifies its loans in accordance with MAS Notice 612 and internal loan classification policies. Performing loans are categorised as 'Passed' or 'Special Mention', while non-performing loans are categorised as 'Substandard', 'Doubtful' or 'Loss', based on the following guidelines:

- Passed – Interest and principal payments are fully up-to-date, and orderly repayment and/or timely settlement in the future is without doubt.
- Special Mention – Currently protected but potentially weak. Borrower exhibits some deteriorating trends which, if not addressed or corrected, could jeopardise the timely repayment of interest and principal.
- Substandard – Timely repayment and/or settlement is at risk. Well-defined weakness is evident.
- Doubtful – Full repayment and/or settlement is improbable.
- Loss – The outstanding debt is regarded as uncollectable.

Restructured loans

A restructured loan refers to one where the original contractual terms and conditions have been modified upon mutual agreement between the Bank and the borrower. Where a loan is restructured because a borrower is facing severe financial difficulties and where it is probable that the account will have to be downgraded to non-performing status without the restructuring, the restructured loan will be classified as NPL. Once classified as an NPL, a restructured loan can only be upgraded after a reasonable period (typically six months) of sustained performance under the restructured terms.

Provisioning policies

The provision for estimated losses in the loan book comprises a specific provision against each NPL and a general provision that cannot be specifically applied and reflects the potential risk embodied in the loan portfolio. A minimum 1% general provision is made on the total amount of loans less total outstanding provisions, except for loans to the five regional countries, for which general provisions are made in accordance with MAS guidelines.

The specific provision against each NPL is based on the individual circumstances of each account after considering:

(a) the underlying business and financial viability of the borrower;
(b) the cash flow sources of the borrower;
(c) the quality and realisable value of the collateral and guarantee supporting the loan; and
(d) the existence of a valid and enforceable legal right of recourse against the borrower.

The specific provision against each NPL must comply with the following minimum amounts as prescribed by the MAS:

Substandard – 10% (on unsecured portion)
Doubtful – 50% (on unsecured portion)
Loss – 100% (on loan outstanding)

Where appropriate, the Group also makes additional specific provisions in excess of the MAS minimum requirements, taking into account the circumstances of each borrower, the collateral values and other relevant considerations.

Write-offs

Write-offs of debts are made when recovery action has been instituted and the loss can be reasonably determined. For unsecured consumer loan programmes, the general policy is to write-off overdue debts after 180 days after the first default.

Ceasing of interest accrual on loans

Interest accrual effectively ceases when a loan is classified "Substandard", "Doubtful" or "Loss", except for overdrafts where interest continues to accrue even after classification.

Collateral held against NPLs

The major type of collateral backing for the Group's NPLs is real estate in Singapore. The realisable value of the real estate collateral is used to determine the adequacy of the collateral coverage. Proceeds from the sale of collateral pledged for a particular loan cannot be applied to other classified loans unless the accounts are related and cross collateralisation of the facilities is provided for contractually.

Property Exposure

The Bank is in compliance with Section 35 of the Banking Act, which limits its exposure to real estate in Singapore to not more than 35% of its total eligible loan assets.

Information on credit exposures by geographical area, business line and industrial classification, and the breakdown of investment and dealing securities by issuer type, are disclosed in Notes 24, 26, 30, 37 and 39 of the Financial Statements and in the Management Discussion and Analysis chapter.

MARKET RISK MANAGEMENT

Market risk is defined as the uncertainty in the future values of the Group's on and off balance sheet financial items, resulting from movements in factors such as interest rates, equity prices, and foreign exchange rates.

The Market Risk Management Committee (MRMC) is the principal senior management group that supports the Board and Chief Executive Officer in managing market risk. The MRMC includes senior managers from both the business and support units, and is responsible for developing market risk principles and policies and reviewing and strengthening the control and monitoring processes relating to market risk.

The Asset Liability Management Committee (ALCO) is the senior management forum that is responsible for overseeing the Group's liquidity and balance sheet risks. The ALCO comprises the Chief Executive Officer, the Chief Financial Officer and other senior representatives from both the business and support units.

The Market Risk Management Department ("MRMD") within the Group Risk Management Division supports both the MRMC and ALCO. MRMD is responsible for developing policies and procedures as well as putting in place the monitoring, reporting and control systems for market risk as well as asset liability management.

Market Risk Management Methodologies

The key elements in the market risk management framework are principles and policies, risk limits and risk measures.

Principles and Policies – The Board and the Chief Executive Officer approve the market risk principles and policies. The principles provide guidance on the oversight and management of the Group's market risk, while the policies facilitate a common understanding of market risk definition and adoption of common methodologies across the Group. Controls are in place to ensure that all business activities conform to the Group's risk management principles and policies.

Risk Limits – On a daily basis, all trading risk positions are monitored against the authorised limits by support units independent of the businesses. Under the market risk corporate governance framework, limits are approved at various business activity levels, with defined exception escalation procedures. All exceptions are to be promptly reported to the relevant senior management for ratification. Only authorised activities may be undertaken.

Risk Measures – The Value-at-Risk (VaR) methodology is the primary measure for the Group's trading activities. The overall trading risk is determined by aggregating the VaR measures for the interest rate risk, foreign exchange risk and equity risk arising from the trading activities. With effect from 2003, the Group has adopted the historical simulation approach, applied against a 10-day holding period at a 99% confidence level. Potential losses are expected to be within the VaR estimate 99% of the time. The Group prefers historical simulation as it involves fewer assumptions on the distribution of trading losses than the parametric approach.

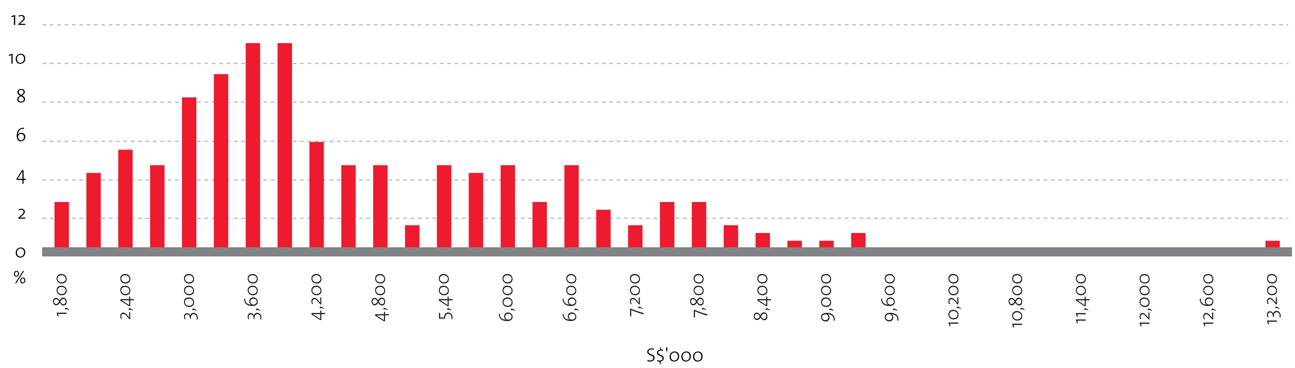
The following provides a summary of the Group's VaR profile, broken down in the key risk classes, in 2002 and 2003.

Value at Risk Profile

(S$'000)	2002			**2003**		
Risk Classes	Max	Ave	Min	**Max**	**Ave**	**Min**
Foreign Exchange	5,212	1,774	446	**15,806**	**4,606**	**0**
Interest Rates	12,410	7,089	2,458	**27,916**	**11,437**	**2,882**
Equity	5,172	1,689	1,029	**5,537**	**689**	**25**
Diversification Effect	(6,074)	(2,852)	(1,733)	**(17,342)**	**(6,557)**	**(1,419)**
Aggregate	13,268	7,700	4,144	**27,221**	**11,459**	**3,573**

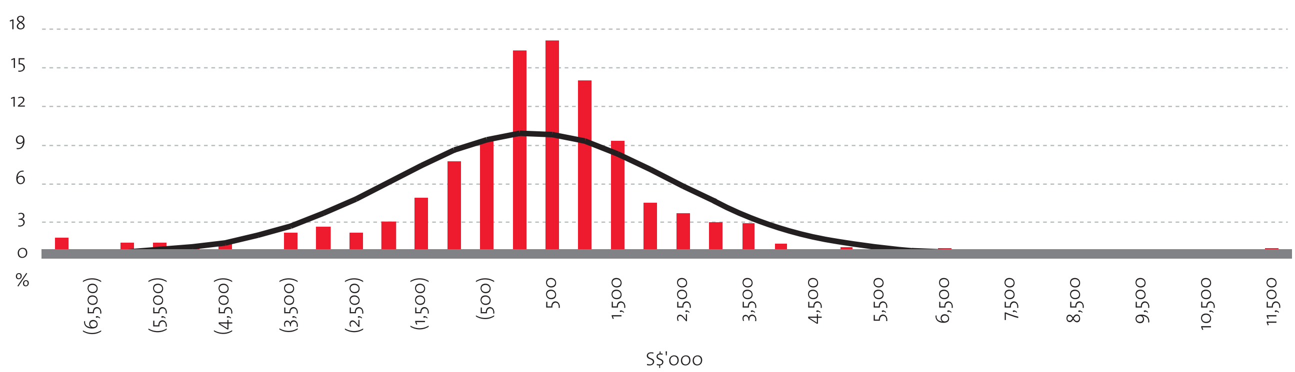
The Group's daily trading VaR for 2003 averaged S$4.3 million and ranged between a low of S$82,000 and a high of S$13.2 million.

Daily Trading VaR Distribution for FY 2003



The Group's daily trading income ranged between a profit of S$11.5 million and a loss of S$9.1 million for 2003.

Daily Trading Income Distribution for FY 2003



Back-testing is conducted to ensure the effectiveness of the VaR model, by comparing the daily VaR against the theoretical profits and losses. The theoretical profits and losses are computed assuming that end-of-day market risk exposures do not change for a period of one day.

Present Value of a Basis Point (PV01), which measures the change in value of interest rate sensitive exposures resulting from a 0.01% increase in interest rates, is an additional measure and is computed on a daily basis. This is a sensitivity measure that identifies the parts of the yield curve where exposures are most vulnerable to interest rate changes, providing inputs to the implementation of hedging strategies.

Stress Testing and Scenario Analyses have been implemented to better quantify financial risk arising from low probability, abnormal market movements. Stress tests help measure the effects on values arising from a range of extreme movements in market prices, based on historical experience and assuming that no actions are taken during the stress event to mitigate risk. Scenario analysis simulates the impact on the portfolio under extreme market crisis events. Scenarios are developed based on actual historical market data during periods of market crisis.

Asset Liability Management Framework

The Group's Asset Liability Management framework consists of 3 components:

- Interest Rate Risk Management
- Structural Foreign Exchange Risk Management
- Liquidity Management

Interest Rate Risk – The main market risk faced by the Group is the interest rate risks arising from the re-pricing mismatches of assets and liabilities arising from its banking business. These are monitored through tenor limits and net interest income changes.

A system is in place to measure the Group's re-pricing mismatch profile. In-depth analyses of current and projected balance sheet positions and the likely impact on the Group's net interest income are performed. Group Treasury actively manages the re-pricing mismatches with the aid of daily re-pricing gap and sensitivity reports, against defined sensitivity limits. The re-pricing gap reports allow for the analysis of the re-pricing profile for the Group's assets and liabilities. The sensitivity reports identify the parts of the yield curve where the Group is most vulnerable to changes in interest rates.

The funding mix varies across the Group. In Singapore, the lending portfolio is largely funded by demand and fixed deposits. The major component of interest rate risks lies in the Bank's extension of commercial property loans, housing loans and automobile loans, which are generally priced at fixed rate. The Bank uses the interest rate swap market actively to ensure that these fixed rate exposures are managed within its risk appetite.

Deposit rates and lending rates are frequently reviewed and adjusted based on market and competitive factors.

Structural Foreign Exchange Risk – The Group's business is mainly transacted in the following currencies: the Singapore dollar, the US dollar, the Malaysia ringgit, the Australian dollar and the Euro. The Group's structural foreign exchange exposure arises primarily from its equity investment in overseas subsidiaries and related companies; head office funds in overseas branches and investment in fixed assets and premises. The Group's policy is to protect its capital by ensuring that, where appropriate and practical, exposures arising from changes in exchange rates are minimised. Hedging is performed to protect the real economic value rather than to avoid the short-term accounting impact.

Liquidity Risk – The objective of liquidity management is to ensure that the Group has sufficient funds to meet its contractual and regulatory financial obligations at all times. As a policy, the Group requires individual subsidiaries and overseas branches to be self-sufficient and to fund their own operations. It is the responsibility of each local management team to ensure compliance with local regulatory and the Group's requirements on liquidity management. Liquidity is managed daily at each branch or subsidiary, taking into account the complexity of the individual balance sheet, as well as the depth and liquidity of the local market.

The Group's liquidity policy is to ensure that all contractual and behavioural commitments can be met by readily available sources of funding. In addition, a level of liquid assets is maintained in relation to cash flows to provide further sources of funding in the event of a crisis. The Group frequently accesses the wholesale financial markets to ensure the availability of funds.

The liquidity management process includes projecting cash flows by major currencies; monitoring liquidity ratios and depositor concentration to ensure an appropriate funding mix and avoid undue reliance on large individual depositors; and maintaining a contingency funding plan. Cash flow projections are also subject to stress tests to ensure that the Group has the ability to withstand sudden and heavy cash outflows. The stress tests are conducted on a regular basis to assess and measure liquidity risk under a bank-specific and general market crisis situation.

Pursuant to MAS regulations, banks are currently required to meet a statutory Minimum Liquid Assets (MLA) requirement, comprising Singapore Government Securities, Singapore Government Securities held under overnight repurchase agreements with, among others, banks in Singapore, and commercial bills of exchange in Singapore dollars, accepted or endorsed by banks in Singapore. In addition, the Bank maintains a daily minimum cash balance with the MAS of at least 3% of its Singapore-dollar denominated liabilities.

OPERATIONAL RISK MANAGEMENT

Operational risk is the potential loss caused by a breakdown in internal processes and systems, deficiencies in people and management, or operational failure arising from external events. The Group has an overall framework with the required environment and organisational components for managing operational risk in a structured, systematic and consistent manner.

The goal of operational risk management is to minimise unexpected and catastrophic losses and manage expected losses. This enables new business opportunities to be pursued in a risk controlled manner and increases risk adjusted profitability through calculated risk-and-reward decision making.

Operational risk management comes under the oversight of the Operational Risk Management and Information Security Committee ("ORISC"), which includes senior representatives from risk management, business units and relevant support functions. Business units are supported by the Operational Risk Management ("ORM") Department of Group Risk Management Division, which has established the operational risk framework, including policies and methodologies and provides independent oversight of operational risk monitoring and control. The operational risk management programmes are actively implemented through the Operational Risk Co-ordinators in the business units.

There are also regular reviews by the internal and external auditors to assess the overall management of operational risks so as to ensure that key business processes are appropriately controlled and functioning effectively.

A comprehensive strategy has been formulated to provide a group-wide integrated solution encompassing the roll-out of qualitative and quantitative tools and methodologies which will position the Group to qualify for the more proactive risk management approaches recommended by the Basel committee.

A well-established and comprehensive loss event and incident reporting system that is aligned to both emerging regulatory and industry standards, to monitor and manage operational losses is in place. A risk and control assessment programme is being progressively rolled out to reinforce our risk assessment capabilities from both institutional and regulatory compliance perspectives. Business continuity and crisis management programmes are in place as an integral part of the Group's strategy to mitigate risks and to manage the impact of unforeseen events. In addition, operational risk training programmes are conducted on an ongoing basis to cultivate a pro-active risk management culture within the Group.