Standard Bank Group Risk and capital management report

for the six months ended 30 June 2012

Standard Bank

Risk and capital management

Risk and capital management report

Overview

Introduction

Effective capital and risk management is fundamental to the business activities of the Standard Bank Group (the group).

Capital is managed using regulatory and economic capital metrics, at both business line and legal entity level.

Risks are controlled at individual exposure level as well as in aggregate within and across all business lines, legal entities and risk types.

The group's three business lines are:

- Personal & Business Banking;
- Corporate & Investment Banking; and
- Liberty.

The legal entities are listed on pages 208 to 214 of book II of the 2011 annual integrated report.

Board responsibility

The board of directors (board) has ultimate responsibility for risk and capital management. Various committees within the governance structure enable the board and executive management to evaluate the risks faced by the group and the effectiveness of the group's management of these risks. These committees are integral to the group's risk management framework and are set out in the diagram on page 7.

The board relies on quarterly reports from these committees, as well as attestations by senior risk managers and group internal audit (GIA), to satisfy itself that the group's risk management processes are fit for purpose. The board further relies on the three lines of defence model, described on page 9, to satisfy itself as to the effectiveness of risk assessments, responses and interventions.

During the six-month period under review, the business activities of the group and its subsidiaries have been managed within the board-approved risk appetite.

Reporting protocol differences

The group's risk and capital management report is prepared in accordance with, and complies with, Basel II pillar 3 (also referred to as pillar 3) disclosures, which are intended to complement the minimum capital requirements and supervisory review process of Basel II.

While the overarching aim of both the International Financial Reporting Standards (IFRS) and pillar 3 reporting frameworks is transparency and accountability, it is important to understand the differences between them in order to correctly interpret the disclosures in this report. The source of all risk and financial disclosures is a centralised set of data thereby ensuring compatibility across both reporting frameworks.

Asset class differences

An important difference between IFRS and pillar 3 pertains to the analysis of credit risk exposures. Under IFRS the exposure is presented by class of financial instrument while pillar 3 requires classification by Basel II asset class. Classes are determined for IFRS purposes by taking into account the nature of the information to be disclosed and the characteristics of the underlying financial instruments. Basel II asset classes, under the internal ratings-based (IRB) approach, are based on their underlying homogeneous risk characteristics and support the risk mitigation factors applied in the Basel II calculations.

The Basel II exposure classes are therefore the basis for the preparation of regulatory reporting and pillar 3 disclosures. The principles in IFRS are applied for recognising, measuring and presenting financial assets and financial liabilities in the IFRS sections of this risk and capital management report. Refer to the tables disclosed on pages 38 to 40.

Fair value instruments

IAS 39 *Financial Instruments: Recognition and Measurement* (IAS 39) permits any financial asset or financial liability, on meeting specific criteria, to be designated at fair value with all changes in fair value being recognised in profit or loss. For liabilities that are designated to be measured at fair value, any deterioration in the credit risk of the issuer will result in a decrease in its fair value and a resultant profit being recognised in the issuer's profit or loss.

IFRS requires the amount of change in fair value attributable to changes in own credit risk on such liabilities, both for the period and cumulatively to date, to be disclosed in the financial statements. From a Basel II pillar 3 perspective, recognising gains as a result of deterioration in own creditworthiness is considered to undermine the quality of capital measures and performance ratios. Those fair value gains and losses attributable to own credit risk are therefore excluded when calculating regulatory capital.

Available-for-sale instruments

IAS 39 permits certain financial assets, such as non-trading debt and equity instruments, to be classified as available-for-sale. All financial assets classified in this manner must be measured at fair value with all gains and losses, with the exception of impairment losses, dividends and interest income, recognised in other comprehensive income.

Banking supervisors generally agree that the resulting gains and losses in other comprehensive income cannot be included in regulatory capital as there is no inflow of capital and it is not permanently available. Basel II requires such amounts to be eliminated in determining the group's regulatory capital.

Impairments

In accordance with IAS 39, it is necessary to determine whether there is objective evidence that a financial asset or group of financial assets is impaired.

A financial asset or group of financial assets is impaired, and impairment losses are recognised, only if there is objective evidence of impairment, resulting from one or more events that have occurred after the initial recognition of the asset (a trigger event) and that loss event has an impact on the estimated future cash flows of the financial asset or group of financial assets that can be reliably measured (incurred loss approach).

Impairments of financial assets are determined as the difference between a financial asset's carrying value and the present value of its estimated future cash flows, including any recoverable collateral, discounted at the original effective interest rate. To provide for latent losses in a portfolio of loans where the loans have not yet been individually identified as impaired, impairment for incurred but not reported losses is recognised based on historic loss patterns and estimated emergence periods.

While IFRS is based on an incurred loss approach, Basel II focuses on expected and unexpected losses. Basel II seeks to ensure that expected losses are addressed through the level of impairments held against the underlying exposure, while unexpected losses are addressed through holding regulatory capital in relation to the size and nature of the exposure held, known as capital adequacy. Basel II requires statistical modelling of expected losses whereas IFRS, although it allows for statistical models, requires a trigger event to have occurred before an impairment loss can be recognised.

The difference between default under Basel II and impairment under IFRS relates to timing. Basel II defines default as the obligor being 90 days past due on the obligation (extended to 180 days for some products) whereas IFRS refers to a loss event such as actual breach of contract, which includes a missed capital or interest payment or changes in macroeconomic variables before the reporting date.

Banks compare the IRB measurement of expected losses with the total amount of impairments that they have recognised in terms of IFRS, including both portfolio and specific impairments. For any individual bank, this comparison produces a shortfall if the expected loss amount exceeds total impairments, or an excess if total impairments exceed the expected loss amount.

Shortfall amounts, if any, are deducted from capital in the ratio of 50% from tier I capital and 50% from tier II capital.

Basis of consolidation

The principal accounting policies and procedures relevant to the interpretation of the group's risk exposures are set out in the annual financial statements' accounting policy elections starting on page 223 of book II of the 2011 annual integrated report. The differences relating to consolidation methods under Basel II pillar 3 and IFRS are explained in the table that follows.

Reporting protocol differences

	Basel II pillar 3	IFRS
Distinction of treatment	Treatment depends on the nature of the underlying activity of the entity. There are different treatments for entities which conduct banking, securities or financial activities, as defined, and those which do not.	All entities, regardless of the nature of their underlying activities, are treated in the same manner.
Subsidiaries conducting banking, securities or financial activities, as defined[1]	Consolidated[2]	Consolidated
Other subsidiaries	Deducted[3]	Consolidated
Significant influence or joint control of entities conducting banking, securities or financial activities, as defined[1]	Proportionately consolidated[4]	Equity accounted
Significant influence or joint control of entities conducting other activities	Deducted[3]	Equity accounted

[1] *Refer to the definitions shown in the table on the next page.*
[2] *Includes the full risk-weighted exposure amounts of the subsidiary in the group's consolidated risk-weighted exposures.*
[3] *The investment in the entity is deducted from the group's consolidated capital and reserve funds and the related assets are removed from the consolidated balance sheet.*
[4] *Includes the pro rata portion (based on the group's share in the entity) of the risk-weighted exposure amounts of the entity in the group's consolidated risk-weighted exposures.*

As pillar 3 disclosures apply at a group level, disclosures related to individual banks within the group are not required. Contrary to accounting principles, banking regulations view consolidation as including only those group companies (subsidiaries, joint ventures and voluntarily consolidated minority-owned entities) that conduct banking, securities and financial activities. These include credit institutions, securities firms and financial entities, but no other companies.

Basel II pillar 3 information has been disclosed in accordance with the following approaches, as explained above:

- consolidated;
- proportionately consolidated; and
- deducted.

For the six months ended 30 June 2012, the group complied with Basel 2.5 rules. The group participated in the Basel III Quantitative Impact Study, based on 31 December 2011 disclosure, submitted to the South African Reserve Bank (SARB) and the Bank for International Settlements.

The results of the assessment reflect a reduction in the group's capital adequacy ratios under the proposed framework, but the group will remain adequately capitalised to meet the new Basel III requirements.

Treatment of legal entities under the Basel II consolidation

	Banks[1]	Securities firms[2]	Financial entities[3]	Commercial entities[4]	Insurance entities[5]
June 2012					
Consolidated	24	5	88		
Proportionately consolidated			4		
Deduction			20	106	3
Total	24	5	112	106	3
December 2011					
Consolidated	24	5	88		
Proportionately consolidated			4		
Deduction	1		21	105	3
Total	25	5	113	105	3

[1] *Banks – public companies registered as banks in terms of the Banks Act 94 of 1990 (Banks Act) or the relevant legislation if the entity is registered outside of the Republic of South Africa.*
[2] *Securities firms – entities that provide securities services as envisaged in the Securities Services Act 36 of 2004 or the relevant legislation if the entity is registered outside the Republic of South Africa.*
[3] *Financial entities – entities that conduct financial activities, for example, lending business, financial leasing, consumer credit, mortgage credit, money transmission, portfolio management or money broking.*
[4] *Commercial entities – entities primarily involved in the production of goods or non-financial services.*
[5] *Insurance entities – entities that conduct insurance business including any entity registered as an insurer in terms of the Short-term Insurance Act 53 of 1998 (Short-term Insurance Act) or Long-term Insurance Act 52 of 1998 (Long-term Insurance Act) or the relevant legislation if the entity is registered outside the Republic of South Africa.*

Risk types

The various risk types the group is exposed to are detailed below.

Credit risk

Credit risk is the risk of loss arising out of the failure of counterparties to meet their financial or contractual obligations when due, for any reason.

Credit risk comprises counterparty risk, settlement risk and concentration risk. These risk types are defined as follows:

- **Counterparty risk:** The risk of credit loss to the group as a result of the failure by a counterparty to meet its financial and/or contractual obligations to the group. This risk type has three components:
  - **Primary credit risk:** The exposure at default (EAD) arising from lending and related banking product activities, including underwriting the issue of these products in the primary market.
  - **Pre-settlement credit risk:** The EAD arising from unsettled forward and derivative transactions where the group is acting in principal capacity or as a clearer. This risk arises from the default of the counterparty to the transaction and is measured as the cost of replacing the transaction at current market rates.
  - **Issuer risk:** The EAD arising from traded credit and equity products, including underwriting the issue of these products in the primary market.
- **Settlement risk:** The risk of loss to the group from settling a transaction where value is exchanged, but where the group may not receive all or part of the counter value.
- **Credit concentration risk:** The risk of loss to the group as a result of excessive build-up of exposure to a specific counterparty or counterparty group, an industry, market, product, financial instrument or type of security, a country or geography, or a maturity. This concentration typically exists where a number of counterparties are engaged in similar activities and have similar characteristics, which could result in their ability to meet contractual obligations being similarly affected by changes in economic or other conditions.

Country and cross-border risk

Country risk is the risk of loss arising when political or economic conditions or events in a particular country inhibit the ability of counterparties in that country to meet financial obligations to the group. Country risk events may include sovereign defaults, banking or currency crises, social instability and governmental policy changes or interventions such as expropriation, nationalisation and asset confiscation.

Country risk also encompasses cross-border risk, which is the risk that government actions may restrict convertibility (local currency into non-local currency) and the transfer of funds, thereby impacting the ability of counterparties to meet financial obligations to the group. Examples of restrictions on the transfer of funds are exchange controls and debt moratoria.

Liquidity risk

Liquidity risk arises when the group, despite being solvent, is unable to maintain or generate sufficient cash resources to meet its payment obligations as they fall due, or can only do so on materially disadvantageous terms.

This inability to maintain or generate sufficient cash resources occurs when counterparties who provide the group with funding withdraw or do not roll over that funding, or as a result of a general disruption in asset markets that renders normally liquid assets illiquid.

Market risk

Market risk is the risk of a change in the market value, earnings (actual or effective) or future cash flows of a portfolio of financial instruments, including commodities, caused by movements in market variables such as equity, bond and commodity prices, currency exchange rates and interest rates, credit spreads, recovery rates, correlations and implied volatilities in all of these measures.

Insurance risk

Insurance risk is the risk that future demographic, policyholder behaviour (such as discontinuances) and related expense experience will exceed the expected allowance for such experience as determined by the product pricing basis.

Insurance risk arises due to uncertainty regarding the timing and amount of future cash flows from insurance contracts. This could be due to variations in mortality, morbidity or persistency experience in the case of life products, or claims incidence and severity assumptions in the case of short-term insurance products.

Operational risk

Operational risk is the risk of loss resulting from inadequate or failed internal processes, people and systems, or from external events. Reputational risk and strategic risk are, in terms of general market convention, excluded from the definition of operational risk. Reputational risk is defined separately below. Strategic risk is included in the definition of business risk below.

Business risk

Business risk is the risk of loss, usually from inflexible cost structures or inefficiencies, due to adverse operating conditions caused by:

- market-driven pressures, such as decreased demand, increased competition or cost increases, and
- group-specific causes, such as a poor choice of strategy, reputational damage or the decision to absorb costs or losses to preserve reputation.

Reputational risk

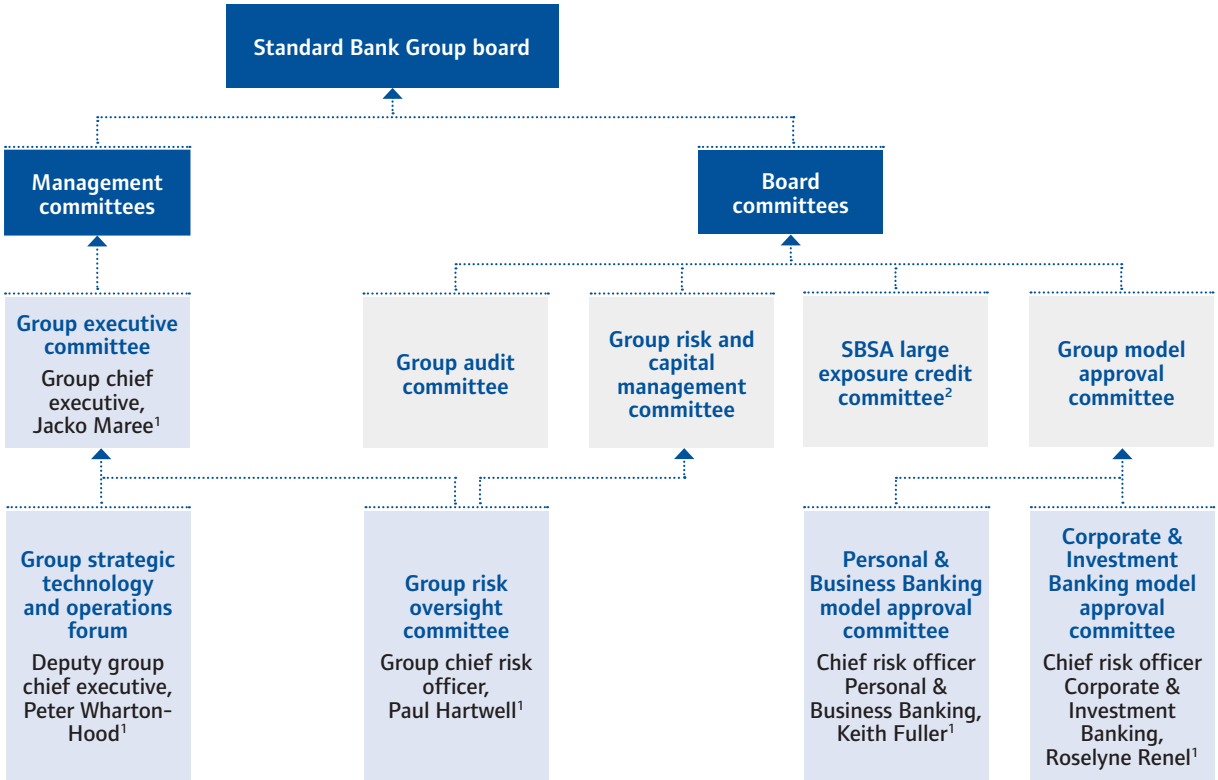
Reputational risk results from damage to the group's image which may impair its ability to retain and generate business. Such damage may result from a breakdown of trust, confidence or business relationships.

Risk management framework

The group's risk management framework comprises the following components:

- risk governance committees as described on page 7;
- management organisation structure to support the three lines of defence model as described on page 9;
- governance standards as described on page 11; and
- policies to support the governance standards.

Risk governance committees



[1] *Chairman of management committee.*
[2] *A sub-committee of The Standard Bank of South Africa (SBSA) board.*
▲ *Arrows denote reporting lines.*

The group's risk governance process relies on both individual responsibility and collective oversight, supported by comprehensive and independent reporting. This approach balances strong corporate oversight at group level, with participation by the senior executives of the group, in all significant risk matters.

Board committees

Board sub-committees responsible for effective risk management include the group audit committee (GAC), the group risk and capital management committee (GRCMC), the SBSA large exposure credit committee and the group model approval committee. Key roles and responsibilities of these committees, as they relate to risk and capital management, are detailed in the sections that follow.

Group audit committee (GAC)

The GAC reviews the group's financial position and makes recommendations to the board on all financial matters, risks, internal financial controls, fraud and IT risks relevant to financial reporting. In relation to risk and capital management, the GAC plays a crucial role in ensuring that the group's internal financial controls are adequate to effectively and efficiently mitigate all risks.

Minutes of the GRCMC meetings are tabled at the GAC meetings on a quarterly basis. In addition, the group chief risk officer (CRO) provides quarterly updates to the GAC on significant matters relating to risk and capital management discussed at the GRCMC and group risk oversight committee (GROC) meetings. Furthermore, on a quarterly basis, the chairman of the GAC meets with the group chief compliance officer and chief audit officer, in the absence of management, to discuss risk- and capital-related matters.

Further details on the GAC's roles, responsibilities and membership can be found in the corporate governance statement on pages 76 and 78 of book I of the group's 2011 annual integrated report.

Group risk and capital management committee (GRCMC)
The GRCMC provides independent and objective oversight of risk and capital management across the group by:

- reviewing and providing oversight in respect of the adequacy and effectiveness of the group's risk management framework;
- approving risk and capital management governance standards and policies; and
- approving the group's risk appetite statements and monitoring the group's risk profile.

SBSA large exposure credit committee
This committee is designated by the SBSA board to discharge the responsibility of ensuring compliance with the Banks Act regulations in respect of large exposures, as defined therein. It meets as required, with the requirements for a quorum being mandatory in terms of guidance from the SARB, and reports quarterly to the SBSA board through its chairman on all large exposures as defined in the regulations.

Group model approval committee
The group model approval committee was established, effective 1 January 2012, in line with the Banks Act regulations. This committee is responsible for assisting the board in reviewing and approving all aspects of the group's material credit rating models. This committee reports to the board and the GRCMC through its chairman. This committee is supported by the Personal & Business Banking and Corporate & Investment Banking model approval sub-committees.

Management committees

Group risk oversight committee (GROC)
Executive management oversight for all risk types has been delegated by the group executive committee to GROC which, in turn, assists the GRCMC to fulfil its mandate. GROC considers and, to the extent required, recommends for approval by the relevant board committees:

- risk appetite statements;
- stress testing results and scenario analyses;
- risk governance standards for each risk type;
- actions on the risk profile and/or risk tendency;
- risk strategy and key risk controls across the group;
- risk profile;
- internal capital adequacy assessment process (ICAAP);
- usage of economic capital parameters;
- allocation of economic capital; and
- approval of macroeconomic scenarios for modelling and stress testing.

GROC sub-committees
There are 14 GROC sub-committees, as detailed in the committee structure below. Each deals with the specific matters assigned to it.

Sub-committee	Chairman
Corporate & Investment Banking credit governance committee[1]	Chief risk officer Corporate & Investment Banking, Roselyne Renel
Group asset and liability committee *Sub-committee: Group capital management committee*	Group financial director, Simon Ridley *Group financial director, Simon Ridley*
Group compliance committee	Group chief compliance officer, Isabel Lawrence
Group country risk management committee	Group chief risk officer, Paul Hartwell
Group credit portfolio management committee	Group chief risk officer, Paul Hartwell
Group equity risk committee	Chief risk officer Corporate & Investment Banking, Roselyne Renel
Group insurance risk committee	Group head of insurance risk, Calvin Quan
Group internal financial control governance committee	Group financial director, Simon Ridley
Group operational risk committee	Group head operational risk, Paul Rew
Group regulatory and legislative oversight committee	Deputy group chief executive, Sim Tshabalala
Group sanctions review committee	Deputy group chief executive, Sim Tshabalala
Group stress testing committee	Group chief risk officer, Paul Hartwell
Intragroup exposure committee[2]	Group financial director, Simon Ridley
Personal & Business Banking credit governance committee[2]	Chief risk officer Personal & Business Banking, Keith Fuller

[1] *Also reports into SBSA large exposure credit committee.*
[2] *Also reports into the GRCMC.*

Three lines of defence model

The group adopts the three lines of defence model. Responsibility for risk management within each line of defence lies at functional and committee level. Reporting lines reinforce segregation of duties and independence within the model. The three lines of defence are described below.

	First line of defence	Second line of defence	Third line of defence
Consists of:	• management of business lines and legal entities.	• finance function; • risk management function; • legal function; and • governance and assurance function excluding GIA.	• GIA function (administratively part of governance and assurance).
Responsibilities:	• measures, assesses and controls risks through the day-to-day activities of the business, within the frameworks set by the second line of defence.	• sets frameworks within the parameters set by the board; • provides independent oversight of the first line of defence; and • reports to management and board governance committees.	• sets the internal audit framework; • provides independent assessment of first and second lines of defence; and • reports to GAC.

Second line of defence functions

The second line of defence consists of four specialist functions which are set out below.

	Finance function	Risk management function	Legal function	Governance and assurance function
Consists of:	• treasury and capital management (TCM) function – capital management; – liquidity risk; – banking book interest rate risk; – business risk; and – credit portfolio management; • group tax function; and • group financial control function.	• credit risk; • country and cross-border risk; • market risk; • operational risk, including business continuity and resilience; • information risk management; • long- and short-term insurance risk; and • integrated risk management.	• prudential, by geographic region; and • transactional, by product type.	• governance office; • financial crime control; • sustainability management; • compliance; • occupational health and safety; and • physical security.

Each of these four functions has resources both at the centre and embedded within the business lines. The central resources coordinate activities within a function across business lines and legal entities. The resources dedicated to the business lines support business line management in ensuring that business line-specific risks are effectively managed as close to the source as possible.

Finance function

TCM function

The objective of TCM is to contribute to shareholder value through managing the balance sheet and financial resources in a way that is optimised, comprehensive and integrated across all banking operations. This includes:

- raising capital and funding in an efficient, cost effective and sustainable manner;
- ensuring optimal use of capital and liquidity resources through effective planning, prioritisation, allocation and pricing of financial resources; and
- managing the supply of and demand for financial resources within the group's risk appetite, ratings and regulatory constraints, the latter including the SARB macro prudential limits.

Group tax function

The group tax function is headed by the group head of tax and reports to the group financial director, as well as to the GAC. Its mandate is to ensure compliance with group tax policy, in terms of which the group fulfils its responsibilities under tax law in each of the jurisdictions in which it operates, whether in relation to compliance, planning or client service matters. All group tax employees, whether located centrally or embedded in business units, report to the group head of tax, while those in business units also report administratively to management in their respective business unit and/or country of operation.

Group financial control function

The group financial control function provides independent product financial accounting and control for all trading desks and investment banking units, and financial control, including balance sheet substantiation, for legal entities.

Risk management function

Risk management has a matrix structure with functional and business line dimensions and a legal entity overlay.

- The functional dimension consists of a risk-type head for each of the risk types, listed in the table on page 9. These risk-type heads provide a governance and oversight function of the specific risk type across the group, and manage centres of expertise such as model development, model validation and portfolio review functions.
- The business line dimension consists of three embedded risk management teams headed up by a CRO, one for each of the three business lines.
- Business line CROs are members of the business line executive committee and are accountable to the group CRO.
- Legal entity CROs are members of the legal entity executive committee and are accountable to the legal entity board, relevant regulators and the group CRO. These CROs are supported by risk management resources from within this matrix structure.

The group's philosophy is to manage risk as close as possible to where it arises. Consequently, 95% of risk employees are embedded within relevant business lines, supported by risk-type heads and centres of expertise at the centre.

Legal function

All legal practitioners, employed in such capacity in the group, report primarily to the group's general counsel, with a secondary reporting line to the business lines they serve. To manage legal risk, these legal practitioners anticipate legal risks that may arise during the course of the group's activities and ensure that these risks are appropriately mitigated. This is achieved by providing or sourcing appropriate legal advice, ensuring that legal risks are optimally negotiated, documented and monitored, and that the necessary controls are implemented.

Governance and assurance function

Governance office

The governance office ensures that the groupwide corporate governance framework is appropriate and in accordance with both home- and host-country legislative requirements, and that it facilitates effective decision making.

Financial crime control

The financial crime control function ensures the safety of the group's employees and assets through the prevention and proactive identification of and response to financial crime, in order to mitigate economic and reputational loss. It also provides independent financial crime risk assessments, physical security services and investigative services.

Sustainability management

The group sustainability management unit is mandated to provide a consistent approach to environmental and social management by facilitating policy, systems, performance standards, monitoring and assurance within the group's operations.

Compliance
The group compliance function proactively supports senior management and business through effective compliance risk management practices, to ensure that all business is conducted within statutory, supervisory and regulatory requirements, thereby mitigating regulatory sanctions and reputational risk.

Occupational health and safety
The occupational health and safety function provides guidance and oversight in managing health, safety and environmental systems, addressing issues such as occupational health and safety in building construction and maintenance, and employee occupational health and safety awareness.

Third line of defence
The GIA function, under the stewardship of the chief audit officer, reports to and operates under a mandate from the GAC. In terms of this mandate, the GIA's role is to provide independent and objective assurance, designed to add value and improve group operations. The GIA has the authority to independently determine the scope and extent of work to be performed. All internal audit employees in the group report operationally to the chief audit officer and administratively to management in their country of residence.

Governance standards
The specialist second line of defence functions maintain risk governance standards for each major risk type to which the group is exposed. The risk governance standards set out minimum control requirements and ensure alignment and consistency in the manner in which the major risk types and capital management metrics across the group are dealt with.

All governance standards are applied consistently across the group and are approved by the GRCMC. It is the responsibility of executive management in each business line and of risk management to ensure the implementation of risk governance standards. Supporting policies and procedures are implemented by the management team and monitored by the embedded risk resources.

Compliance with risk governance standards is controlled through annual self assessments and reviews by the GIA.

The group's approach to risk appetite
The following terms have specific meanings within the group.

- **Risk appetite:** An expression of the amount, type and tenor of risk the group is generally willing to take in pursuit of its financial and strategic objectives, reflecting its capacity to sustain losses and continue to meet its obligations as they fall due, under a range of stress conditions.
- **Risk tolerance:** The maximum amount, type or tenor of risk the group is prepared to take above risk appetite for short periods of time on the understanding that:
  - management action is taken to get back within risk appetite; and
  - the group does not breach the buffer between risk tolerance and risk capacity.

  Risk appetite could be exceeded either as a result of an adverse economic event more severe than that envisaged under the range of stress conditions (passive), or as a result of a decision to increase the risk profile to accommodate market, client or portfolio requirements (active).
- **Risk capacity:** The maximum amount of risk the group is able to support within its available financial resources.
- **Risk profile:** The amount, type and tenor of risk the group currently holds.
- **Risk tendency:** The forward-looking view of how the group's profile may change as a result of portfolio effects and/or changes in economic conditions. The changes in economic conditions may be articulated either in the form of formally approved macroeconomic stress scenarios as part of the budgeting process, the quarterly scenario analysis process or other stress scenarios as required.

The board establishes parameters for risk appetite by:

- providing strategic leadership and guidance;
- reviewing and approving annual budgets and forecasts, under normal and stressed conditions, for the group, each business line and legal entity;
- regularly reviewing and monitoring performance in relation to risk through quarterly board reports; and
- conducting forward-looking analyses of risk tendency against risk appetite.

The board delegates the determination of risk appetite to the GRCMC, which in turn ensures that risk appetite is in line with group strategy and the desired balance between risk and reward. GROC recommends the level of risk appetite to both the GRCMC and the board.

Risk appetite at a group level is described by the following metrics which are supplemented by qualitative criteria:

- earnings at risk;
- liquidity;
- regulatory capital; and
- economic capital.

These metrics are converted into limits and triggers across the relevant risk types, at group, business line and legal entity level.

The group's approach to stress testing

Stress testing is an important management tool in general and for establishing risk tendency in particular.

Stress testing supports a number of business processes including:

- strategic planning and budgeting;
- ICAAP, specifically capital planning and management, and setting capital buffers;
- assessing the impact of stress conditions on the risk profile;
- identifying and proactively mitigating potential risks through actions such as reviewing and changing risk limits, limiting exposures and hedging; and
- communication with internal and external stakeholders.

Stress tests are conducted at group, business line and legal entity level.

Groupwide macroeconomic stress testing is conducted regularly across all major risk types for various common scenarios. This allows the group to monitor its risk profile and risk tendency against its risk appetite. This groupwide stress testing is augmented by portfolio-specific bottom-up stress testing and sensitivity analysis to identify the drivers of risk tendency and necessary actions to constrain risk.

The appropriateness of the stress scenarios and the severity of the relevant scenarios used for capital planning are approved by the GRCMC.

Basel II approaches adopted

Credit risk

The group has approval from the SARB to adopt the advanced internal ratings-based (AIRB) approach for its credit portfolios in SBSA and the foundation internal ratings-based (FIRB) approach for Standard Bank Plc. For internal management purposes, the group utilises AIRB measures and principles wherever possible.

Equity risk

The group has approval from the SARB to adopt the market-based approach for certain equity portfolios in SBSA while the risk-weighted IRB approach is used for Standard Bank Plc equity portfolios.

Operational risk

The group currently applies the standardised approach for operational risk, but is implementing the advanced measurement approach (AMA) operational risk framework. An application was made to the SARB in the fourth quarter of 2011 for permission to use the AMA to determine regulatory capital requirements. The group continues to run the AMA in parallel with the standardised approach. Provided that the necessary approval is obtained from the SARB, the group will adopt a partial approach, that is, SBSA will make use of the AMA for regulatory capital purposes, with effect from the end of 2012, while the other entities will remain on the standardised approach for regulatory capital until they are ready to migrate to the AMA under home and host regulatory requirements.

Market risk

The group has approval from the SARB to adopt the internal models approach for most trading product groups and across most market risk types for SBSA and Standard Bank Plc.

Capital management

Objectives

Capital management is a key contributor to shareholder value. The capital management framework is designed to ensure that the group and its principal subsidiaries are capitalised in line with the risk profile, regulatory requirements, economic capital standards and target ratios approved by the board.

The capital management functional pillar of TCM is structured into the following key functions:

- **Strategic capital management function:** Key responsibilities are capital raising, maintaining the dividend policy, facilitating capital allocation, risk-adjusted performance measurement (RAPM), ICAAP and capital planning.
- **Portfolio analysis and reporting function:** Key responsibilities are to own and manage the regulatory and economic capital results (and the systems used to produce the results), capital budgeting, reporting and analysis.
- **Data function:** Key responsibilities are improving data quality, data system enhancements and standardising data management processes across functions within TCM.
- **Corporate & Investment Banking and Personal & Business Banking capital management functions:** Key responsibilities are to provide support on capital management matters such as deal pricing, key return measures and management of actual capital against budgets.
- **Regional capital management function:** Key responsibilities are to own and manage the regulatory and economic capital results, capital budgeting and reporting, and analysis of the group's operations in the rest of Africa and outside Africa.

These functions work collectively to achieve the objectives of capital management, which are outlined below.

- Maintain sufficient capital resources to support:
  - the group's risk appetite and economic capital requirements;
  - internal and external regulatory capital requirements in the form of management's target ratios;
  - the SARB's minimum ratios set in accordance with Basel II and future Basel III requirements; and
  - minimum requirements set by foreign regulators for the group's foreign-regulated subsidiaries.
- Allocate capital to businesses using risk-based capital allocation to support the group's strategic objectives, including optimising returns on economic and regulatory capital.
- Maintain the dividend policy and dividend declarations of the group while taking into consideration shareholder and regulatory expectations.
- Develop, review and approve the ICAAP including short- to medium-term capital planning and stress testing.

Capital transferability

Subject to appropriate motivation and approval by exchange control authorities, no significant restrictions exist on the transfer of funds and regulatory capital within the banking group.

Regulatory capital

The group manages its capital base to achieve a prudent balance between maintaining capital levels to support business growth, maintaining depositor and creditor confidence, and providing competitive returns to shareholders.

Banking operations

Regulatory capital adequacy is measured through three risk-based ratios, namely:

- core tier I;
- tier I; and
- total capital adequacy.

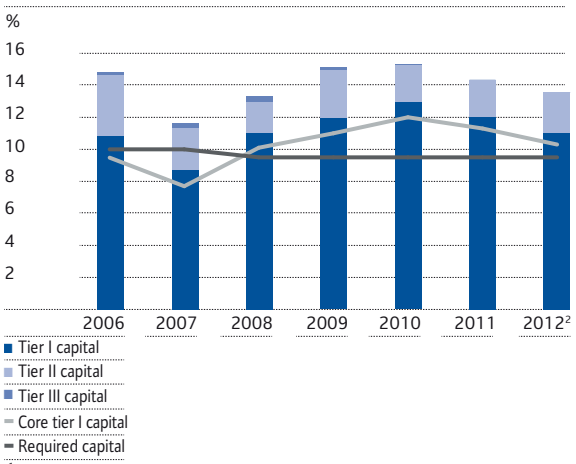
Core tier I capital represents ordinary share capital, share premium and appropriated retained earnings. Tier I capital comprises core tier I and perpetual, non-cumulative preference shares. Total capital includes other items such as subordinated debt and the general allowance for credit impairments.

These ratios represent a measure of the capital supply relative to the total risk-weighted assets and are measured against internal targets and regulatory minimum requirements.

Risk-weighted assets are determined on a granular basis by using risk weights calculated from internally derived risk parameters within the regulatory requirements as follows:

- both on- and off-balance sheet exposures are included in the overall credit risk-weighted assets of the group;
- risk-weighted assets for equity risk are modelled on the standardised, market-based and probability of default (PD)/loss given default (LGD) approaches; and
- capital requirements for market, operational and other risk are converted into notional risk-weighted assets for the purpose of determining total risk-weighted assets.

Capital adequacy[1]

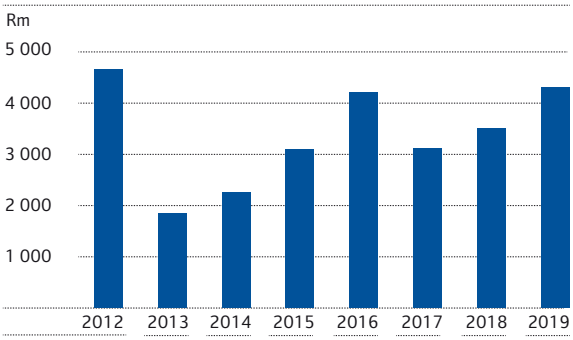


[1] *2006 is presented on a Basel I basis, 2007 – 2011 are presented on a Basel II basis and 2012 is on a Basel 2.5 basis.*
[2] *Relates to the six months ended 30 June 2012.*

During the six months ended 30 June 2012 and the comparative full year ended 31 December 2011, the group complied with all externally imposed capital requirements on its banking operations. The main requirements are those specified in the Banks Act and related regulations which are broadly consistent with the Basel II and Basel 2.5 guidelines issued by the Bank for International Settlements.

The group's tier I capital, including unappropriated profit, was R87,8 billion at 30 June 2012 (31 December 2011: R85,5 billion) and total capital, including unappropriated profit was R108,0 billion at 30 June 2012 (31 December 2011: R102,0 billion). The change in the group's capital was primarily due to an increase in retained earnings and the issuance of Basel II compliant tier II capital instruments. The group maintained a well-capitalised position based on core tier I, tier I and total capital adequacy ratios as set out on page 17.

Tier II subordinated debt maturity profile by call date



The group has a balanced tier II subordinated debt maturity profile. Ongoing focus on capital raising opportunities resulted in the successful issue of R3,2 billion of tier II instruments, which are Basel II compliant, in January and March 2012, further bolstering the group's capital position and smoothing its debt maturity profile.

Basel II regulatory capital

	June 2012 Rm	December 2011 Rm
Tier I		
Issued primary capital and unimpaired reserve funds	114 413	112 030
Ordinary share capital and premium	18 002	17 735
Ordinary shareholders' reserves	83 266	81 307
Non-controlling interest	13 145	12 988
Less: Regulatory deductions	(19 070)	(20 698)
Goodwill and other intangible assets	(12 697)	(11 449)
Investment in banks	(457)	(3 099)
Less: Regulatory deductions – 50% deducted from tier I and tier II respectively	(5 916)	(6 150)
Future expected loss exceeding eligible provisions on an incurred loss basis	(1 427)	(1 452)
Investment in insurance and financial entities not consolidated	(4 447)	(4 660)
Loans to special purpose entities (SPEs) (first loss credit enhancement)	(42)	(38)
Less: Regulatory exclusions	(19 540)	(16 687)
Non-qualifying entities' ordinary shareholders' reserves[1]	(6 020)	(4 440)
Unappropriated profit	(6 530)	(5 407)
Non-qualifying, non-controlling interest	(6 940)	(5 928)
Other reserves[2]	(50)	(912)
Preference share capital and premium	5 495	5 495
	81 298	80 140
Tier II		
Issued secondary capital and reserves	25 893	22 543
Preference share capital and premium	8	8
Subordinated debt	24 296	20 983
General allowance for credit impairments	1 589	1 552
Less: Regulatory deductions – 50% deducted from tier I and tier II respectively	(5 916)	(6 150)
Future expected loss exceeding eligible provisions on an incurred loss basis	(1 427)	(1 452)
Investment in insurance and financial entities not consolidated	(4 447)	(4 660)
Loans to SPEs (first loss credit enhancement)	(42)	(38)
Investment in banks' tier II subordinated debt instruments	(150)	(262)
	19 827	16 131
Tier III		
Subordinated debt	300	300
Total regulatory capital (excluding unappropriated profits)	101 425	96 571
Total capital requirement	75 778	67 519
Total risk-weighted assets	797 659	710 725

[1] *Mainly insurance and commercial entities.*

[2] *Mainly the share-based payment reserve, cash flow hedging reserve, available-for-sale revaluation reserve and foreign currency translation reserve, where applicable. Also included in other reserves is the statutory credit risk reserve which is included in tier II qualifying capital.*

Basel II risk-weighted assets and associated capital requirements

	June 2012		December 2011	
	Risk-weighted assets Rm	Capital requirement[1] Rm	Risk-weighted assets Rm	Capital requirement[1] Rm
Credit risk	578 784	54 985	521 838	49 575
Portfolios subject to the standardised approach[2]	167 324	15 896	146 475	13 916
Corporate	98 235	9 332	84 469	8 025
Sovereign	31 550	2 997	25 111	2 385
Banks	4 300	409	7 134	678
Retail mortgages	6 825	648	6 282	597
Retail other[3]	25 983	2 469	22 978	2 183
Securitisation exposure	431	41	501	48
Portfolios subject to the FIRB approach	55 554	5 278	49 938	4 744
Corporate	40 411	3 839	35 117	3 336
Sovereign	1 089	104	1 286	122
Banks	14 054	1 335	13 535	1 286
Portfolios subject to the AIRB approach	329 447	31 297	292 625	27 799
Corporate	133 578	12 690	121 767	11 568
Sovereign	10 482	996	9 857	935
Banks	16 807	1 597	15 927	1 513
Retail mortgages	77 561	7 368	70 670	6 714
Qualifying revolving retail exposure (QRRE)	46 184	4 387	37 632	3 575
Retail other[3]	38 594	3 666	32 407	3 079
Securitisation exposure	6 241	593	4 365	415
Other assets	26 459	2 514	32 800	3 116
Equity risk in the banking book	22 844	2 170	20 904	1 986
Portfolios subject to the standardised approach[2]	5 891	559	3 986	379
Listed	4 602	437	3 385	322
Unlisted	1 289	122	601	57
Portfolios subject to the market-based approach	7 810	742	6 508	618
Listed	636	60	310	29
Unlisted	7 174	682	6 198	589
Portfolios subject to the PD/LGD approach	9 143	869	10 410	989
Market risk	80 115	7 611	59 244	5 628
Portfolios subject to the standardised approach[2]	37 132	3 528	33 540	3 186
Interest rate risk	26 653	2 532	25 685	2 440
Equity position risk	1 007	96	1 161	110
Foreign exchange risk	6 239	593	2 951	280
Commodities risk	3 233	307	3 743	356
Portfolios subject to the internal models approach	42 983	4 083	25 704	2 442
Value-at-risk (VaR)-based	25 608	2 433	14 824	1 408
Commodities	13 489	1 281	5 640	536
Forex	7 190	683	1 909	181
Interest rates	34 693	3 296	14 853	1 411
Equities	10 166	966	5 333	507
Diversification	(39 930)	(3 793)	(12 911)	(1 227)
Non-VaR-based	17 375	1 650	10 880	1 034
Operational risk				
Portfolios subject to the standardised approach	115 916	11 012	108 739	10 330
Total risk-weighted assets/capital requirement	797 659	75 778	710 725	67 519

[1] *Capital requirement at 9,5% excludes bank specific add-ons and capital floor.*
[2] *Portfolios on the standardised approach relate to the rest of Africa operations and, in addition, portfolios for which the application to adopt the internal models approach has not yet been submitted, or for which an application has been submitted but approval has not yet been granted.*
[3] *Retail other includes retail small and medium enterprises, vehicle and asset finance, and term lending exposures.*

Capital adequacy ratios

	Basel II minimum regulatory requirement %	Target ratio %	Including unappropriated profits June 2012 %	Including unappropriated profits December 2011 %	Excluding unappropriated profits June 2012 %	Excluding unappropriated profits December 2011 %
Total capital adequacy ratio	9,5	11 – 12	**13,5**	14,3	**12,7**	13,6
Tier I capital adequacy ratio	7,0	9,0	**11,0**	12,0	**10,2**	11,3
Core tier I capital adequacy ratio	5,25		**10,3**	11,3	**9,5**	10,5

Capital adequacy ratios of banking subsidiaries

	Host tier I regulatory require-ments %	Host total regulatory require-ments %	June 2012 Tier I capital %	June 2012 Total capital %	December 2011 Tier I capital %	December 2011 Total capital %
Standard Bank Group	7,0	9,5	**11,0**	**13,5**	12,0	14,3
The Standard Bank of South Africa	7,0	9,5	**9,5**[1]	**12,5**	10,7	13,5
Rest of Africa						
CfC Stanbic Bank (Kenya)	8,0	12,0	**13,5**	**20,2**	11,2	16,9
Stanbic Bank Botswana	7,5	15,0	**10,9**	**20,1**	10,6	18,3
Stanbic Bank Ghana	6,7	10,0	**13,4**	**14,9**	19,1	21,4
Stanbic Bank Tanzania	10,0	12,0	**13,9**	**15,9**	12,7	14,7
Stanbic Bank Uganda	8,0	12,0	**14,7**	**17,9**	12,8	14,6
Stanbic Bank Zambia	5,0	10,0	**18,1**	**21,0**	9,8	12,9
Stanbic Bank Zimbabwe	5,0	10,0	**13,4**	**14,8**	15,2	16,4
Stanbic IBTC Bank (Nigeria)	5,0	10,0	**19,1**	**19,1**	18,6	18,7
Standard Bank de Angola	5,0	10,0	**13,8**	**13,8**	47,4	47,6
Standard Bank Malawi	6,0	10,0	**19,6**	**24,7**	17,5	23,2
Standard Bank Mauritius	5,0	10,0	**13,1**	**17,2**	11,7	15,9
Standard Bank Mozambique	4,0	8,0	**20,2**	**21,6**	17,5	19,0
Standard Bank Namibia	7,0	10,0	**10,9**	**13,2**	10,8	12,8
Standard Bank RDC (DR Congo)	5,0	10,0	**24,6**	**29,7**	27,8	34,8
Standard Bank Swaziland	4,0	8,0	**11,7**	**16,1**	9,3	13,4
Standard Lesotho Bank	4,0	8,0	**14,4**	**15,5**	10,7	11,4
Standard International Holdings, consolidated[2]		12,3	**11,0**	**16,1**	10,9	15,9
Standard Bank Isle of Man		10,0	**10,9**	**13,4**	9,3	12,0
Standard Bank Jersey		10,0	**10,4**	**14,9**	10,1	14,7

[1] *The tier I capital ratio increased on 31 July 2012 to 10,2% due to a R2,5 billion equity capital injection.*

[2] *Incorporating:*
- *Banco Standard de Investimentos (Brazil)*
- *Standard Bank Argentina*
- *Standard Bank Plc (United Kingdom)*
- *Standard Merchant Bank (Asia) (Singapore)*

Insurance operations

The quarterly and annual returns submitted to the Financial Services Board (FSB) in terms of the Long-term Insurance Act and the Short-term Insurance Act indicated that the minimum capital requirements were met throughout the six-month period ended 30 June 2012.

Liberty capital adequacy requirement (CAR)

		June 2012[1]	December 2011[2]
Statutory CAR	Rm	**2 422**	2 495
Actual qualifying capital	Rm	**7 110**	7 200
Target CAR coverage ratio	(times)	**1,7**	1,7
Actual CAR coverage ratio	(times)	**2,9**	2,9

[1] *Based on termination CAR (TCAR).*
[2] *Based on ordinary CAR (OCAR).*

Economic capital

Economic capital is the basis for measuring and reporting all quantifiable risks faced by the group on a consistent risk-adjusted basis. The group assesses its economic capital requirements by measuring its risk profile using both internally and externally developed models which are independently validated by the central validation function. Economic capital is used for risk management, capital management, capital planning, capital allocation, evaluation of new business and performance measurement.

ICAAP considers the qualitative capital management processes within the organisation and includes the organisation's governance, risk management, capital management and financial planning standards and frameworks. Furthermore, the quantitative internal assessments of the organisation's business models are used to assess capital requirements to be held against all risks the group is or may become exposed to, in order to meet current and future needs as well as to assess the group's resilience under stressed conditions. It informs the board in greater detail of the group's capital position.

Economic capital of R69,4 billion (31 December 2012: R64,3 billion) is the amount of permanent capital that is required to support the group's economic risk profile. For potential losses arising from risk types that are statistically quantifiable, economic capital reflects the worst-case loss commensurate with the group's target rating of A- translating to a confidence level of 99,92%. The group is capitalised above levels required to support its current A- target rating.

Stress testing confirmed the availability of financial resources to meet the increased economic capital requirements in a stress scenario.

Banking operations

Economic capital by risk type at end of the period

	June 2012 Rm	December 2011 Rm
Credit risk	**50 626**	44 975
Equity risk	**5 482**	6 992
Market risk	**1 035**	1 489
Operational risk	**7 651**	6 770
Business risk	**2 509**	2 253
Interest rate risk in the banking book	**2 139**	1 836
Banking activities – economic capital	**69 442**	64 315
Available financial resources	**96 735**	95 844
Capital coverage ratio (times)	**1,39**	1,49

The available financial resources of R96,7 billion (31 December 2011: R95,8 billion) covers the minimum economic capital requirement of R69,4 billion (31 December 2011: R64,3 billion) by a factor of 1,39 times (31 December 2011: 1,49 times), indicating that risks are well covered by available financial resources.

Insurance operations

Insurance entities are currently excluded from the calculation of economic capital from a group perspective.

Insurance operations are in the process of developing economic capital models to meet the future solvency assessment and measurement (SAM) requirements. These models will continue to change as the requirements of SAM are clarified.

Risk-adjusted performance measurement (RAPM)

One of the objectives of the RAPM policy is to maximise shareholder value through optimal financial resource management within the agreed risk appetite.

Capital is centrally monitored and allocated based on usage and performance in a manner that enhances overall group economic profit and return on equity. Business units are held accountable to achieve their RAPM targets, ensuring the interests of shareholders and management are aligned.

RAPM is calculated on both regulatory and economic capital measures. RAPM is based on allocated capital on a tier I equivalent basis including buffers.

Cost of equity

The group's rand-based cost of equity (CoE) is estimated using the industry standard capital asset pricing model. CoE is recalibrated twice a year using the latest parameter estimates. The group's CoE is 13,7% (31 December 2011: 13,6%), derived as follows.

CoE = Risk-free rate + (Beta x equity risk premium)
13,7% = 7,5% + (0,88 x 7%)

Credit risk

Introduction

The group's credit exposure is spread across a broad range of asset classes, including derivatives, trading assets, loans and advances to customers, loans and advances to banks and financial investments. Credit risk is taken within the constraints of the group's risk appetite framework. Various limits have been defined to support the group's strategy for growth, to maintain an appropriate quality credit portfolio and to control credit risk concentrations. A group credit risk governance standard sets out the principles and minimum control requirements under which the group is prepared to assume and manage credit risk.

Primary responsibility for credit risk management for banking operations resides within the group's business lines, supported by an independent group credit risk function operationally embedded in business units. The GRCMC is the principal board committee responsible for the oversight of credit risk, with the GAC having oversight responsibility for reviewing credit impairment adequacy.

The principal management committee responsible for the oversight of credit risk is GROC. The primary credit governance committees for both Personal & Business Banking and Corporate & Investment Banking report directly to GROC. These committees are responsible for credit risk and credit concentration risk decision making, and delegation thereof to credit officers and forums within defined parameters. Key aspects of rating systems and credit risk models are approved by the Personal & Business Banking, Corporate & Investment Banking and group model approval committees, all of which are mandated by the board as designated committees. Regular model validation and reporting to these committees is undertaken by a quantitative analytical function, itself independent of both business and credit risk lines. The committees have clearly defined mandates and delegated authorities, which are reviewed regularly.

Liberty's credit risk exposure is relatively small when measured in terms of economic capital consumption. However, the potential for default does exist and thus this risk is also monitored and managed within the business with central oversight provided at a group level by GROC. Under Liberty's credit risk management framework, credit exposures are either directly managed through business units or indirectly managed through outsourced asset managers. Each asset manager is required to manage credit risk portfolios in line with investment guidelines specified in the asset manager's mandate. These investment guidelines specify Liberty's required asset characteristics for the particular credit portfolio. Liberty mandates responsibility for credit assessment and decision making, as well as ongoing management and reporting of the credit assets, to the asset manager.

Banking operations

The group was granted regulatory approval under Basel II for the IRB approach for the majority of the portfolio. However, the group uses the same or similar credit models for the internal assessment and management of the portfolio remaining on the standardised approach.

Standardised approach

Credit exposures

The group has adopted the standardised approach for some of its less significant subsidiaries and portfolios. The calculation of regulatory capital is based on net counterparty exposures after recognising a limited set of qualifying collateral. A prescribed percentage, being the risk weighting which is based on the exposure characteristics and the external agency credit rating of the counterparty for corporate, bank and sovereign exposures, is then applied to the net exposure.

External credit assessment institutions

	Moody's Investor Services	Standard & Poor's	Fitch
Asset class			
Corporate	✓		✓
Sovereign	✓	✓	✓
Banks	✓		✓
Small and medium enterprises	✓		✓

For counterparties for which there are no credit ratings available, exposures are classified as unrated for determining regulatory capital requirements.

Basel II exposure subject to the standardised approach per risk weighting

	June 2012			December 2011
	Exposure Rm	Mitigation Rm	Exposure after mitigation Rm	Exposure after mitigation Rm
Based on risk weights				
0% – 35%	4 716	503	3 282	4 728
50%	42 227	125	42 034	37 330
Rated	5 059		5 059	4 566
Unrated	37 168	125	36 975	32 764
75%	57 168	169	56 672	50 631
100% and above	133 563	3 941	128 874	119 473
Rated	8 956	108	8 625	7 891
Unrated	124 607	3 833	120 249	111 582
Total	237 674	4 738	230 862	212 162

Equity exposures

Under the standardised approach, unlisted and listed equity exposures are assigned a 100% risk weighting. Where exposure relates to private equity and venture capital, a risk weighting of 150% is assigned. As at 30 June 2012, unlisted equity exposures amounted to R386 million (31 December 2011: R456 million). There were no listed equity exposures at 30 June 2012 and 31 December 2011 under the standardised approach.

Internal ratings-based (IRB) approach

The group has adopted the IRB approach for its material credit portfolios and most other credit risk portfolios. The group makes extensive use of internal risk estimates of PD, LGD and EAD in:

- setting risk appetite;
- setting limits for concentration risk and counterparty limits;
- determining credit approval;
- pricing transactions;
- determining portfolio impairment provisions;
- calculating regulatory capital; and
- calculating economic capital.

All IRB models are managed under model development and validation policies that set out the requirements for model governance structures and processes, and the technical framework within which model performance and appropriateness is maintained. The models are developed using internal historical default and recovery data. In low default portfolios, internal data is supplemented with external benchmarks and studies. Models are assessed frequently to ensure ongoing appropriateness as business environments and strategic objectives change, and are recalibrated annually using the most recent internal data.

PD

PD parameters measure the likelihood that the borrower will default over a prescribed period. The group uses a 25-point master rating scale to quantify the credit risk for each borrower. The mapping of the master rating scale to the SARB risk buckets and external credit assessment institutions' alphanumerical rating scales and grading categories is shown in the table below. Ratings are mapped to PDs by means of calibration formulae that use historical default rates and other data from the applicable portfolio. The group distinguishes between through-the-cycle PDs and point-in-time PDs, and utilises both measures in decision making and in managing credit risk exposures.

Relationship between the group master rating scale and external ratings

Group master rating scale	SARB risk bucket	Moody's Investor Services	Standard & Poor's	Fitch	Grading	Credit quality
1 – 4	AAA to AA-	Aaa, Aa1, Aa2, Aa3	AAA, AA+, AA, AA-	AAA, AA+, AA, AA-	Investment grade	Normal monitoring
5 – 7	A+ to A-	A1, A2, A3	A+, A, A-	A+, A, A-		
8 – 12	BBB+ to BBB-	Baa1, Baa2, Baa3	BBB+, BBB, BBB-	BBB+, BBB, BBB-		
13 – 21	BB+ to B-	Ba1, Ba2, Ba3, B1, B2, B3	BB+, BB, BB-, B+, B, B-	BB+, BB, BB-, B+, B, B-	Sub-investment grade	
22 – 25	Below B-	Caa1, Caa2, Caa3, Ca	CCC+, CCC, CCC-	CCC+, CCC, CCC-		Close monitoring
Default	Default	C	D	D	Default	Default

LGD

LGD measures the economic loss that the group will incur in the event of borrower default, expressed as a percentage of EAD. LGD measures may also be related to customer type, seniority of loan, country of risk and level of collateralisation. LGDs are estimated per product using historic recovery data. A downturn LGD is used in the estimation of the capital charge and reflects the correlation between recovery rates and macroeconomic factors in a downturn period.

EAD

EAD is the exposure amount that the group estimates will be outstanding at the time of default. EAD captures the impact of potential draw-downs against unutilised facilities and changes in counterparty risk positions due to changes in market prices. By using historical data it is possible to estimate the average utilisation of limits of an account when default occurs, recognising that customers may make more use of their facilities as they approach default.

Model validation

IRB models are validated at initial development and at least annually thereafter by the central validation function, which is independent of the central model development function. Validation techniques test the appropriateness and effectiveness of the models.

The level and depth of the data used for validation purposes differs across various PD, LGD and EAD models depending on the materiality of the portfolio, incidence of defaults at a given stage in the economic cycle and availability of external benchmarks. Model validation results are regularly presented to the model approval committees.

Credit exposures: Corporates, sovereigns and banks
Corporate, sovereign and bank borrowers include South African and international companies, sovereigns, local and provincial government entities, pure bank financial institutions, non-bank financial institutions and public sector entities. Corporate entities include large companies as well as small and medium enterprises that are managed on a relationship basis or have a combined exposure to the group of more than R7,5 million.

Credit exposures: Specialised lending exposures
Specialised lending includes project, object and commodity finance as well as income-producing real estate finance. Creditworthiness is assessed on a transactional level, rather than on the financial strength of the borrower, as the group relies on repayment from the cash flows generated by the underlying asset.

Slotting approach
Under the supervisory slotting criteria approach, specialised lending assets are rated according to the slotting criteria provided by Basel II. Each category has been assigned a risk weight by the regulator for unexpected losses.

As at 30 June 2012, specialised lending exposures under the slotting approach amounted to R200 million and only consisted of exposures within the 70% to 95% risk weight category (31 December 2011: R204 million within the 70% to 95% risk weight category).

Credit exposures: PD/LGD approach
Under the PD/LGD approach, the models used to rate project, object and commodity finance transactions are scorecards combining quantitative and qualitative factors to generate a PD and LGD for each transaction. The transaction LGD per facility is calculated per loan tranche, net of collateral. Since a characteristic of specialised lending is that the financed asset (project, commodity or object) forms an essential component of the recovery calculation, a realisable value is first calculated for the underlying asset. Additional forms of loss mitigation are taken into account.

Equity exposures: Simple risk-weighted method
The PD/LGD approach is used to model the credit risk and capital requirement for equities, excluding strategic investments in the banking portfolio. The group's approved credit risk grade models, described earlier, are used together with the regulatory prescribed LGD of 90% and a maturity factor of five years. The PD/LGD approach is used for most of the group's South African equity investment portfolios. Where no suitable model exists for the equity investment, the fall-back capital calculation is the simple risk-weighted approach. Under this approach, listed and unlisted equity exposures are ascribed a 300% and 400% risk weighting respectively.

	June 2012 Rm	December 2011 Rm
Listed	**345**	242
Unlisted	**2 455**	2 172
Total	**2 800**	2 414

Credit exposures: Retail mortgages, QRRE and retail other
Retail mortgage exposures relate to mortgage loans to individuals and are a combination of both drawn and undrawn EADs. QRRE relates to cheque accounts, credit cards and revolving personal loans. These products include both drawn and undrawn exposures.
Retail other covers other branch lending and vehicle finance for retail, retail small and retail medium enterprise portfolios. Branch lending includes both drawn and undrawn exposures, while vehicle and asset finance only has drawn exposures.

Internally developed behavioural scorecards for retail accounts and loans are used to measure the anticipated performance for each account. Mapping of the behaviour score to a PD is performed for each portfolio using a statistical calibration of portfolio-specific historical default experience. The behavioural scorecard PDs are used to determine the portfolio distribution on the master rating scale.

Separate LGD models are used for each product portfolio and are based on historical recovery data.

EAD is measured as a percentage of the credit facility limit and is based on historical averages. EAD is estimated per portfolio and per portfolio-specific segment, using internal historical data on limit utilisation.

Analysis of PDs, EADs and LGDs by risk grade under the IRB approach

		Corporate			Sovereign			Banks		
	Average PD %	EAD Rm	LGD %	Exposure weighted average risk weight[1] %	EAD Rm	LGD %	Exposure weighted average risk weight[1] %	EAD Rm	LGD %	Exposure weighted average risk weight[1] %
June 2012										
Non-default		280 749			81 436			128 438		
1 – 4	0,03	117	45,10	15,10	2 497	17,86	3,52	34 407	39,69	9,45
5 – 7	0,07	8 518	41,26	22,06	58 339	16,15	7,72	54 473	41,28	17,73
8 – 12	0,31	90 082	34,49	41,56	16 233	26,47	25,71	31 754	43,29	30,69
13 – 21	2,31	181 249	35,34	79,37	4 316	28,58	65,93	7 803	45,69	102,63
22 – 25	31,16	783	29,77	147,18	51	35,22	191,90	1	56,81	318,05
Default	100,00	8 952	42,13	62,63	579	44,77				
Total		289 701	35,44		82 015	19,11		128 438	41,62	
December 2011										
Non-default		269 185			76 600			137 575		
1 – 4	0,03	422	44,63	14,13	2 749	25,96	3,00	39 570	40,12	10,30
5 – 7	0,07	9 486	41,84	22,39	53 982	15,91	7,54	51 994	40,93	14,50
8 – 12	0,30	89 272	35,04	38,72	14 755	29,15	28,56	37 791	42,88	28,41
13 – 21	2,16	167 451	35,13	73,51	4 938	23,94	52,32	8 218	40,85	91,08
22 – 25	29,61	2 554	16,71	78,76	176	41,14	199,09	2	30,79	163,73
Default	100,00	8 018	42,95	43,58	485	44,48	0,01	50	44,67	
Total		277 203	35,40		77 085	19,56		137 625	41,23	

[1] *Exposure weighted average risk weights have been weighted by the sum of the EAD within each of the PD bands.*

Retail mortgages			QRRE			Retail other			Equity	
EAD Rm	LGD %	Exposure weighted average risk weight[1] %	EAD Rm	LGD %	Exposure weighted average risk weight[1] %	EAD Rm	LGD %	Exposure weighted average risk weight[1] %	Exposure Rm	PD %
276 969			63 734			85 063			3 400	
			1 076	65,53	1,51	2 608	36,20	3,82		
673	10,31	1,95	2 888	65,62	2,85	2 757	38,36	7,22		
55 078	11,03	7,18	7 949	65,62	10,18	8 771	38,88	20,24	1 239	0,33
196 978	13,33	26,75	46 971	65,76	60,36	66 025	34,37	48,17	2 159	1,39
24 240	15,12	84,96	4 850	65,44	182,64	4 902	42,86	105,07	2	14,48
17 074	17,38	15,64	3 046	65,34	288,74	2 778	39,99	5,60	21	
294 043	13,28		66 780	65,69		87 841	35,65		3 421	
269 789			52 835			79 494			3 641	
37	10,03	1,01	281	64,03	1,46	3 417	37,70	3,74		
222	10,23	2,14	2 076	64,36	2,47	2 682	40,31	7,26		
55 993	11,09	6,84	5 938	65,01	9,84	10 161	40,42	19,85	552	0,41
190 494	13,09	24,60	40 753	66,20	56,94	59 356	36,26	44,61	3 089	1,84
23 043	15,01	80,16	3 787	66,32	174,25	3 878	42,47	96,11		
18 409	17,52	20,61	3 053	66,31	251,63	2 586	39,21	4,72	83	
288 198	13,13		55 888	66,01		82 080	37,35		3 724	

Credit portfolio analysis

The credit portfolio is analysed in the tables that follow in terms of the Basel II approach and asset class, industry, geography and residual contractual maturity.

Accounting definitions of past due and impaired exposures as well as the credit impairment approaches adopted in terms of IFRS are set out in detail on page 37.

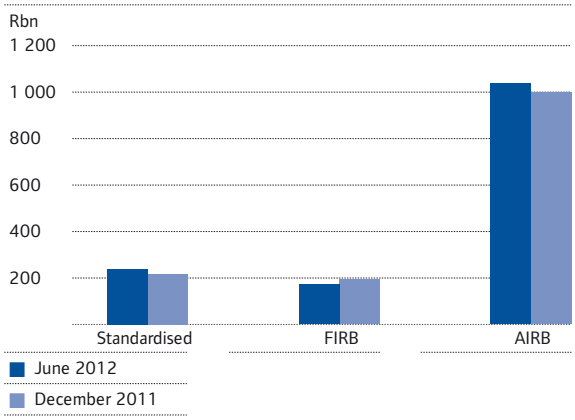
Asset class exposure by Basel II approach and class

	On-balance sheet			Off-balance sheet			Repurchase and resale agreements		
	Standardised Rm	FIRB Rm	AIRB Rm	Standardised Rm	FIRB Rm	AIRB Rm	Standardised Rm	FIRB Rm	AIRB Rm
June 2012									
Corporate	70 138	30 561	169 633	33 126	5 833	99 614	1 071	35 463	15 390
Sovereign	30 538	886	75 168	1 032	9	5 594	83		3 733
Banks	36 182	9 853	60 574	889	840	7 568	45	35 517	26 946
Retail exposure	42 659		393 604	18 302		84 524			
Retail mortgages	11 463		280 169			33 158			
QRRE	3 361		40 603	8 065		31 806			
Other retail	27 835		72 832	10 237		19 560			
Total	179 517	41 300	698 979	53 349	6 682	197 300	1 199	70 980	46 069
December 2011									
Corporate	65 812	28 742	167 061	33 676	5 095	82 110	897	33 457	18 343
Sovereign	24 444	929	68 546	1 076	43	7 233	1 661		3 998
Banks	32 398	17 175	64 139	422	1 519	4 944	233	40 479	18 721
Retail exposure	37 649		374 889	16 381		84 198			
Retail mortgages	11 613		274 022			33 304			
QRRE	2 893		35 656	6 417		30 323			
Other retail	23 143		65 211	9 964		20 571			
Total	160 303	46 846	674 635	51 555	6 657	178 485	2 791	73 936	41 062

[1] *Amount before the application of any offset, mitigation or netting.*

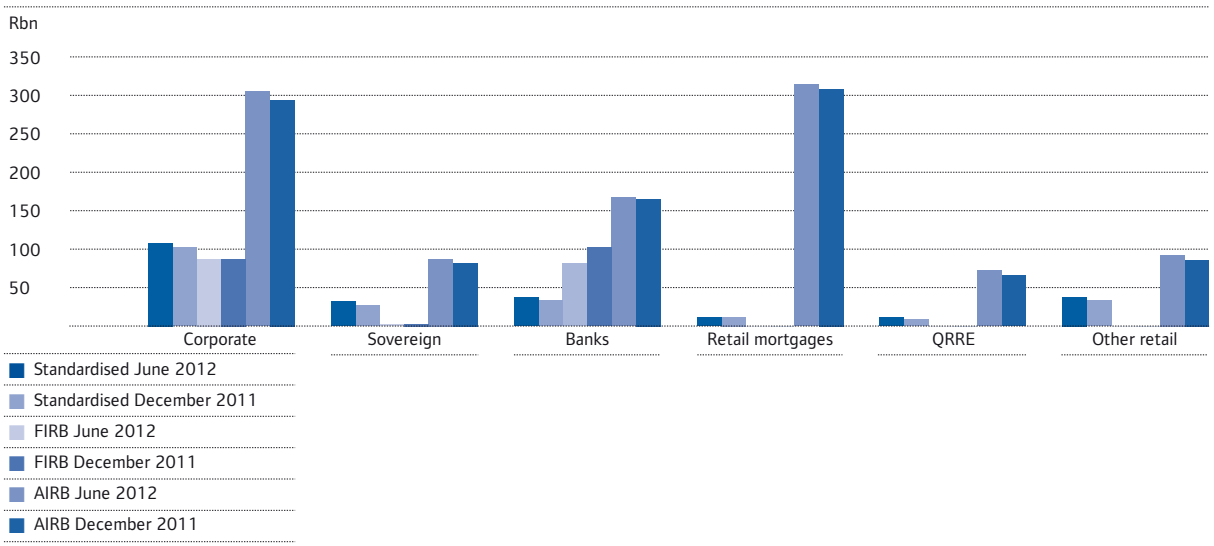
Credit exposures increased by R37 billion from R1 407 billion in December 2011 to R1 444 billion in June 2012. Exposures to retail customers and corporate customers grew most significantly over the period, by R26 billion and R18 billion respectively. Exposure to other African countries increased by 15% over the period, reflecting the group's strategy for expansion into the African continent. Exposure to derivative instruments reduced by R22 billion, following observed global trends of muted market activity in light of global economic uncertainty. Gross defaulted exposures in the retail portfolio reduced over the period, driven by a 6% reduction in defaulted mortgage exposures. This was offset by increased defaults among corporate customers, emanating from geographies outside South Africa.

Basel II exposure by approach



Derivative instruments Standardised Rm	FIRB Rm	AIRB Rm	Total by approach Standardised Rm	FIRB Rm	AIRB Rm	Total Rm	EAD FIRB Rm	AIRB Rm	Gross past due but not impaired exposures Rm	Gross defaulted exposures[1] Rm	Impairment of exposures Specific Rm	Portfolio Rm
3 260	15 480	19 535	107 595	87 337	304 172	499 104	52 690	237 211	1 704	11 019	2 817	
	1 598	2 459	31 653	2 493	86 954	121 100	3 142	78 873	8	580	302	
348	34 415	71 721	37 464	80 625	166 809	284 898	29 377	99 061				
1			60 962		478 128	539 090		448 664	22 063	24 784	7 785	
			11 463		313 327	324 790		294 043	13 433	17 485	3 742	
			11 426		72 409	83 835		66 780	1 890	3 165	1 507	
1			38 073		92 392	130 465		87 841	6 740	4 134	2 536	
3 609	51 493	93 715	237 674	170 455	1 036 063	1 444 192	85 209	863 809	23 775	36 383	10 904	5 972
1 223	19 856	25 225	101 608	87 150	292 739	481 497	52 499	224 908	1 872	8 997	2 332	
	1 570	2 376	27 181	2 542	82 153	111 876	3 175	73 910	3	486	242	
316	42 655	77 319	33 369	101 828	165 123	300 320	41 591	96 034		50	1	
1			54 031		459 087	513 118		426 166	21 155	25 261	7 396	
			11 613		307 326	318 939		288 198	13 064	18 634	3 768	
			9 310		65 979	75 289		55 888	1 614	3 143	1 572	
1			33 108		85 782	118 890		82 080	6 477	3 484	2 056	
1 540	64 081	104 920	216 189	191 520	999 102	1 406 811	97 265	821 018	23 030	34 794	9 971	5 684

Basel II exposure by approach and asset class



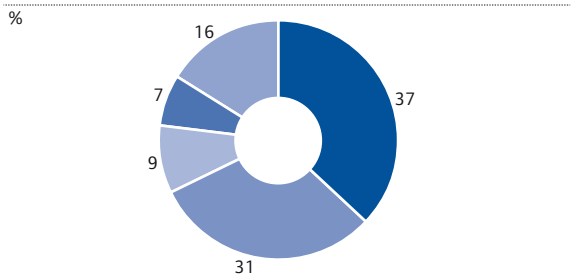
Analysis by industry

Basel II exposures by type of asset and industry

	On-balance sheet Rm	Off-balance sheet Rm	Repurchase and resale agreements Rm	Derivative instruments Rm	Total gross exposure Rm	Gross defaulted exposures[1] Rm	Impairment of exposures Specific Rm	Impairment of exposures Portfolio Rm
June 2012								
Agriculture	14 027	6 902	10	176	21 115	412	216	
Mining	35 882	38 113	72	1 495	75 562	1 665	266	
Manufacturing	47 776	29 621	509	5 149	83 055	1 071	440	
Electricity	10 154	4 140	168	1 022	15 484	167	27	
Construction	9 016	7 087		280	16 383	431	212	
Wholesale	46 886	27 901	19 383	3 445	97 615	711	358	
Transport	21 124	12 159	37	1 212	34 532	251	121	
Finance, real estate and other business services	261 407	39 002	97 986	133 270	531 665	8 131	2 603	
Private households	372 172	69 599		1	441 772	21 762	5 908	
Other	101 352	22 807	83	2 767	127 009	1 782	753	
Total	919 796	257 331	118 248	148 817	1 444 192	36 383	10 904	5 972
December 2011								
Agriculture	14 216	7 845	887	57	23 005	597	327	
Mining	38 383	28 412	244	2 329	69 368	960	73	
Manufacturing	40 483	28 141	802	5 706	75 132	1 013	411	
Electricity	10 629	2 334	196	560	13 719	248	32	
Construction	8 757	6 979		971	16 707	173	84	
Wholesale	40 347	23 960	13 727	4 440	82 474	500	246	
Transport	20 860	11 656		1 875	34 391	203	89	
Finance, real estate and other business services	268 325	37 114	100 124	153 513	559 076	7 445	2 325	
Private households	352 785	68 708		10	421 503	22 647	5 784	
Other	86 999	21 548	1 809	1 080	111 436	1 008	600	
Total	881 784	236 697	117 789	170 541	1 406 811	34 794	9 971	5 684

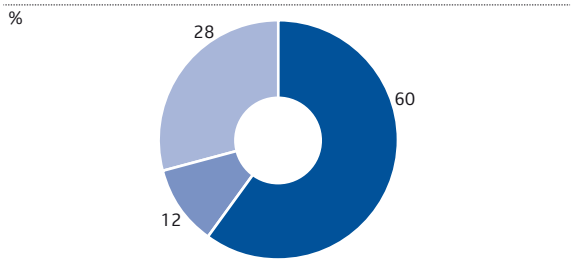
[1] *Amount before the application of any offset, mitigation or netting.*

Basel II total gross exposure by type of industry



- Finance, real estate and other business services (December 2011: 40)
- Private households (December 2011: 30)
- Other (December 2011: 8)
- Wholesale (December 2011: 6)
- Agriculture, mining, manufacturing, electricity, construction and transport (December 2011: 16)

Basel II total gross exposure by geographic region



- South Africa (December 2011: 60)
- Rest of Africa (December 2011:11)
- Outside Africa (December 2011: 29)

Analysis by geographic region

Basel II exposures by type of asset and geographic region

	On-balance sheet Rm	Off-balance sheet Rm	Repurchase and resale agreements Rm	Derivative instruments Rm	Total gross exposure Rm	Gross defaulted exposures[1] Rm	Impairment of exposures Specific Rm	Impairment of exposures Portfolio Rm
June 2012								
South Africa	632 444	178 711	15 782	30 861	857 798	25 851	7 435	
Other African countries	139 198	34 774	576	3 644	178 192	4 774	1 632	
Europe	54 717	8 875	63 842	70 640	198 074	2 301	272	
Asia	41 826	6 277	27 325	3 896	79 324	2 733	1 147	
North America	9 840	4 905	5 368	37 385	57 498	71	45	
South America	40 198	23 695	5 163	1 990	71 046	653	373	
Other	1 573	94	192	401	2 260			
Total	919 796	257 331	118 248	148 817	1 444 192	36 383	10 904	5 972
December 2011								
South Africa	613 798	175 328	21 519	38 812	849 457	26 236	7 462	
Other African countries	123 069	27 173	1 309	3 088	154 639	2 724	1 045	
Europe	53 335	5 806	57 754	82 711	199 606	2 625	232	
Asia	42 774	3 906	25 567	5 063	77 310	2 711	893	
North America	11 286	2 070	2 076	38 210	53 642	56	40	
South America	35 532	22 328	9 558	2 445	69 863	442	299	
Other	1 990	86	6	212	2 294			
Total	881 784	236 697	117 789	170 541	1 406 811	34 794	9 971	5 684

[1] *Amount before the application of any offset, mitigation or netting.*

Movement in group loans and advances impairment[1]

	June 2012 Corporate Rm	June 2012 Retail secured Rm	June 2012 Retail unsecured Rm	June 2012 Total Rm	December 2011 Total Rm
Specific impairments					
Balance at beginning of the period	2 198	4 777	2 800	9 775	12 222
Reclassified as held for sale					(205)
Net impairment raised and released	849	1 761	1 618	4 228	7 262
Impaired accounts written off	(248)	(1 581)	(1 157)	(2 986)	(8 921)
Discount element recognised in interest income	(5)	(289)	(77)	(371)	(944)
Exchange and other movements	25	(10)	(14)	1	361
Balance at end of the period	2 819	4 658	3 170	10 647	9 775
Portfolio impairments					
Balance at beginning of the period	1 300	1 903	2 207	5 410	4 884
Reclassified as held for sale					(191)
Net impairment raised and released	32	(21)	224	235	587
Exchange and other movements	(10)	(3)	(26)	(39)	130
Balance at end of the period	1 322	1 879	2 405	5 606	5 410
Total	4 141	6 537	5 575	16 253	15 185

[1] *Excluding impairments relating to Standard Bank Argentina, a discontinued operation, of R257 million relating to specific impairments and R366 million relating to portfolio impairments (31 December 2011: R196 million and R274 million respectively).*

Analysis by residual contractual maturity

Basel II exposures by residual contractual maturity

	Less than 1 year Rm	1 to 5 years Rm	Greater than 5 years Rm	Total gross exposure Rm
June 2012				
Corporate	220 286	229 414	49 404	499 104
Sovereign	72 210	33 692	15 198	121 100
Banks	195 121	62 773	27 004	284 898
Retail exposure	146 719	73 092	319 279	539 090
Retail mortgages	9 707	7 502	307 581	324 790
QRRE	74 050	9 785		83 835
Other retail	62 962	55 805	11 698	130 465
Total	634 336	398 971	410 885	1 444 192
December 2011				
Corporate	209 751	221 240	50 506	481 497
Sovereign	62 097	31 101	18 678	111 876
Banks	192 719	80 583	27 018	300 320
Retail exposure	132 378	64 755	315 985	513 118
Retail mortgages	5 407	6 682	306 850	318 939
QRRE	66 125	9 164		75 289
Other retail	60 846	48 909	9 135	118 890
Total	596 945	397 679	412 187	1 406 811

Loss analysis

Regulatory expected loss versus actual losses

The table that follows shows the actual losses experienced in the group's IRB exposure classes during the first six months of 2012, compared to the first six months of 2011. Actual losses comprise impairments as determined by IFRS. Actual losses for the six months ended 30 June 2012 have increased from the same period in 2011 due to growth in the higher risk, higher margin unsecured personal term loan book and provisions raised for a small number of large corporate exposures.

Analysis of actual losses

	June 2012 Rm	June 2011 Rm
IRB exposure class[1]		
Corporate	580	496
Sovereign	8	10
Retail exposure	2 839	2 443
Retail mortgages	1 473	1 383
QRRE	662	633
Other retail	704	427
Total	3 427	2 949

[1] *Excludes all the standardised approach portfolios.*

The table on the following page provides the comparison of the 12-month period ended 30 June 2012 actual PDs, LGDs and EADs to the estimated through-the-cycle PDs, LGDs and EADs at the beginning of the 12-month period determined for regulatory capital calculations. Note that this comparison is an approximation as the PD, LGD and EAD actual and estimated parameters are not identical. The parameters are:

- PDs and LGDs estimated at the end of June 2011, to determine the regulatory expected loss for the following 12-month period. PDs are calibrated to long-run default experience to ensure stable regulatory models over an entire credit cycle. These models would tend to underestimate at the top of the credit cycle and overestimate actual defaults at the bottom of the credit cycle.
- Actual LGDs have been determined based on write-offs in the 12-month period ended 30 June 2012, and are thus reflective of write-offs as opposed to losses from exposures defaulting in the period. Accurate actual LGDs can only be determined when exposures that have defaulted in the 12-month period have reached a write-off stage which can be several years in the case of corporate, sovereign, bank or mortgage exposures. Accurate actual LGD comparisons are thus only feasible several years after the default has taken place.

- The EAD ratio reflects estimated through-the-cycle EADs, used to derive the regulatory expected loss, as a percentage of EADs derived from the actual losses for the 12 months to June 2012. The analysis is conducted on all accounts that defaulted during the period under review. A ratio above 100% indicates an overestimation of EAD.

Estimated values are based on regulatory capital models applied as at 30 June 2011. For PDs, these are applied to the total performing book as at 30 June 2011. For the corporate, sovereign and bank asset classes, the actual default rates from July 2011 to June 2012 were lower than the estimated default rates. This illustrates the general level of conservatism the group applies to its low-default portfolio models. Actual PDs for the retail exposures for the 12-month period ended 30 June 2012 are below the estimated through-the-cycle PDs indicating lower average defaults than through-the-cycle default expectations.

Estimated LGDs and EADs are determined by applying regulatory capital models to all facilities.

Actual values are based on realised outcomes over the same period.

The LGD analysis is based only on the South African portfolio, as entities outside South Africa are under the FIRB or standardised approach. The actual LGD experienced for the corporate asset class during the 12 months ended 30 June 2012 is significantly lower than the estimated LGD. This difference can be attributed to the application of downturn parameters when estimating LGD, even when market conditions are improving or positive, and to the general conservatism of the LGD models the group applies to low-default portfolios.

No bank or sovereign defaults were experienced in the AIRB portfolio during the period under review, hence actual LGDs and EADs are not applicable. Actual LGDs for mortgage exposures are higher than estimates as write-offs, mostly from exposures defaulting during the downturn, have occurred in the 12-month period to 30 June 2012.

Analysis of estimated versus actual loss rates by IRB exposure class[1]

	PD		LGD[2]		EAD
	Estimated[3] %	Actual[4] %	Estimated[3] %	Actual[4] %	Estimate to actual ratio %
June 2012					
Corporate	2,10	2,07	37,85	19,47	123,23
Sovereign	1,31		21,43		
Banks	0,76	0,29	32,10		
Retail exposure	4,37	3,63	24,13	24,85	106,01
Retail mortgages	4,52	3,69	12,61	17,27	104,10
QRRE	5,16	4,20	65,44	58,89	105,51
Other retail	3,39	3,06	35,89	37,81	115,26
Total	3,08	2,67	26,78	22,14	108,46
December 2011					
Corporate	2,40	1,72	31,82	13,02	92,87
Sovereign	1,43		20,91		
Banks	0,66	0,15	33,76		
Retail exposure	4,43	4,09	23,91	25,61	109,86
Retail mortgages	4,56	4,27	13,80	16,61	104,26
QRRE	5,13	4,55	64,19	65,19	118,22
Other retail	3,51	3,23	31,31	40,27	124,45
Total	3,08	2,42	26,20	15,94	107,38

[1] *Excludes all the standardised approach portfolios.*
[2] *Excludes FIRB portfolios.*
[3] *Estimated at 30 June 2011.*
[4] *Actual for the subsequent period 1 July 2011 to 30 June 2012.*

Credit risk mitigation

Collateral, guarantees, derivatives and on- and off-balance sheet netting are widely used to mitigate credit risk. Credit risk mitigation policies and procedures ensure that credit risk mitigation techniques are acceptable, used consistently, valued appropriately and regularly, and meet the risk requirements of operational management for legal, practical and timely enforcement. Detailed processes and procedures are in place to guide each type of mitigation used.

The main types of collateral taken are:

- mortgage bonds over residential, commercial and industrial properties;
- cession of book debts;
- bonds over plant and equipment; and
- the underlying moveable assets financed under leases and instalment sales.

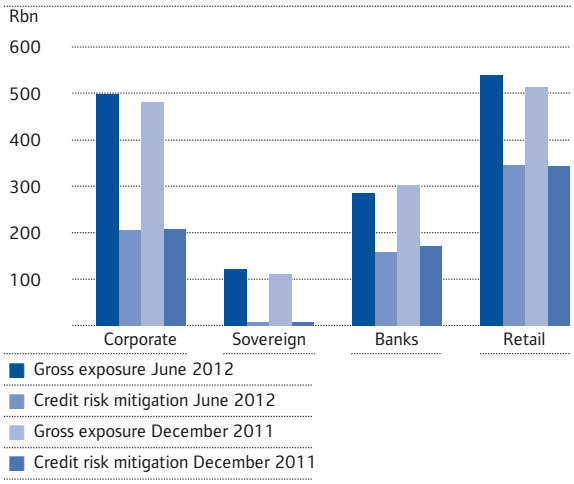
Reverse repurchase agreements are underpinned by the assets being financed, which are mostly liquid and tradable financial instruments.

Guarantees and related legal contracts are often required, particularly in support of credit extension to groups of companies and weaker counterparties. Guarantor counterparties include banks, parent companies, shareholders and associated counterparties. Creditworthiness is established for the guarantor as for other counterparty credit approvals.

For derivative transactions, the group typically uses internationally recognised and enforceable International Swaps and Derivatives Association agreements with a credit support annexure, where necessary. Exposures are generally marked to market daily. Netting is applied to the full extent contractually agreed by the parties and cash or near cash collateral posted where contractually provided for.

Since the counterparty credit risk of derivatives can vary with market risk over time, exposures to counterparty credit risk at any point in time are calculated by adding increases in future potential exposure to the balance of exposure at that point in time.

Basel II exposure and mitigation by asset class



To manage actual or potential portfolio risk concentrations in areas of higher credit risk and credit portfolio growth, the group implements hedging and other strategies from time to time. This is done at individual counterparty, sub-portfolio and portfolio levels through the use of syndication, distribution and sale of assets, asset and portfolio limit management, credit derivatives and credit protection.

Collateral

Wrong-way risk exposures

Wrong-way risk arises where there is a positive correlation between counterparty default and transaction exposure, and a negative correlation between transaction exposure and the value of collateral at the point of counterparty default. Transactions where this may arise are, for example, reverse repurchase and collateralised forward sale transactions. This risk is addressed by taking into consideration the high correlation between the default event and exposure to counterparty when calculating the potential exposure and security margin requirements on these transactions.

Credit protection terms

The group enters into derivative contracts with rated and unrated counterparties. To mitigate counterparty credit risk, the group stipulates credit protection terms such as limitations on the amount of unsecured credit exposure it will accept, collateralisation if mark-to-market credit exposure exceeds those amounts, and collateralisation and/or termination of the contract if certain credit events occur, including but not limited to a downgrade of the counterparty's public credit rating.

The following tables show the credit risk mitigation under the IRB and standardised approaches, respectively.

Basel II credit risk mitigation for portfolios under the IRB approach

	Eligible financial collateral Rm	Other eligible IRB collateral Rm	Guarantees and credit derivatives Rm	Effects of netting agree-ments Rm	Total credit risk mitigation Rm	Total exposure Rm
June 2012						
Corporate	72 330	46 677	59 167	21 317	199 491	391 509
Sovereign	4 343	591	858	950	6 742	89 447
Banks	64 911		5 345	88 627	158 883	247 434
Retail exposures	1	345 447	3		345 451	478 128
Retail mortgages		303 430			303 430	313 327
QRRE		367			367	72 409
Other retail	1	41 650	3		41 654	92 392
Total	141 585	392 715	65 373	110 894	710 567	1 206 518
December 2011						
Corporate	73 364	44 025	58 214	28 215	203 818	379 889
Sovereign	4 108	654	897	1 041	6 700	84 695
Banks	59 924		5 601	105 374	170 899	266 951
Retail exposures	2	342 864			342 866	459 087
Retail mortgages		303 577			303 577	307 326
QRRE		335			335	65 979
Other retail	2	38 952			38 954	85 782
Total	137 398	387 543	64 712	134 630	724 283	1 190 622

Basel II credit risk mitigation for portfolios under the standardised approach

	Effects of netting agreements Rm	Eligible financial collateral Rm	Guarantees and credit derivatives Rm	Total credit risk mitigation Rm	Total exposure Rm
June 2012					
Corporate	847	3 998	1 908	6 753	107 595
Sovereign					31 653
Banks	1	55	120	176	37 464
Retail		685	296	981	60 962
Total	848	4 738	2 324	7 910	237 674
December 2011					
Corporate	170	3 266	2 006	5 442	101 608
Sovereign					27 181
Banks	9	22	12	43	33 369
Retail		739	295	1 034	54 031
Total	179	4 027	2 313	6 519	216 189

Management of concentration risk

Credit concentration risk is the risk of loss to the group arising from an excessive concentration of exposure to a single counterparty, industry, market, product, financial instrument or type of security, country or geography, or maturity. This concentration typically exists when a number of counterparties are engaged in similar activities and have similar characteristics that would cause their ability to meet contractual obligations to be similarly affected by changes in economic or other conditions.

The group maintains a portfolio of credit risk that is adequately diversified and avoids unnecessarily excessive concentration risks. The group constantly reviews its concentration levels and sets maximum exposure guidelines to these. Excesses are reported to GROC and the GRCMC.

Counterparty credit risk

The group is exposed to credit risk on derivative contracts, which arises as a result of counterparty credit risk and movements in the fair value of securities financing and over-the-counter (OTC) derivative contracts. The risk amounts reflect the aggregate replacement costs that would be incurred by the group in the event of counterparties defaulting on their obligations.

The group's exposure to counterparty risk is affected by the nature of the trades, the creditworthiness of the counterparty, and netting and collateral arrangements. Counterparty credit risk is measured in potential future exposure terms and recognised in risk systems on a net basis where netting agreements are in place and are legally recognised, or on a gross basis otherwise.

Counterparty credit risk is subjected to explicit credit limits which are formulated and approved for each counterparty and economic group, with specific reference to its credit rating and all other credit exposures. This risk is managed according to the group credit risk governance standard, which also covers any other type of credit risk. All such credit risk limits are subject to annual review. Counterparty exposures are monitored against limits by the risk functions on a daily basis, and included in the calculation of economic capital demand.

Analysis of securities financing transactions

Securities financing transactions include repurchase agreements, resale agreements, securities lending and securities borrowing agreements for all relevant Basel II asset classes and collateral held.

Basel II securities financing transactions

	June 2012 Rm	December 2011 Rm
Exposure		
With master netting agreement	63 610	66 272
Without master netting agreement	54 637	51 519
Total	118 247	117 791
Collateral		
Cash	24 879	27 783
Commodities	19 405	14 241
Debt securities	65 182	66 156
Equities	3 778	2 577
Total	113 244	110 757
EAD	18 028	19 095

Analysis of OTC derivatives

The details of this counterparty credit risk are disclosed in the table that follows. Derivative transactions traded on a recognised exchange or with a central counterparty, for example a clearing house, have been excluded as such exposures are currently not subject to capital requirements in respect of counterparty credit risk, though this treatment is the subject of regulatory review internationally.

Basel II OTC derivatives exposure

	June 2012 Rm	December 2011 Rm
Notional principal		
Interest rate products	5 078 015	5 469 420
Forex and gold	1 981 866	2 090 012
Equities	53 648	49 311
Precious metals	66 212	78 637
Other commodities	218 252	237 375
Credit derivatives	193 609	264 811
Protection bought	98 329	131 735
Protection sold	95 280	133 076
Total	7 591 602	8 189 566
Gross positive fair value	148 092	170 539
Interest rate products	88 830	90 263
Forex and gold	40 926	53 478
Equities	1 635	4 482
Precious metals	2 795	4 488
Other commodities	8 759	10 613
Credit derivatives	5 147	7 215
Protection bought	4 336	6 531
Protection sold	811	684
Netting benefits	(111 742)	(134 811)
Netted current credit exposure (net fair value)	36 350	35 728
EAD	75 150	77 461
Collateral		
Cash	12 666	14 698
Gold	19	
Debt securities	760	174
Total	13 445	14 872

Securitisation

The group has used securitisation primarily as part of its funding strategy to provide added flexibility in mitigating structural liquidity risk and diversifying the funding base. The group has entered into securitisation transactions in which it transferred recognised financial assets directly to third parties or SPEs, or in a secondary role as an investor in securitisation notes.

In accordance with IAS 39, no gain or loss on sale is recognised as these assets are sold at carrying value. Securitised assets are derecognised when permitted to reflect the element of risk and reward transfer.

For local securitisations in South Africa, Moody's Investor Services and/or Fitch were appointed as rating agencies. For securitisation issues outside Africa, Standard & Poor's was previously appointed.

The group fulfils a number of roles in the process of securitising assets including, among others, sponsor, hedge counterparty, commercial paper dealer, liquidity facility provider, subordinated lender and calculation agent.

For originated and sponsor or administered securitisations consolidated under IFRS (that is, Siyakha Fund, Blue Granite and Blue Titanium Conduit) intragroup exposures to and between these securitisations have been eliminated and the underlying assets consolidated in the relevant sections (that is, primarily retail mortgages) of the risk disclosure. Only exposures to third-party securitisations are disclosed below. The approach applied in the calculation of risk-weighted assets is dependent on the group's model approval for the underlying assets and the presence of a rating from an eligible external credit assessment institution. To date, the group has applied the standardised approach, ratings-based approach and standard formula approach, where relevant, in the calculation of risk-weighted assets.

The group has not engaged in new securitisation activity during the first half of 2012.

Analysis of securitisation activity for the year

	June 2012 Rm	December 2011 Rm
As investor		
Retail mortgages		353
Retail loans		1 010
Total activity for the year		1 363

Basel II securitised on-balance sheet exposures

	June 2012				December 2011
	Corporate Rm	Retail mortgages Rm	Retail loans Rm	Total Rm	Total Rm
Standardised – unrated[1]			150	150	204
IRB	202	2 941	1 549	4 692	4 738
Unrated[1]		24		24	121
Investment grade		2 917	1 549	4 466	4 415
Sub-investment grade	202			202	202
Total	202	2 941	1 699	4 842	4 942

[1] *This includes rated securitisation exposures whose ratings are not eligible for recognition from a regulatory perspective.*

Basel II securitised off-balance sheet exposures

	June 2012			December 2011
	Retail mortgages Rm	Retail loans Rm	Total Rm	Total Rm
Standardised – unrated[1]		350	350	296
IRB	2 976	175	3 151	3 413
Unrated[1]	2 645		2 645	3 129
Investment grade	331	175	506	284
Total	2 976	525	3 501	3 709

[1] *This includes rated securitisation exposures whose ratings are not eligible for recognition from a regulatory perspective.*

Basel II securitisation capital deductions by approach – risk-weighted assets

	June 2012 Rm	December 2011 Rm
IRB	1 844	1 770
Standardised	300	349
Total	2 144	2 119

Analysis of loans and advances in terms of IFRS

The tables on the pages that follow analyse the credit quality of loans and advances measured in terms of IFRS. Refer to page 4 for an understanding of the differences between IFRS and Basel II.

Maximum exposure to credit risk

Loans and advances are analysed and categorised based on credit quality using the following definitions.

Performing loans

Neither past due nor specifically impaired loans are loans that are current and fully compliant with all contractual terms and conditions. Normal monitoring loans within this category are generally rated 1 to 21, and close monitoring loans are generally rated 22 to 25 using the group's master rating scale.

Early arrears but not specifically impaired loans include those loans where the counterparty has failed to make contractual payments and payments are less than 90 days past due, but it is expected that the full carrying value will be recovered when considering future cash flows, including collateral. Ultimate loss is not expected but could occur if the adverse conditions persist.

Non-performing loans

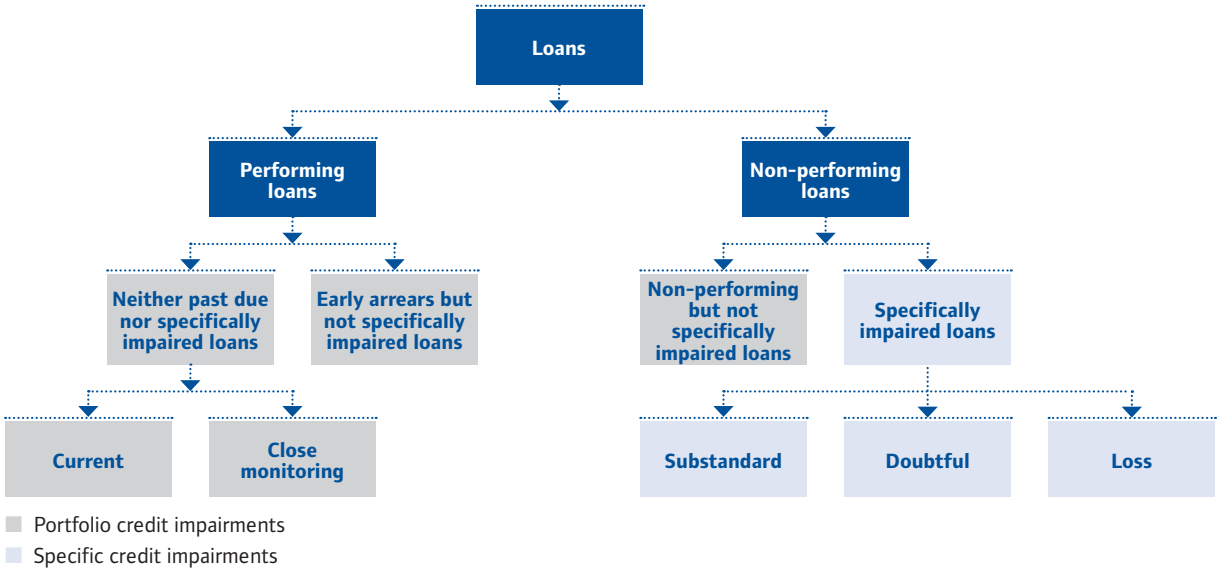
Non-performing loans are those loans for which:

- the group has identified objective evidence of default, such as a breach of a material loan covenant or condition; or
- instalments are due and unpaid for 90 days or more.

Non-performing but not specifically impaired loans are not specifically impaired due to the expected recoverability of the full carrying value when considering future cash flows, including collateral.

Non-performing specifically impaired loans are those loans that are regarded as non-performing and for which there has been a measurable decrease in estimated future cash flows. Specifically impaired loans are further analysed into the following categories:

- substandard items that show underlying well-defined weaknesses and are considered to be specifically impaired;
- doubtful items that are not yet considered final losses due to some pending factors that may strengthen the quality of the items; and
- loss items that are considered to be uncollectible in whole or in part. The group provides fully for its anticipated loss, after taking collateral into account.



Maximum exposure to credit risk by credit quality

		Performing loans			
		Neither past due nor specifically impaired		Not specifically impaired	
	Gross advances Rm	Normal monitoring Rm	Close monitoring Rm	Early arrears Rm	Non-performing[1] Rm
June 2012					
Personal & Business Banking	474 659	406 083	21 427	22 931	
Mortgage loans	292 733	247 674	13 490	13 526	
Instalment sale and finance leases	58 453	51 134	2 536	3 078	
Card debtors	22 669	18 936	2 480	335	
Other loans and advances	100 804	88 339	2 921	5 992	
Corporate & Investment Banking	386 509	374 750	1 175	170	2 026
Corporate loans	344 306	333 824	1 175	168	1 732
Commercial property finance	42 203	40 926		2	294
Other services	(28 014)	(28 014)			
Gross loans and advances	833 154	752 819	22 602	23 101	2 026
Discontinued operations loans and advances	21 606	18 992	357	1 881	
Gross loans and advances including discontinued operations	854 760				
Less:					
Impairments for loans and advances – continuing operations	(16 253)				
Tutuwa loans and advances IFRS adjustment	(2 609)				
Discontinued operations loans and advances	(21 606)				
Net loans and advances	814 292				
December 2011					
Personal & Business Banking	454 899	390 474	17 488	21 890	
Mortgage loans	286 100	241 342	12 451	13 142	
Instalment sale and finance leases	53 741	48 168	1 117	2 706	
Card debtors	20 726	17 450	1 935	205	
Other loans and advances	94 332	83 514	1 985	5 837	
Corporate & Investment Banking	386 463	376 020	1 723	359	1 183
Corporate loans	345 756	336 347	1 688	178	919
Commercial property finance	40 707	39 673	35	181	264
Other services	(22 366)	(22 366)			
Gross loans and advances	818 996	744 128	19 211	22 249	1 183
Discontinued operations loans and advances	21 173	18 916	269	1 713	
Gross loans and advances including discontinued operations	840 169				
Less:					
Impairments for loans and advances – continuing operations	(15 185)				
Tutuwa loans and advances IFRS adjustment	(2 503)				
Discontinued operations loans and advances	(21 173)				
Net loans and advances	801 308				

[1] *Includes loans of R1 437 million (December 2011: R781 million) that are past due but not specifically impaired.*

Non-performing loans									
Specifically impaired loans									
Sub-standard Rm	Doubtful Rm	Loss Rm	Total Rm	Securities and expected recoveries on specifically impaired loans Rm	Net after securities and expected recoveries on specifically impaired loans Rm	Balance sheet impairments for non-performing specifically impaired loans Rm	Gross specific impairment coverage %	Total non-performing loans Rm	Non-performing loans %
6 861	14 631	2 726	24 218	16 392	7 826	7 826	32	24 218	5,1
5 720	11 670	653	18 043	14 294	3 749	3 749	21	18 043	6,2
213	642	850	1 705	796	909	909	53	1 705	2,9
157	218	543	918	296	622	622	68	918	4,0
771	2 101	680	3 552	1 006	2 546	2 546	72	3 552	3,5
3 194	4 873	321	8 388	5 569	2 819	2 819	34	10 414	2,7
2 713	4 402	292	7 407	4 739	2 668	2 668	36	9 139	2,7
481	471	29	981	830	151	151	15	1 275	3,0
				(2)	2	2			
10 055	19 504	3 047	32 606	21 959	10 647	10 647	33	34 632	4,2
150	119	107	376	125	257	257	68	376	1,7
7 232	14 933	2 882	25 047	17 470	7 577	7 577	30	25 047	5,5
6 332	12 232	601	19 165	15 393	3 772	3 772	20	19 165	6,7
136	633	981	1 750	745	1 005	1 005	57	1 750	3,3
137	229	770	1 136	312	824	824	73	1 136	5,5
627	1 839	530	2 996	1 020	1 976	1 976	66	2 996	3,2
2 931	4 016	231	7 178	4 980	2 198	2 198	31	8 361	2,2
2 765	3 638	221	6 624	4 548	2 076	2 076	31	7 543	2,2
166	378	10	554	432	122	122	22	818	2,0
10 163	18 949	3 113	32 225	22 450	9 775	9 775	30	33 408	4,1
85	94	96	275	79	196	196	71	275	1,3

Ageing of loans and advances past due but not impaired

	Less than 31 days Rm	31 – 60 days Rm	61 – 90 days Rm	91 – 180 days Rm	More than 180 days Rm	Total Rm
June 2012						
Personal & Business Banking	15 495	4 980	2 456			22 931
Mortgage loans	8 564	3 360	1 602			13 526
Instalment sale and finance leases	2 282	564	232			3 078
Card debtors	15	232	88			335
Other loans and advances	4 634	824	534			5 992
Corporate & Investment Banking	31	110	29	645	792	1 607
Corporate loans	29	110	29	645	792	1 605
Commercial property finance	2					2
Discontinued operations loans and advances	1 640	181	60			1 881
Total	17 166	5 271	2 545	645	792	26 419
December 2011						
Personal & Business Banking	15 250	4 255	2 385			21 890
Mortgage loans	8 527	2 906	1 709			13 142
Instalment sale and finance leases	1 953	542	211			2 706
Card debtors	17	128	60			205
Other loans and advances	4 753	679	405			5 837
Corporate & Investment Banking	136	106	117	101	680	1 140
Corporate loans	49	15	114	101	680	959
Commercial property finance	87	91	3			181
Discontinued operations loans and advances	1 560	110	43			1 713
Total	16 946	4 471	2 545	101	680	24 743

Insurance operations

The portfolio continues to be diversified through establishing the Liberty Financial Services division's (LibFin) credit origination business and the introduction of a centralised credit portfolio management capability. This centralised capability oversees the asset manager mandate process and resultant credit exposures generated through such mandates (indirectly managed) and the origination of credit exposure through LibFin (directly managed).

Reinsurance is used to manage insurance risk and consequently, in the liability valuation process, reinsurance assets are raised for expected recoveries on projected claims. This does not, however, discharge Liberty's liability as primary insurer. In addition, reinsurance debtors are raised for specific recoveries on claims recognised.

Creditworthiness is assessed prior to the appointment of reinsurers. Financial position strength, performance, track record, relative size or ranking within the industry and credit ratings of reinsurers are taken into account when determining the allocation of business to reinsurers. Credit exposure to reinsurers is also limited through the use of several reinsurers. These reinsurers are reviewed at least annually.

To further mitigate credit exposures to reinsurers, assurance management performs the following annual checks on reinsurers:

- analyses reports on reinsurers' claim paying abilities as assessed by reputable ratings agencies;
- analyses valuators' certificates;
- audits administration processes of reinsurers to whom Liberty has larger exposures; and
- reviews and renegotiates reinsurance agreements.

Consolidated mutual funds

Liberty invests in various registered mutual funds to provide for obligations under policyholders' contracts. Several of the investments in mutual funds exceed 50% of the total value of the underlying net assets of that fund. These funds are consequently defined as subsidiaries in terms of Liberty's accounting policies and are consolidated into its results.

Each fund has its own legal constitution and operates within a distinct mandate that is delegated to the appointed fund manager. Market and credit risks assumed within the assets held are controlled by various protection mechanisms within the mandate and in law. For example, the South African Collective Investment Schemes Control Act 45 of 2002, prescribes maximum limits to concentration risk exposures.

Each fund's trustees or board appoints administrators who are responsible for ensuring that the fund's mandate, and any internal and legislated control procedures, are adhered to. In the event of breach, they are obligated to immediately notify the fund trustees or board and management of the administrators for remedial action.

Liberty's credit exposure generated through its investment in mutual funds is classified at fund level under pooled funds and not at the underlying asset level. Going forward, it is Liberty's intention to look through to the underlying asset measure and report credit risk on a look through basis. Although mutual funds themselves are not rated, fund managers are, however, required to invest in credit assets within the defined parameters stipulated in the fund's mandate. These rules limit the extent to which fund managers can invest in unlisted and/or unrated credit assets and generally restrict funds to the acquisition of investment grade assets.

The mutual funds, into which Liberty has invested and which are defined as subsidiaries, are managed by Stanlib Limited, a wholly owned Liberty subsidiary, or Ermitage Funds Limited, an internationally based asset manager.

Country and cross-border risk

Country risk is the risk of loss arising when political or economic conditions or events in a particular country inhibit the ability of counterparties in that country to meet financial obligations to the group. Country risk events may include sovereign defaults, banking or currency crises, social instability and government policy changes or interventions such as expropriation, nationalisation and asset confiscation.

Country risk also encompasses cross-border risk, which is the risk that government actions may restrict the convertibility (local currency into non-local currency) and transfer of funds, thereby impacting the ability of counterparties to meet financial obligations to the group. Examples of restrictions on the transfer of funds are exchange controls and debt moratoria.

Cross-border obligations include cross-border claims on third parties and investments in and funding of local subsidiaries of the group. Cross-border claims on third parties include cross-border loans and deposits, counterparty exposures through OTC derivatives and securities financing, and the market value of the inventory of debt securities.

The management of country risk is delegated by the GRCMC to GROC and then to the group country risk management committee. This committee is a sub-committee of GROC and recommends the country risk appetite for individual countries and ensures, through compliance with the country risk governance standard, that country risk exposures are effectively governed, identified, measured, managed and reported in the group.

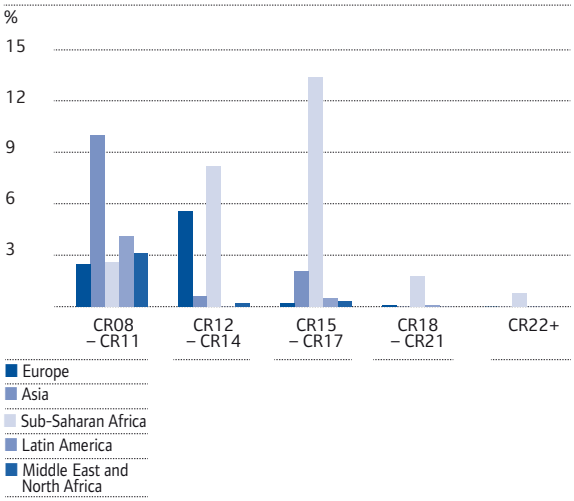
An internal rating model is used to determine the rating of each country in which the group has an exposure. These ratings are also a key input into the group's credit rating models. The model inputs are continuously updated to reflect economic and political changes in countries. The country risk model output provides an internal risk grade which is calibrated to a country risk grade (CR) rating scale, from CR1 to CR25. All countries to which the group is exposed are reviewed at least annually. In determining ratings, extensive use is made of the group's network of operations, country visits and external information sources.

Credit loan conditions and covenants are linked to country risk events.

The country risk function also rates sovereigns. Sovereign ratings are distinct from country ratings in that they focus on sovereign creditworthiness. Country risk ratings provide a more holistic view, covering transfer and convertibility risk, economic (or credit portfolio risk), as well as sovereign risk. The sovereign rating process is an extension of the country rating process. Sovereign risk reviews occur simultaneously with country reviews. The research process underpinning sovereign reviews is comparable with the country risk process.

Countries rated eight (CR08) and higher, referred to as medium- and high-risk countries, are subject to increased analysis and monitoring. For countries with an internal risk grade of seven (CR07) and lower, referred to as low-risk countries, a lesser degree of analysis is generally performed. Total medium- and high-risk country risk exposures and total low-risk country risk exposures for the six months ended 30 June 2012 amounted to USD21,6 billion and USD21,4 billion, respectively (31 December 2011: USD19 billion and USD20 billion, respectively).

Medium- and high-risk country exposure by region



Country risk exposure by region and risk grade

	Europe %	Asia %	North America %	Sub-Saharan Africa %	Latin America %	Middle East and North Africa %	Australasia %
June 2012							
Risk grade							
CR01 – CR07	23,9	6,0	9,5		1,1	0,5	2,8
CR08 – CR11	2,5	10,0		2,6	4,1	3,1	
CR12 – CR14	5,6	0,6		8,2		0,2	
CR15 – CR17	0,2	2,1		13,4	0,5	0,3	
CR18 – CR21	0,1			1,8	0,1		
CR22+				0,8			
December 2011							
Risk grade							
CR01 – CR07	30,7	6,3	14,4		1,1		0,8
CR08 – CR11	3,1	10,0		3,7	4,2	1,7	
CR12 – CR14	3,4	0,9		3,8		0,7	
CR15 – CR17	0,3	1,7		8,3	1,1		
CR18 – CR21	0,2			2,9	0,1		
CR22+				0,6			

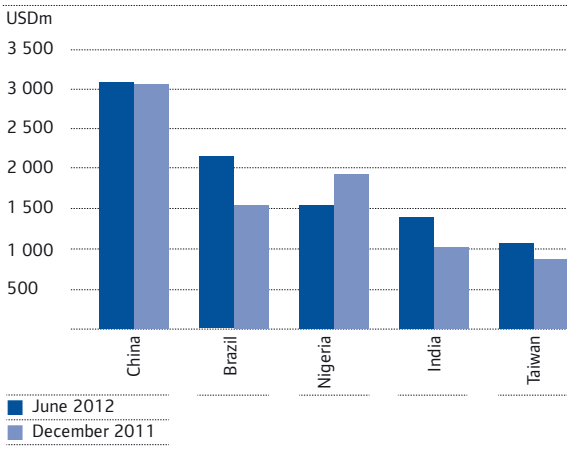
Where appropriate, country risk is mitigated through a number of methods including:

- political and commercial risk insurance;
- co-financing with multilateral institutions; and
- structures to mitigate transferability and convertibility risk such as collection, collateral and margining deposits outside the jurisdiction in question.

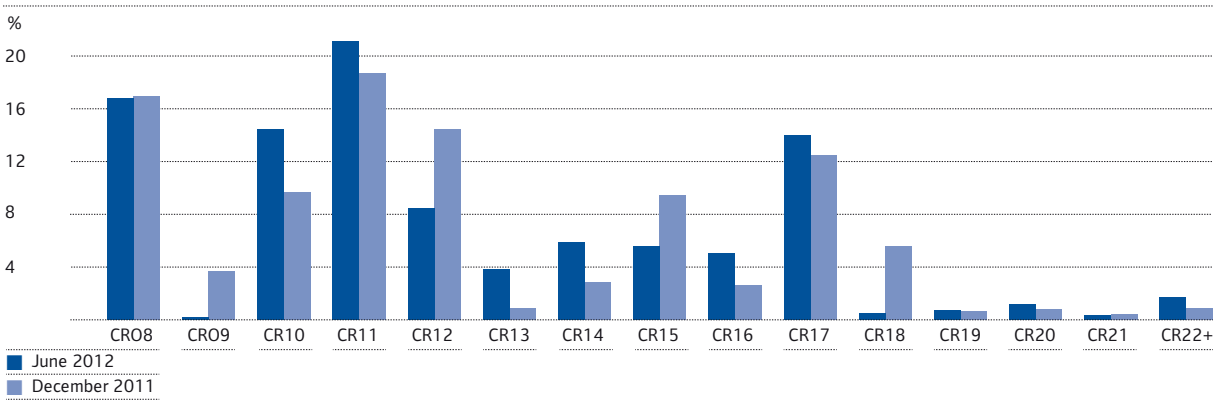
The risk distribution of country risk cross-border exposures is weighted towards European and North American low-risk countries. Exposure to troubled Eurozone peripheral countries is limited and closely managed by the country risk function.

Exposure to the top five medium- and high-risk countries is shown in the graph alongside. These exposures are in line with the group's growth strategy focused on select emerging markets.

Top five medium- and high-risk country risk EAD



Medium- and high-risk country EAD concentration by country rating



Liquidity risk

Introduction

The nature of banking and trading results in continuous exposure to liquidity risk. The group's liquidity management framework, which is largely unchanged from the previous reporting period, is designed to measure and manage liquidity positions to ensure that payment obligations can be met at all times, under both normal and stressed conditions.

Banking liquidity risk can be distinguished by two risk categories which are strictly managed by the group.

- Market liquidity risk: The risk that the group cannot easily offset or eliminate a position without significantly affecting the market price because of inadequate market depth or market disruption.
- Funding liquidity risk: The risk that the group will not be able to effectively meet both expected and unexpected current and future cash flow and collateral requirements without negatively affecting the daily operations or financial condition of the group.

The principal risk relating to insurance liquidity is the group's exposure to policyholder behaviour. Liquidity requirements are reviewed on a monthly basis. These requirements are also monitored on an ongoing basis as part of Liberty's normal operating activities.

Basel III liquidity impact

Basel III requires the calculation and monitoring of two liquidity metrics, namely the liquidity coverage ratio (LCR), effective 1 January 2015, and the net stable funding ratio (NSFR), effective 1 January 2018. The LCR's objective is to measure the ability to manage short-term liquidity stress and ensure the appropriate holding of surplus qualifying liquid assets. The NSFR's objective is to measure the group's long-term structural funding stability in order to address the structural liquidity mismatch inherent in banking operations. Both the LCR and NSFR calculations are subject to an observation period prior to implementation to address any unintended consequences.

Banks are required to submit semi-annual Quantitative Impact Study reports to the Basel Secretariat under the Basel liquidity framework.

The group is taking several steps to ensure compliance with these ratios within the specified timelines. Liquid asset buffers have been increased to address the LCR requirement. The funding profile of the bank's diversified funding base is being extended for compliance with the NSFR. The group continues to ensure that the structural tenor of funding sources is sufficiently long in relation to the tenor of the asset base in order to provide excess liquidity to fund assets where required.

Banking operations

Organisational structure and governance

GROC and the board review and set the liquidity risk governance standard annually in accordance with regulatory requirements, international best practice and the group's stated risk appetite. This ensures that a comprehensive and consistent governance framework for liquidity risk management is followed across the group. Each banking entity in the group has an asset and liability committee (ALCO) responsible for ensuring compliance with liquidity risk policies.

Liquidity and funding management

The group manages liquidity in accordance with applicable regulations, international best practice and within the group's risk appetite for liquidity risk.

As part of a comprehensive liquidity management process, the group distinguishes between tactical, structural and contingency liquidity risk. These three risk management categories are governed by a comprehensive internal governance framework to identify, measure and manage liquidity risk exposure. Combining each of these risk management categories allows for effective liquidity risk monitoring.

Liquidity management categories		
Tactical (shorter-term) liquidity risk management: • Manage intra-day liquidity positions. • Monitor interbank and repo shortage levels. • Monitor daily cash flow requirements. • Manage short-term cash flows. • Manage daily foreign currency liquidity. • Set deposit rates in accordance with structural and contingent liquidity requirements as informed by ALCO.	**Structural (longer-term) liquidity risk management:** • Ensure a structurally sound balance sheet. • Identify structural liquidity mismatches. • Determine and apply behavioural profiling. • Manage long-term cash flows. • Preserve a diversified funding base. • Inform term funding requirements. • Assess foreign currency liquidity exposures. • Establish liquidity risk appetite. • Ensure appropriate transfer pricing of liquidity costs.	**Contingency liquidity risk management:** • Monitor and manage liquidity early warning indicators. • Establish and maintain contingency funding plans. • Undertake regular liquidity stress testing and scenario analysis. • If needed, convene liquidity crisis management committees. • Set liquidity buffer levels in accordance with anticipated stress events. • Advise diversification of liquidity buffer portfolios.
Tools used to manage liquidity across all risk management categories: • Liquidity ratios • Market triggers		

The liquidity management process is independently reviewed on a regular basis. In periods of stable market conditions, the group's consolidated liquidity risk position is monitored on at least a quarterly basis by group ALCO. In periods of increased volatility, the frequency of meetings is increased as required to facilitate appropriate and timely management action.

Tactical liquidity risk management

Active liquidity and funding management is an integrated effort across a number of functional areas. Short-term cash flow projections are used to plan for and meet the day-to-day requirements of the business, including adherence to prudential and internal requirements.

The group's wholesale funding strategy is derived from the projected net asset growth which includes consideration of Personal & Business Banking and Corporate & Investment Banking asset classes, capital requirements, the maturity profile of existing wholesale funding and anticipated changes in the retail deposit base. Funding requirements and initiatives are assessed in accordance with ALCO requirements for diversification, tenor and currency exposure, as well as the availability and pricing of alternative liquidity sources.

An active presence is maintained in professional markets, supported by relationship management efforts among corporate and institutional clients.

Structural liquidity risk management

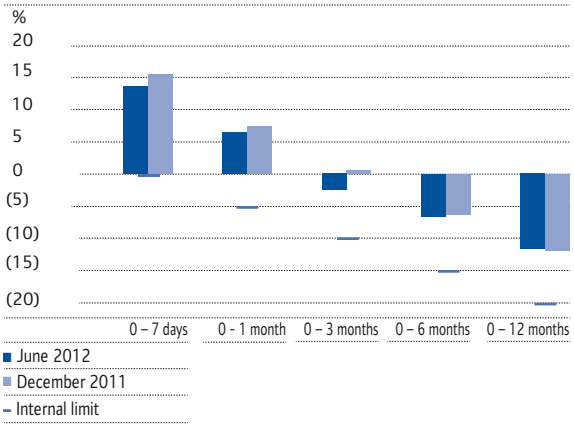
Structural requirements

With actual cash flows typically varying significantly from the contractual position, behavioural profiling is applied to assets, liabilities and off-balance sheet commitments with an indeterminable maturity or drawdown period, as well as to certain liquid assets. Behavioural profiling assigns probable maturities based on historical customer behaviour. This is used to identify significant additional sources of structural liquidity in the form of liquid assets and core deposits, such as current and savings accounts, which exhibit stable behaviour despite being repayable on demand or at short notice.

Structural liquidity mismatch analyses are performed regularly to anticipate the mismatch between payment profiles of balance sheet items, in order to highlight potential risks within the group's defined liquidity risk thresholds.

The graph that follows shows the group's cumulative maturity mismatch between assets and liabilities for the 0 to 12 months bucket, after applying behavioural profiling. Limits are set internally to restrict the cumulative liquidity mismatch between expected inflows and outflows of funds in different time buckets. These mismatches are monitored on a regular basis with active management intervention if potential limit breaches are evidenced. The behaviourally adjusted cumulative liquidity mismatch remains within the group's liquidity risk appetite.

Behaviourally adjusted cumulative liquidity mismatch



Foreign currency liquidity management

A number of indicators are observed to monitor changes in either market liquidity or exchange rates. Foreign currency loans and advances are restricted to the availability of foreign currency deposits.

Funding strategy

Funding markets are evaluated on an ongoing basis to ensure appropriate group funding strategies are executed depending on the market, competitive and regulatory environment. The group employs a diversified funding strategy, sourcing liquidity in both domestic and offshore markets, and incorporates a coordinated approach to accessing capital and loan markets across the group.

Concentration risk limits are used within the group to ensure that funding diversification is maintained across products, sectors, geographic regions and counterparties.

Primary funding sources are in the form of deposits across a spectrum of retail and wholesale clients, as well as long-term capital and loan markets. The group remains committed to increasing its core deposits and accessing domestic and foreign capital markets when appropriate to meet its anticipated funding requirements.

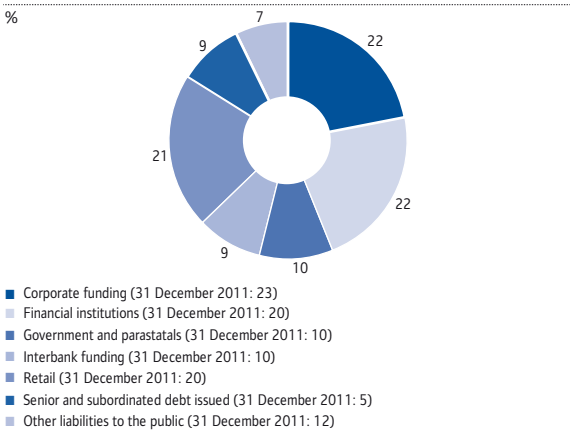
Depositor concentrations

	June 2012 %	December 2011 %
Single depositor	2,5	2,1
Top 10 depositors	7,9	9,6

Funding-related liabilities composition

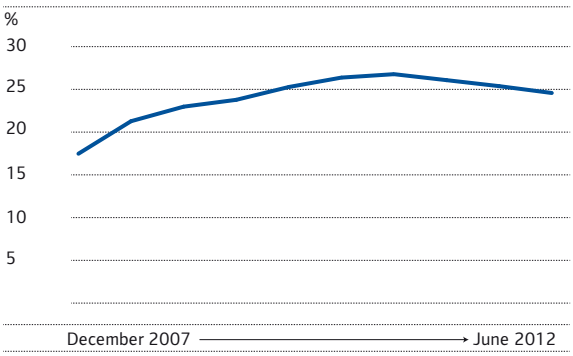
	June 2012 Rbn	December 2011 Rbn
Corporate funding	224	234
Financial institutions	229	198
Government and parastatals	106	100
Interbank funding	99	102
Retail deposits	211	198
Senior and subordinated debt issued	89	48
Other liabilities to the public	69	118
Total funding-related liabilities	**1 027**	998

Funding-related liabilities composition



A component of the funding strategy is to ensure sufficient contractual term funding is raised in support of term lending and to ensure adherence to the structural mismatch limits and guidelines. The long-term funding ratio is defined as those funding-related liabilities with a remaining maturity of greater than six months as a percentage of total funding-related liabilities. The graph below illustrates the group's long-term funding ratio for the period 31 December 2007 to 30 June 2012.

Long-term funding ratio



Contingency liquidity risk management

Contingency funding plans

Contingency funding plans are designed to protect stakeholder interests and maintain market confidence to ensure a positive outcome in the event of a liquidity crisis. The plans incorporate an early warning indicator methodology supported by clear crisis response strategies. Early warning indicators cover bank-specific and systemic crises and are monitored according to assigned frequencies and tolerance levels. Crisis response strategies are formulated for the relevant crisis management structures and address internal and external communications, liquidity generation and operations, heightened and supplementary information requirements as well as various management actions available to address the crisis event.

Liquidity stress testing and scenario analysis

Stress testing and scenario analysis are based on hypothetical as well as historical events. These are conducted on the funding profiles and liquidity positions of the group. The crisis impact is typically measured over a two-month period, as this is considered the most crucial time horizon for a liquidity event. This may, however, vary depending on the severity of the stress scenario and local in-country regulations (for example, the United Kingdom (UK) Financial Services Authority (FSA) regulations require monitoring over a two-week to three-month period rather than a two-month period). Anticipated on- and off-balance sheet cash flows are subjected to a variety of bank-specific and systemic stresses and scenarios to evaluate the impact of unlikely but plausible events on liquidity positions. Under each scenario, loan portfolios are assumed to rollover. However, the rollover of liabilities will be partially impaired resulting in a funding shortfall. The results are assessed against the liquidity buffer and contingency funding plan to provide assurance as to the group's ability to maintain sufficient liquidity under adverse conditions. The results also inform target liquidity buffer positions.

Liquidity buffer

Portfolios of highly marketable securities over and above prudential requirements are maintained as protection against unforeseen disruptions in cash flows. These portfolios are managed within ALCO-defined limits on the basis of diversification and liquidity.

The table below provides a breakdown of the group's surplus marketable securities and foreign currency placements as at 30 June 2012 compared to the 31 December 2011 closing position. These portfolios are highly liquid and can be readily sold to meet liquidity requirements.

Total liquidity

	June 2012 Rbn	December 2011 Rbn
Total marketable assets	**138,2**	143,9
Other readily accessible liquidity	**4,6**	4,2
Total liquidity (in excess of prudential requirements)	**142,8**	148,1
Prudential requirements	**42,1**	39,4
Total liquidity	**184,9**	187,5

In addition to minimum requirements, total contingent liquidity holdings are informed by the results from liquidity stress testing as per Basel principles and, in certain instances, in-country regulations. Total liquidity (in excess of prudential requirements) decreased to R142,8 billion as at 30 June 2012 (31 December 2011: R148,1 billion). The total amount of liquidity held remains comfortably adequate to meet all internal stress tests as well as various legal entity and group regulatory requirements, while leaving capacity for growth in loans and advances in line with budget.

Credit ratings

The group's ability to access funding at cost-effective levels is dependent on maintaining or improving the borrowing entity's credit rating.

The detailed table representing the major credit ratings for the group's significant banking subsidiaries can be found on the group's website, **www.standardbank.com.**

The following table provides a summary of the major credit ratings.

Credit ratings

SBSA[1]

Long-term	Fitch
Foreign currency issuer default rating	BBB+
RSA Sovereign ratings: foreign currency	BBB+
	Moody's
Foreign currency deposit rating	A3
RSA Sovereign ratings: foreign currency	A3

[1] *SBSA is the largest operating entity within the group.*

Credit ratings for the bank are dependent on multiple factors including the sovereign rating, capital adequacy levels, quality of earnings, credit exposure, the risk management framework and funding diversification. These parameters and their possible impact on the borrowing entity's credit rating are monitored closely and incorporated in the group's liquidity risk management and contingency planning considerations.

Rating downgrades as a collateralisation or termination event are generally conceded only to highly rated counterparties and, whenever possible, on a bilateral reciprocal basis. In exceptional cases, the group might concede such rating downgrade events to unrated counterparties when their size, credit strength and business potential are deemed acceptable.

A reduction in these ratings could have an adverse effect on the group's access to liquidity sources and funding costs, trigger collateral calls through the reduction of the threshold above which the group's negative mark-to-market must be collateralised, or lead to activation of downgrade clauses associated with certain structured deposits.

The impact on the group's liquidity of a collateral call linked to downgrading is taken into account in model stress testing. At 30 June 2012, a one notch rating downgrade will reduce thresholds above which collateral must be posted with counterparties to cover the group's negative mark-to-market on derivative contracts by R427 million (31 December 2011: R489 million).

Insurance operations

The principal risk relating to liquidity comprises the group's exposure to policyholder behaviour. Liquidity requirements are reviewed on a monthly basis. These requirements are also monitored on an ongoing basis as part of Liberty's normal operating activities.

Liberty's assets are highly liquid. However, given the quantum of investments held relative to the volumes of trading within the relevant exchanges and counterparty transactions, a substantial short-term liquidation may result in current values not being realised. It is considered highly unlikely, however, that a short-term realisation of that magnitude would occur.

Market risk

Introduction

For the purpose of identifying, managing, controlling, measuring and reporting, market risks have been categorised, consistent with the previous financial reporting period, as follows:

- **Market risk in the trading book:** These risks result from two principal sources, namely the trading activities of the group's banking operations where the primary focus is client facilitation in chosen markets and Liberty's investment activities in various capital market instruments. All trading activities are carried out within the group's Corporate & Investment Banking division. Trading activities comprise market making, arbitrage and proprietary trading, with the latter constituting a small proportion of trading revenues.
- **Interest rate risk in the banking book:** These risks result from the different repricing characteristics of banking assets and liabilities. They include endowment risk associated with a downturn in the economic cycle, repricing risk, basis risk, optionality risk and yield curve risk.
- **Equity investments in the banking book:** These risks result from price changes in listed and unlisted equity investments.
- **Foreign currency risk:** The group's primary exposures to foreign currency risk arise as a result of the translation effect on the group's net assets in foreign operations, intra-group foreign-denominated debt and foreign-denominated cash exposures and accruals.
- **Policyholder asset-liability mismatch in the insurance operations:** The risk arises where Liberty's property and financial assets do not move in the same direction and magnitude as the obligations arising under its insurance and investment contracts. This includes annuity mismatches, embedded derivative mismatches and the market risk arising from negative rand reserves (present value of future charges less the present value of future expenses and risk claims).
- **Insurer shareholder investment portfolio:** These risks result from price changes to financial assets and liabilities utilised to support Liberty's capital base (also referred to as shareholder funds).

Banking operations

The GRCMC-approved market risk governance standard ensures that the measurement, reporting, monitoring and management of market risk across the group's banking entities follows a common governance framework.

Trading book market risk management

Framework

The board grants general authority to take on trading book market risk exposure to GROC, which delegates this authority to group ALCO. Group ALCO is chaired by the group financial director and operates through various legal entity and regional sub-ALCOs. There are two types of limits.

- **Level one:** Limits and triggers (for example, capital, VaR and entity stop loss) are approved by the group and sub-ALCOs.
- **Level two**: Limits and triggers (for example, desk level limits and desk stop loss) are set by market risk functions under delegated authority.

The market risk functions embedded in the business lines are independent of trading operations and accountable to sub-ALCOs. They are responsible for identifying, measuring, managing, controlling and reporting market risk as outlined in the market risk governance standard, with support from the central market risk function. The market risk functions also have the ability to set individual trader mandates. The central market risk function is accountable to group ALCO.

Exposures and excesses are monitored and reported daily to business line and group management, monthly to sub-ALCOs and quarterly to group ALCO, GROC and the GRCMC. Where breaches in limits and triggers occur, actions are taken by market risk functions to move exposures back in line with approved market risk appetite, with such breaches being reported to management and sub-ALCOs.

Measurement

The techniques used to measure and control trading book market risk and trading volatility include:

- VaR;
- stop-loss triggers;
- stress tests;
- backtesting; and
- specific business unit and product controls.

VaR

The group uses the historical VaR simulation approach to derive quantitative measures, specifically for market risk under normal conditions. VaR is based on 251 days of unweighted historical data, a holding period of one day and a confidence interval of 95%. The historical VaR results are calculated in four steps:

- Calculate 250 daily market price movements based on 251 days' historical data.
- Calculate hypothetical daily profit or loss for each day using these daily market price movements.
- Aggregate all hypothetical profits or losses for day one across all positions, giving daily hypothetical profit or loss. Repeat for all other days.
- VaR is the 95th percentile selected from the 250 days of daily hypothetical total profit or loss.

Daily losses exceeding the VaR are likely to occur, on average, 13 times in every 250 days.

VaR models have been approved by the regulators for all South African trading units except for the structured product desk and specific risk on interest rates. Standard Bank Plc has general market risk regulatory model approval for certain products in its commodity trading, local markets (rates and foreign exchange), equity and credit trading businesses. Specific risk regulatory approval has also been granted for an incremental default risk charge model for certain significant credit risk products of Standard Bank Plc. Where the group has received internal model approval, a VaR using a confidence level of 99% and a 10-day holding period is used to determine market risk regulatory capital.

Limitations of historical VaR are acknowledged globally and include:

- The use of historical data as a proxy for estimating future events may not encompass all potential events, particularly those which are extreme in nature.
- The use of a one-day holding period assumes that all positions can be liquidated or the risk offset in one day. This may not fully reflect the market risk arising at times of severe illiquidity, when a one-day holding period may be insufficient to liquidate or hedge all positions fully.
- The use of a 95% confidence level, by definition, does not take into account losses that might occur beyond this level of confidence.
- VaR is calculated on the basis of exposures outstanding at the close of business and therefore does not necessarily reflect intra-day exposures.
- VaR is unlikely to reflect loss potential on exposures that only arise under significant market moves.

Stress tests

In recognition of the limitations of VaR, stress testing provides an indication of the potential losses that could occur under extreme market conditions and where longer holding periods may be required to exit positions. The stress tests carried out by the group include individual market risk factor testing, combinations of market factors per trading desk and combinations of trading desks. Stress tests include a combination of historical, hypothetical and Monte Carlo-type simulations and provide senior management with an assessment of the financial impact that such events would have on the group's profit. The daily losses experienced during the first six months ended 30 June 2012 were within the stress loss scenarios.

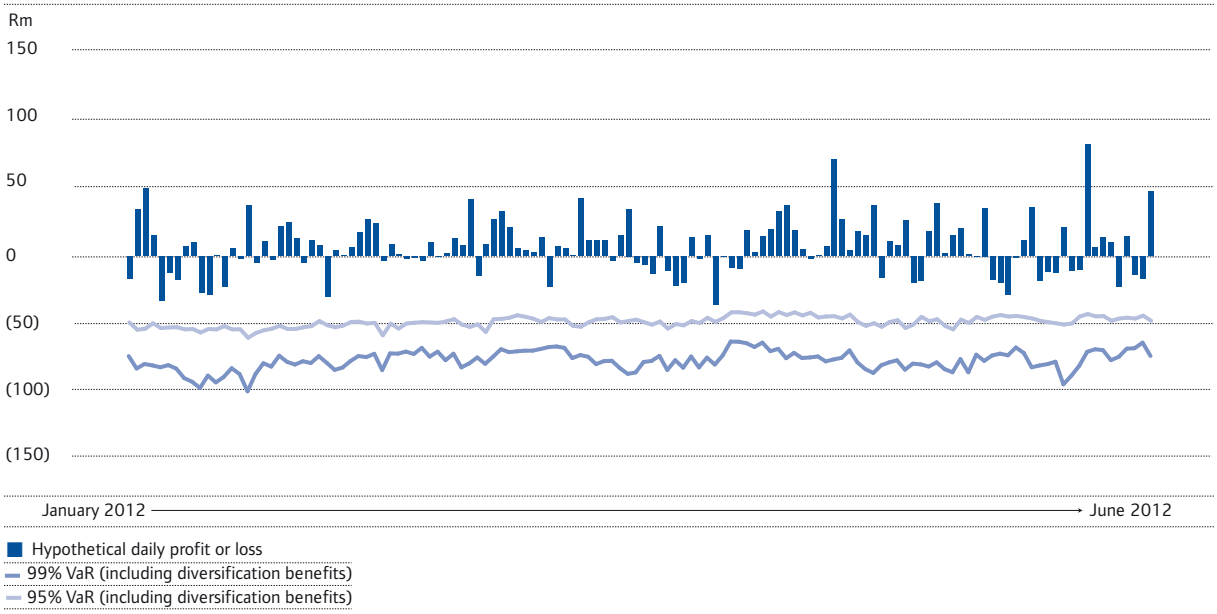
Backtesting

The group back-tests its VaR models to verify the predictive ability of the VaR calculations and ensure the appropriateness of the models within the inherent limitations previously referred to. Backtesting compares the daily hypothetical profit and losses under the one-day buy and hold assumption to the prior day's VaR. In addition, VaR is tested by changing various parameters, such as confidence intervals and observation periods used in the model.

In this manner, characteristics of the VaR model are captured to ensure the accuracy of the VaR measurement and the effectiveness of hedges and risk-mitigation instruments, again within the limitations previously referred to. Regulators categorise a VaR model as green, amber or red and assign regulatory capital multipliers based on this categorisation.

A green model is consistent with a satisfactory VaR model and is achieved for models that have four or less backtesting exceptions in a 12-month period. All the group's approved models were assigned green status for the six months ended 30 June 2012 with the detailed backtesting results shown in the graph below.

Backtesting: Hypothetical daily profit or loss and VaR



Specific business unit and product controls

Other market risk controls specific to individual business units include permissible instruments, concentration of exposures, gap limits, maximum tenor and stop loss triggers. In addition, only approved products that can be independently priced and properly processed are permitted to be traded. All VaR limits require prior approval from their respective ALCOs.

The central validation function independently validates all new pricing models and performs an annual review of existing models to ensure they are still relevant and behaving within expectations.

VaR for the period under review

Trading book market risk exposures arise mainly from residual exposures from client transactions with limited trading for the group's own account. The table on the following page shows the aggregated historical VaR for the group's trading positions by market variable. The maximum and minimum VaR amounts show the bands in which the values at risk fluctuated during the periods specified.

In general, the group's trading desks have run low levels of market risk throughout the six months ended 30 June 2012, with average VaR being largely unchanged.

Trading book VaR analysis by market variable

	Normal VaR			
	Maximum[1] Rm	Minimum[1] Rm	Average Rm	Closing Rm
June 2012				
Commodities	27,4	16,9	20,8	18,0
Forex	25,9	6,7	16,3	7,6
Equities	23,4	10,4	15,3	22,0
Debt securities	46,8	31,5	38,1	34,5
Diversification benefit[2]			(40,1)	(33,0)
Aggregate	63,6	42,1	50,4	49,1
December 2011				
Commodities	45,0	19,3	26,6	19,8
Forex	17,8	3,6	10,2	10,9
Equities	26,0	10,2	17,3	20,6
Debt securities	55,8	19,1	30,3	36,4
Diversification benefit[2]			(33,4)	(35,5)
Aggregate	67,7	41,0	51,0	52,2

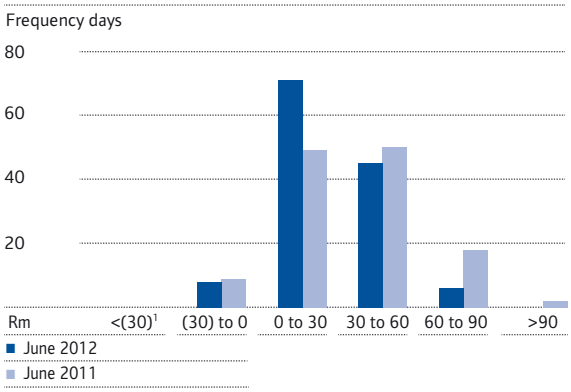
[1] *The maximum and minimum VaR figures reported for each market variable do not necessarily occur on the same day. As a result, the aggregate VaR will not equal the sum of the individual market VaR values, and it is inappropriate to ascribe a diversification effect to VaR when these values may occur on different dates.*

[2] *Diversification benefit is the benefit of measuring the VaR of the trading portfolio as a whole, that is, the difference between the sum of the individual VaRs and the VaR of the whole trading portfolio.*

Analysis of trading profit

The graph below shows the distribution of daily profit and losses for the six months ended 30 June 2012 and 30 June 2011. It captures trading volatility and shows the number of days in which the group's trading-related revenues fell within particular ranges. The distribution is skewed favourably to the profit side with no material negative outliers. For the six months ended 30 June 2012, trading profit was positive for 122 out of 130 days (six months ended 30 June 2011: 119 out of 128 days).

Distribution of daily trading profit or loss for trading units for the six months ended June



[1] *There were no losses greater than R30 million for the six months ended June 2011 and June 2012.*

Interest rate risk in the banking book

Banking book-related market risk exposure principally involves managing the potential adverse effect of interest rate movements on net interest income and the economic value of equity.

The group's approach to managing interest rate risk is governed by applicable laws and regulations, and is guided by international best practice and the competitive environment in which the group operates. Banking book interest rate risk is monitored centrally by the group's TCM team with oversight by group ALCO. Each banking entity in the group manages this risk on a stand-alone basis and also calculates and maintains economic capital in support thereof.

Interest rate risk measurement

The analytical techniques used to quantify banking book interest rate risk include both earnings- and valuation-based measures. Results are monitored on at least a monthly basis by the relevant ALCOs. The analysis takes cognisance of embedded optionality such as loan prepayments and accounts where the account behaviour differs from the contractual position.

The results obtained from forward-looking dynamic scenario analyses, as well as Monte Carlo simulations, assist in developing optimal hedging strategies on a risk-adjusted return basis. Desired changes to a particular interest rate risk profile are achieved through the restructuring of on-balance sheet repricing and/or maturity profiles and, where appropriate, the use of derivative instruments.

Interest rate risk limits

Interest rate risk limits are set with respect to changes in forecast net interest income and the economic value of equity. Economic value of equity sensitivity is calculated as the net present value of aggregate asset cash flows less the net present value of aggregate liability cash flows.

Hedging of endowment risk

Interest rate risk in the banking book is predominantly the consequence of endowment exposures, being the net effect of non-rate sensitive assets less non-rate sensitive liabilities and equity. The endowment risk emanating from the anticipated downturn in the economic cycle is hedged as and when it is considered opportune, using bonds, fixed rate loans and derivative instruments such as swaps and interest rate swaptions. A significant component of the group's endowment risk resides within SBSA. The interest rate view is formulated through the ALCO process, following meetings of the monetary policy committees, or notable market developments.

Outside the endowment exposure, all other banking book interest rate risk (basis, repricing, optionality and yield curve) is managed within the global markets portfolio.

Analysis of banking book interest rate sensitivity

The table below indicates the rand equivalent sensitivity of the group's net interest income and equity in response to a parallel yield curve shock, before tax. Hedging transactions are taken into account while other variables are kept constant.

Assuming no management intervention, a downward 100 basis point parallel interest rate shock across all foreign currency yield curves and a 200 basis point parallel interest rate shock across rand yield curves, would decrease the forecast 12-month net interest income on 30 June 2012 by R2,3 billion (31 December 2011: R1,9 billion).

Interest rate sensitivity analysis

		ZAR	USD	GBP	Euro	Other	Total
June 2012							
Increase in basis points		**200**	**100**	**100**	**100**	**100**	
Sensitivity of annual net interest income	Rm	**1 941**	**97**	**4**	**(3)**	**186**	**2 225**
Sensitivity of equity	Rm	**41**	**(3)**			**(126)**	**(88)**
Decrease in basis points		**200**				**100**	
Sensitivity of annual net interest income	Rm	**(2 051)**				**(237)**	**(2 288)**
Sensitivity of equity	Rm	**(41)**				**126**	**85**
December 2011							
Increase in basis points		200	100	100	100	100	
Sensitivity of annual net interest income	Rm	1 482	10	10	7	129	1 638
Sensitivity of equity	Rm	115	(12)			(129)	(26)
Decrease in basis points		200	100	100	100	100	
Sensitivity of annual net interest income	Rm	(1 688)	(33)	(10)	(7)	(140)	(1 878)
Sensitivity of equity	Rm	(115)	12			129	26

Equity investments

The equity risk committee approves investments in listed and unlisted entities in accordance with delegated authority limits. Periodic reviews and reassessments are undertaken on the performance of these investments.

Banking book equity exposures

Market risk on equity investments is managed in accordance with the purpose and strategic benefits of such investments, rather than purely on mark-to-market considerations. Reviews and reassessments on the performance of the investments are undertaken periodically.

Basel II equity positions in the banking book

	June 2012 Rm	December 2011 Rm
Fair value		
Listed	392	1 042
Unlisted	3 369	3 077
Total[1]	3 761	4 119

[1] *Banking book equity exposures are equity investments which comprise listed and unlisted private equity and strategic investments, and do not form part of the trading book.*

Financial instruments include all financial assets and liabilities held for liquidity, investment, trading or hedging purposes. Financial instruments are accounted for and valued in terms of accounting policy 4 – *Financial Instruments* as described in the annual financial statements on page 225 in book II of the 2011 annual integrated report.

Cumulative realised gains from the sale or liquidation of equity positions in the banking book were R417 million (31 December 2011: loss of R32 million). This increase can be attributed to the sale of a listed equity investment which has been held as an equity investment for five years prior to the sale.

No unrealised gains or losses were recognised in other comprehensive income (31 December 2011: R32 million loss).

Foreign currency risk

Framework and governance

The group's primary exposures to foreign currency risk arise as a result of the translation effect on the group's net assets in foreign operations, intra-group foreign-denominated debt and foreign-denominated cash exposures.

The group capital management committee delegates the management of this risk to the net asset value currency risk management committee. This committee manages the risk according to existing legislation, South African exchange control regulations and accounting parameters. It takes into account naturally offsetting risk positions and manages the group's residual risk by means of forward exchange contracts, currency swaps and option contracts. Hedging is undertaken in such a way that it does not interfere with or constrain normal operational activities. In particular, cognisance is taken of the need for capital held in offshore banking entities to fluctuate in accordance with risk-weighted assets, thereby preserving the capital adequacy in-country. The net asset value currency risk management committee meets regularly to reassess the hedging or diversification strategy in the event of changes in currency views.

Hedging of rand or foreign currency exposure is permitted only for planned, specific future investment-related cash flows and hedging of rand translation risk arising from consolidation of the group's foreign subsidiaries and operations.

The repositioning of the currency profile, which is coordinated at group level, is a controlled process based on underlying economic views of the relative strength of currencies. In terms of the foreign currency risk governance process outlined previously, the group does not ordinarily hold open exposures of any significance with respect to the banking book.

Gains or losses on derivatives that have been designated as either net investment or cash flow hedging relationships are reported directly in other comprehensive income, with all other gains and losses on derivatives being reported in profit or loss.

Insurance operations

The Liberty GRCMC-approved market risk framework ensures that the measurement, reporting, monitoring and management of market risk across the insurance entities follows a common governance framework.

Market risk management and reporting processes continue to mature. For management purposes, Liberty's market risk remains split into two main categories:

- Market risks to which Liberty wishes to maintain exposure on a long-term strategic basis: These include market risks arising from assets backing shareholder funds as well as from the 90/10 fee exposure. In aggregate, this is referred to as the shareholder investment portfolio and is managed by LibFin Investments.
- Market risks to which Liberty does not wish to maintain exposure on a long-term strategic basis as these are not expected to provide adequate return on economic capital over time: This includes the asset-liability mismatch risk arising from Liberty's interest rate exposure to annuity business, and the mismatch risk arising from embedded derivatives including policyholders' investment guarantees. It also includes market risk arising from negative rand reserves, which represents the present value of future charges less the present value of future expenses and risk claims. In aggregate, this is referred to as the risk management portfolio and is managed by LibFin Markets.

LibFin is responsible for managing Liberty's aggregate market risks, including exposures arising from shareholder funds and asset-liability mismatches, in terms of its delegated authority and within set limits. Stanlib, Liberty Properties and other external asset managers remain responsible for managing the investment risks within their investment mandates. An independent market risk team provides oversight of the effectiveness of market risk management processes and reports on the status of market risk management to the relevant governance committees.

Shareholder investment portfolio

Liberty recognises the importance of investing its capital base in a diversified portfolio of financial assets. In addition to this, Liberty has a strategic long-only exposure to a defined portion of the assets backing unit-linked policyholders' liabilities through the 90/10 fee exposure. The total market risk arising from these consolidated exposures is modelled and managed together as a single portfolio.

LibFin Investments determines the long-term asset mix of this investment portfolio by applying a strategic asset allocation methodology with a long-term investment horizon. The typical asset classes included in this portfolio are equity, fixed income, property and cash, in both local and foreign currency. Stanlib is mandated by LibFin Investments to manage the underlying assets in this portfolio.

Tactical asset allocation is performed by Stanlib within their mandate. This is similar to the way in which an asset manager would invest on behalf of a client with a long-term investment horizon.

On a through-the-cycle basis, this conservative, diversified portfolio was constructed to maximise after-tax returns for a level of risk consistent with Liberty's risk appetite.

In the short term, market movements will contribute to some earnings volatility. The diversified nature of the portfolio should, however, shield against significant earnings volatility.

Market risk exposure from management fee revenues, other than exposure to the 90/10 fee exposure, is not currently managed as part of the shareholder investment portfolio.

Asset liability management portfolio

Liberty has a number of market risk exposures arising from asset-liability mismatches to which it does not wish to be exposed on a long-term strategic basis. As a result, it has chosen to mitigate these risks through a dedicated ongoing hedging programme.

The decision to hedge these risks is based on the following factors:

- The assumption that these market risks would result in Liberty operating outside its risk appetite.
- The capital-intensive nature of these market risks, particularly in an economic capital framework, which over time could potentially reduce shareholders' returns on capital unless actively managed.
- Some of the market risks, for example those that arise from selling investment guarantees, are asymmetric in nature and could compromise Liberty's solvency under severe market conditions. This is due to current regulatory capital rules requiring available capital to be impaired for IFRS mark-to-market changes of such instruments.

The exposures which are included in this hedging programme include the following:

- Embedded derivatives provided in contracted policies, for example minimum investment return guarantees and guaranteed annuity options.
- The interest rate exposure from writing annuities and guaranteed capital bonds. However, credit risk on the backing assets is not hedged and serves as a diversified source of revenue for Liberty.

Negative rand reserves comprising future expected management fees and insurance profits are a negative liability on the IFRS statement of financial position. Negative rand reserves are calculated as the present value of future charges less the present value of future expenses and risk claims.

Insurance risk

Introduction

Insurance risk applies to long-term insurance operations housed in the Liberty business line and the short-term insurance operations of Standard Insurance Limited (SIL) housed in the Personal & Business Banking business line.

Long-term insurance

Overview

The management and staff in all insurance business units, as the first line of defence, are responsible for the day-to-day identification, management and monitoring of insurance risk. Management is also responsible for reporting any material insurance risks, risk events and issues identified to senior management through certain predefined escalation procedures.

The statutory actuaries and the Liberty CRO, as the second line of defence, provide independent oversight of compliance with Liberty's risk management policies and procedures and the effectiveness of the company's insurance risk management processes.

Risk identification, assessment and measurement

Insurance risks arise due to the uncertainty of the timing and amount of future cash flows under insurance contracts.

The timing is specifically influenced by assumptions on future mortality, longevity, morbidity, withdrawal and expenses made in the measurement of policyholders' liabilities and in product pricing. Deviations from assumptions will result in actual cash flows being different from those expected. As such, each assumption represents a source of uncertainty.

Experience investigations are conducted on all insurance risks over a number of years to identify trends in experience and identify the reasons for deviations in experience.

The results of these analyses are used as an input into the assumption setting process for expected future experience used in measuring policyholders' liabilities.

Insurance risks are assessed and reviewed against the business line's risk appetite. To reduce the level of risk, mitigating actions are developed for any insurance risks that fall outside management's assessment of risk appetite.

Risk management

The management of insurance risk is essentially the management of deviations of actual experience from the assumed best estimate of future experience, on which product pricing is based. On the published reporting basis, earnings are expected as a result of the release of margins that have been added to the best estimate assumptions. The risk is that these earnings are less than expected due to adverse actual experience.

The statutory actuaries provide oversight of Liberty's insurance risk in that they are required to:

- report at least annually on the financial soundness of the life companies within Liberty;
- set the policy for assumptions used to provide best estimates plus compulsory and discretionary margins, as described in the accounting policies;
- oversee the setting of these assumptions; and
- report on the actuarial soundness of premium rates in use for new business and the profitability of the business, taking into consideration the reasonable benefit expectations of policyholders and the associated insurance and market risks.

In addition, all new products and premium rates are approved through the product approval process after sign-off by the relevant statutory actuary.

Reinsurance is used to reduce exposures to some insurance risks.

Reporting

Each business unit taking on insurance risk prepares monthly and quarterly reports that contain information on insurance risk. The reports are presented to the relevant business unit executive committees for review.

With respect to insurance risks, the reports contain the results of any experience investigations conducted along with other indicators of actual experiences. These reports also raise any issues identified and track the effectiveness of any mitigation plans put in place.

Monthly reports are submitted by the business unit head of risk policy and oversight. On a quarterly basis, the chief executives of the business units assuming insurance risks report on the status of business unit insurance risk management to Liberty GROC.

Major insurance risks are incorporated into a report on Liberty's overall risk by the Liberty CRO, which is submitted to the Liberty group risk committee. Where it is deemed necessary, material insurance risk exposures are escalated to the Liberty board and Liberty GRCMC.

Long-term insurance risk sub-types

Policyholder behaviour risk

Policyholder behaviour risk is the risk of loss arising due to policyholders' actual behaviour being different from that expected.

The primary policyholder behaviour risk is persistency risk, which arises due to policyholders discontinuing or reducing contributions or withdrawing benefits prior to maturity of the contract. This behaviour results in a loss of future charges that are designed to recoup expenses and commission incurred early in the life of the contract, and to provide a return on capital.

A specialised customer management unit addresses persistency. This team has focused on implementing a broad programme of initiatives, including:

- quality and profitability of new business written;
- product flexibility and migration options when client circumstances change; and
- actuarial risk management through setting of appropriate discontinuance terms to discourage selective withdrawals.

Mortality and morbidity risk

Mortality risk is the risk of loss arising due to actual death rates on life assurance business being higher than expected. Morbidity risk is the risk of loss arising due to policyholders' health-related claims being higher than expected.

Liberty has the following processes and procedures in place to manage mortality and morbidity risk:

- Premium rates are differentiated by factors which historical experience has shown are significant determinants of mortality and morbidity claim experience:
  - For individuals, premiums are differentiated by product, age, gender, smoker status and proxies to socioeconomic class.
  - Group (corporate) scheme pricing is based on age, gender, industry class and average income. Past scheme experience is also used in the rating of large schemes.
- Certain life products include the right to review premiums after a certain time period. Group risk rates are generally reviewable annually.
- Underwriting at inception reduces the risk of selection by lives which are likely to exhibit worse experience than allowed for in the pricing. The level of underwriting depends on the size of the sum assured and the life being underwritten. For group risk business, underwriting limits depend on the scheme, and normally relate to the size of the scheme and the distribution of the sums assured.
- Underwriting may also include financial underwriting to determine insurable interest.
- Specific testing for HIV is carried out in all cases where the applications for risk cover exceed set limits.

- Allowance for Aids is made in product pricing and specific Aids provisions are held within policyholder liabilities in accordance with South African actuarial guidance to provide for deterioration in experience.
- The policy terms and conditions contain exclusions for non-standard and unpredictable risks that may result in severe financial loss. For example, there is a suicide exclusion on life policies, which applies to the sum assured for death within two years from the date of issue.
- The expertise of reinsurers is used in the rating of non-standard risks. The group typically reinsures part of the risk on large cases to a reinsurer and hence reduces the impact of a large claim on the group. Reinsurance also provides protection against catastrophes. Reinsurance limits are reviewed annually.
- The actual claims experience is monitored on a regular basis so that deteriorating experience can be identified in a timely manner. Product pricing and the measurement of the liabilities is changed if the deteriorating experience is expected to continue and cannot be mitigated. Detailed mortality and morbidity investigations are conducted on a biannual basis, but the general progression of mortality claims is reviewed monthly.
- For morbidity, experienced claims assessors determine the merits of the claim in relation to the policy terms and conditions. In the case of disability annuitants, claim management ensures the continued eligibility for monthly income and includes interventions that may result in the full or partial medical recovery of the claimant. The actual disability experience is highly dependent on the quality of the claim assessments.
- Liberty performs an annual review of the reinsurance cover in line with the stated risk appetite and reinsurance strategy.

Longevity risk

Longevity risk is the risk of loss arising due to annuitants living longer than expected. For life annuities, the loss arises as a result of Liberty's undertaking to make regular payments to policyholders for their remaining lives, and possibly to the policyholders' spouses for their remaining lives. The most significant risk on these liabilities is continued medical advances and improvement in social conditions that lead to longevity improvements being better than expected.

Liberty manages longevity risk by:

- Annually monitoring the actual longevity experience and identifying trends over time.
- Making allowance for future mortality improvements in the pricing of new business and the measurement of policyholders' liabilities. This allowance will be based on the trends identified in experience investigations and external data.

The eligibility of annuitants payable in South Africa with valid South African identity numbers is established by a monthly check of existence with the Department of Home Affairs. The eligibility of other annuitants is established with the requirement of proof of existence certificate reports on an annual basis.

Claims on disability income business also give rise to annuity payments which are contingent on the claimant's longevity and continued disablement. The claims management of the disability income business is covered under morbidity risk. Liberty views longevity risk as a strategic risk that is core to its business. This risk will be retained if it cannot be mitigated or transferred on risk-adjusted value enhancing terms. The economic capital requirement with respect to longevity risk is relatively small.

Expense risk

Expense risk is the risk of loss arising due to expenses incurred, in the administration of policies, being higher than expected. Allowance is made for expected future expenses in the measurement of policyholders' liabilities. These expected expenses are dependent on estimates of the number of in-force and new business policies. As a result, the risk of expense loss arises due to expenses increasing by more than expected and the number of in-force and new business policies being less than expected.

Liberty manages expense risk by:

- regularly monitoring actual expenses against the budgeted expenses;
- regularly monitoring new business volumes;
- managing persistency as described on the previous page; and
- implementing cost control measures.

Although expense risk does not give rise to large capital requirements, the management of expense risk is core to the business. The expenses that Liberty is expected to incur on policies are accounted for in product pricing. If the expenses expected to be incurred are considerably higher than those of insurers offering competing products, the ability of Liberty to sell business on a profitable basis will be restricted. This does not only have capital implications, but can also affect Liberty's ability to function as a going concern in the long term.

Sensitivity analysis

The table below provides a description of the sensitivities that are provided on insurance risk assumptions.

Insurance risk variables	Description of sensitivity
Assurance mortality	A level percentage change in the expected future mortality rates on assurance contracts.
Annuitant mortality	A level percentage change in the expected future mortality rates on annuity contracts.
Morbidity	A level percentage change in the expected future morbidity rates.
Withdrawal	A level percentage change in the policyholder withdrawal rates.
Expense per policy	A level percentage change in the expected maintenance costs.

Insurance risk sensitivities are applied as a proportional percentage change to the assumptions made measuring policyholders' liabilities. Over a reporting period, assets are expected to earn a return consistent with the long-term assumptions used in measuring policyholders' liabilities. The market sensitivities are applied to all assets held by Liberty, not just assets backing the policyholders' liabilities. Each sensitivity is applied in isolation with all other assumptions left unchanged.

Short-term insurance

SIL writes property insurance on a countrywide basis within South Africa. Property insurance indemnifies, subject to any limits or excesses, the policyholder against loss or damage to their own property and business interruption arising from this damage.

The principal risk is that the frequency and severity of claims are greater than expected. Insurance events are by their nature random, and the actual number and size of events during any one year may vary from those estimated using established statistical techniques.

The greatest likelihood of significant losses to the group arises from catastrophe events such as flood, storm or earthquake damage. Key concentrations of exposure to catastrophe events are:

- earthquakes in Gauteng;
- storms and fires in the Western Cape; and
- storms in KwaZulu-Natal.

Insurance risk is managed through underwriting limits, approval procedures for transactions that involve new products or that exceed limits, pricing guidelines and centralised management of reinsurance and monitoring of emerging issues.

The underwriting strategy seeks diversity to ensure a balanced portfolio and is based on a large portfolio of similar risks over a large geographical area. The underwriting strategy is set out in an annual business plan that stipulates the classes of business to be written, the territories in which business is to be written and the industry sectors to which the company is prepared to expose itself. This strategy is cascaded down to individual underwriters through detailed underwriting authorities that set out the limits that any one underwriter can write by line size, class of business, territory and industry in order to enforce appropriate risk selection within the portfolio.

The business reinsures a portion of the risks it underwrites in order to control its exposure to losses and protect capital resources.

Operational risk

Introduction

Operational risk exists in the natural course of business activity. It is not an objective to eliminate all exposure to operational risk as this would be neither commercially viable nor indeed possible. The group's approach to managing operational risk is to adopt fit-for-purpose operational risk practices that assist business line management in understanding their inherent risk and reducing their risk profile in line with the group's risk tolerance, while maximising their operational performance and efficiency.

Framework

The group has set minimum standards for managing operational risk through the group operational risk governance standard. This ensures a common approach. However, while all areas of the group are required to comply with the minimum standards, different business operations are at different levels of maturity in complying. Specific elements to note are:

- SBSA is adopting the quantitative components of the framework to the AMA quality for regulatory capital purposes.
- The group's remaining banking operations are planning a phased introduction of quantitative methodologies.
- The use of the AMA for regulatory capital purposes in other legal entities outside of South Africa is also dependent on the host regulator adopting Basel II.
- In addition to meeting the group minimum standards, the operational risk framework for the Insurance businesses is also subject to development as part of the implementation of SAM.

The framework sets out a structured and consistent approach for managing operational risk across the group. The risk management approach involves identifying, assessing, measuring, managing, mitigating, and monitoring the risks associated with operations, enabling comprehensive analysis and reporting of the group's operational risk profile.

The framework is based on the following core components:

- **Risk identification and control methodology:** Facilitates the identification of risks and the management thereof across each business and operational function. It comprises two key elements:
  - **Risk and control self assessments:** Each business unit and group enabling function is required to analyse its business activities and critical processes to identify the key operational risks to which it is exposed and assess the adequacy and effectiveness of its controls. For any area where management concludes that the level of residual risk is beyond an acceptable level, it is required to define action plans to reduce the level of risk. The assessments are facilitated, monitored and challenged by the relevant operational risk function aligned to each business unit and group enabling function.
  - **Indicators:** Based on the key risks and controls identified above, relevant indicators are used to monitor key business environment and internal control factors that may influence the group's operational risk profile. Each indicator has trigger thresholds to provide an early-warning indicator of potential risk exposures and/or a potential breakdown of controls.

- **Operational risk incidents:** All areas are required to report operational risk incidents to their relevant operational risk function. The definition of operational risk incidents includes not only events resulting in actual loss, but those resulting in non-financial impacts and near misses. This process is intended to enable the root cause of individual incidents, or trends of incidents, to be analysed and actions taken to reduce the exposure or to enhance controls. All incidents relating to the group's banking operations are consolidated within a central group database, which is also integrated with risk and control self assessments and indicators. The insurance operations are implementing an equivalent incident database using the same IT application as the banking operations.
- **External data:** The group analyses external industry incidents and loss data through a combination of publicly available data and the confidential loss data available from membership of the Operational Riskdata eXchange Association. This enhances the identification and assessment of risk exposures and provides additional data for scenario analysis purposes.
- **Scenarios:** Initially applying only to SBSA, scenarios are generated to represent the exposure to potentially severe operational risk losses. Internal subject matter experts develop estimates of potential impact and likelihood, which support the identification and assessment of key risks and controls, and provide data for quantitative modelling purposes.
- **Reporting:** Operational risk reports are produced on both a regular and an event-driven basis. The reports include a profile of the key risks to business units' achievement of their business objectives, relevant control issues and operational risk incidents. Specific reports are prepared on a regular basis for the relevant business unit committees and for the group operational risk committee (GORC), GROC and the GRCMC.

Managing operational risk

The primary responsibility for managing operational risk forms part of the day-to-day responsibilities of management and employees at all levels. Business line management is ultimately responsible for owning and managing risks resulting from their activities. The risks are managed where they arise.

The operational risk management function is independent from business line management and is part of the second line of defence. It is organised as follows:

- Individual teams are dedicated to each business unit and group enabling functions. These teams are based alongside their business areas and facilitate the business's adoption of the operational risk framework. As part of the second line of defence, they also monitor and challenge the business units' and group enabling functions' management of their operational risk profile.
- A central function, based at a group level, provides groupwide oversight and reporting. It is also responsible for developing and maintaining the operational risk management framework.
- The primary oversight body for operational risk is GORC which reports to GROC, the GRCMC and ultimately the board. GORC is chaired by the group head of operational risk and includes representation from group specialist functions and business units. GORC is also responsible for approving groupwide operational risk policies and methodologies.
- Specialist functions are responsible for oversight of specific components of operational risk including legal, global financial crime control, physical commodities, information security and business continuity management.
- The physical commodities specialist function is based in Johannesburg, London and Singapore and has been established to manage physical commodities transactions executed within the group. The key role of the team is to focus on the risks embedded in each trade, on a pre- and post-trade basis, to ensure they are understood, tracked, controlled and escalated if appropriate. The team works with approved third parties who play a key role in the process and the provision of related control functions such as ship brokers, insurers, warehouse providers and security companies.

Measuring operational risk

The group continues to calculate capital for its banking operations based on the standardised approach in accordance with the SARB approval granted in 2008.

During 2011, the group developed an internal model quantification capability. This is used to calculate capital requirements for SBSA under the AMA in parallel with the standardised approach calculations throughout 2012. The capital requirement derived from the model is principally driven by data generated from scenarios although, where available, internal loss data is also used.

This quantitative methodology is being extended to other group banking entities.

Operational risk in the group's insurance operations is measured in the OCAR calculation. The methodology used has been adopted from approaches used in the Quantitative Impact Studies under the European Union's Solvency II framework. The quantification methodology for operational risk capital is likely to change with the implementation of the new risk-based regulatory regime introduced by the FSB's SAM project in 2014.

Further to the regulatory requirements for measuring operational risk, Liberty also includes an allowance for operational risk in the calculation of its economic capital requirements.

Specialist operational risk types

The definition of operational risk is very broad. Operational risk contains specific sub-risks that are subject to management and oversight by dedicated specialist functions. These include:

- model risk;
- taxation risk;
- legal risk;
- compliance risk;
- environmental and social risk;
- business continuity management and resilience;
- information risk management;
- financial crime control; and
- occupational health and safety.

Model risk

Model risk arises from potential weaknesses in a model that is used in the measurement, pricing and management of risk. These weaknesses include incorrect assumptions, incomplete information, inaccurate implementation, inappropriate use, or inappropriate methodologies leading to incorrect conclusions by the user.

The group's approach to managing model risk is based on the following principles:

- independence of model development and model validation functions;
- model validation summaries that highlight model limitations and recommend improvements;
- controlled implementation of approved models into production systems;
- ongoing monitoring of model performance;
- review and governance of data that is used as model inputs; and
- governance through committees with appropriate board and executive management members, and through policies which deal with materiality, validation criteria and approval criteria.

Taxation risk

In terms of the group tax policy, the group fulfils its responsibilities under tax law in each jurisdiction in which it operates, whether in relation to compliance, planning or client service matters. Tax law includes all responsibilities which the group may have in relation to company taxes, personal taxes, capital gains taxes, indirect taxes and tax administration.

Compliance with this policy is aimed at ensuring that the group:

- pays neither more nor less tax than tax law requires;
- continually reviews its existing and planned operations in this regard; and
- ensures that where clients participate in group products, these clients are either aware of the probable tax implications or are advised to consult with independent professionals to assess these implications, or both.

The framework to achieve compliance with the group tax policy comprises four elements:

- identification and management of tax risk;
- human resources policies, including an optimal mix of staffing and outsourcing;
- skills development, including methods to maintain and improve managerial and technical competency; and
- communication of information affecting tax within the group.

Good corporate governance in the tax context requires that each of these elements is in place, as the absence of any one would seriously undermine the others.

Identifying and managing tax risk is the primary objective of the group tax function. This objective is achieved by applying a tax risk matrix approach, which measures the fulfilment of tax responsibilities against the specific requirements of each category of tax to which the group is exposed, in the context of the various types of activity the group conducts.

Legal risk

Legal risk is defined as exposure to the adverse consequences of non-compliance with legal or statutory responsibilities and/or inaccurately drafted contracts and their execution, as well as the absence of written agreements or inadequate agreements. This includes exposure to new laws as well as changes in interpretations of existing law by appropriate authorities. This applies to the full scope of group activities and may also include others acting on behalf of the group.

Legal risk arises where:

- the group's businesses or functions may not be conducted in accordance with applicable laws in the countries in which it operates;
- regulatory requirements are incorrectly applied;
- the group may be liable for damages to third parties; or
- contractual obligations may be enforced against the group in an adverse way, resulting from legal proceedings being instituted against it.

The following sub-categories of legal risk are recognised:

- contract non-conclusion risk;
- contract unenforceability risk;
- security interest failure risk;
- netting and set-off disallowance risk;
- adverse tax and regulatory treatment risk;
- contract breach, damages and fines risk;
- copyright loss or contravention risk;
- litigation risk; and
- anti-competitive behaviour risk.

Although the group has processes and controls in place to manage its legal risk, failure to manage risks effectively could result in legal proceedings impacting the group adversely, both financially and reputationally.

Compliance risk

Compliance risk is the risk of legal or regulatory sanctions, financial loss or damage to reputation that the group may suffer as a result of its failure to comply with laws, regulations, codes of conduct and standards of good practice that are applicable to its financial services activities.

Approach to compliance risk management

The group's approach to managing compliance risk is proactive and premised on internationally accepted principles of risk management. It is aligned with other group risk type methodologies. Group compliance supports business in complying with current and emerging regulatory developments, including money laundering and terrorist financing control, sanctions management, identifying and managing conflicts of interest and market abuse, treating customers fairly (TCF) and mitigating reputational risk.

Framework and governance

Compliance risk management is a core risk management activity overseen by the group chief compliance officer (GCCO). The GCCO has unrestricted access to the group chief executive and to the chairman of the GAC. The GCCO reports independently to the GAC, thereby ensuring the function's independence.

The group's compliance framework for banking operations is based on the principles of effective compliance risk management, as outlined in the Banks Act, and recommendations from international policy-making bodies.

The compliance structure for banking operations has both decentralised and centralised components. The decentralised business unit compliance functions are managed by heads of compliance who report to the GCCO. The central function incorporates areas of compliance expertise which include a monitoring function, a group conflicts control room, an exchange control compliance function, as well as a central and business unit anti-money laundering and terrorist financing control functions. The advisory services unit provides regulatory support to business. In addition, business is advised on the appropriateness of structures and products from a compliance perspective. Our business compliance model includes onsite dedicated compliance support to business supplemented by training.

A robust risk management reporting and escalation procedure requires both business unit and functional area compliance heads to report monthly and quarterly on the status of compliance risk management in the group.

Regulation and supervision

The group operates in a highly regulated industry across multiple jurisdictions. Supervision is undertaken by host country regulators and by various regulatory bodies in South Africa. The group's primary banking regulator is the Bank Supervision Department (BSD) of the SARB which supervises the group on a consolidated basis. Senior management engages with both the BSD and regulators in other jurisdictions on a regular basis.

South African financial services supervisory bodies include the FSB, which currently regulates the non-banking activities of the financial services industry in South Africa, the Financial Intelligence Centre, which oversees money laundering and terrorist financing control, and various regulatory bodies relating to financial markets. The National Credit Regulator is responsible for regulating the South African credit industry. Regarding TCF, there are various ombuds serving the interests of the public, including the Consumer Commission established under the South African Consumer Protection Act 68 of 2008.

International regulators of our larger operations include the UK FSA, the Hong Kong Monetary Authority, the Monetary Authority of Singapore and the Central Banks of Kenya, Nigeria and the Bank of Uganda.

The details of key legislation impacting the group are available in the group sustainability report which can be accessed on the group's website, **www.standardbank.com.**

Regulatory developments inform the group's business planning processes. During the first half of 2012, SBSA continued to focus on consumer protection and market conduct, and data privacy issues arising in part from initiatives introduced by the FSB, and in anticipation of upcoming legislation.

Liberty partners with banking operations of the group on regulatory issues of common concern. Engagement with legislators takes place primarily through participation in the various committees of the Association for Savings and Investment in South Africa, the trade association for the South African long-term insurance sector and the South African Insurance Association which represents the short-term insurance sector.

In the UK, reforms to the way that financial institutions will be regulated are under way and are expected to take effect by April 2013. Prudential supervision will be transferred to a new Prudential Regulation Authority which will be part of the Bank of England and the remaining functions of the FSA will be transferred to a new Financial Conduct Authority (FCA). In preparation for this reorganisation, the FSA has already split into two divisions to reflect the new PRA and FCA. Standard Bank Plc now has a responsible supervisor in each of the two divisions. The group continues to monitor developments which inform our compliance architecture where appropriate.

Similar reforms are being contemplated by regulators in South Africa.

Money laundering and terrorist financing control

Legislation across the group pertaining to money laundering and terrorist financing control imposes significant requirements in terms of customer identification, record keeping and training, as well as obligations to detect, prevent and report money laundering and terrorist financing. The group money laundering control office is committed to continually improving its control measures, including customer monitoring tools. Group minimum standards are implemented throughout the group, taking cognisance of jurisdictional requirements where these may be more stringent.

Sanctions management

The group actively manages the legal, regulatory, reputational and operational risks associated with doing business in jurisdictions that are subject to embargoes and/or sanctions imposed by relevant authorities. A group sanctions review committee (a sub-committee of GROC), supported by a sanctions desk, is jointly responsible for providing advice on all sanctions-related matters in a fluid sanctions regime. Systems are continuously enhanced to detect payments to sanctioned persons or entities, and processes have been designed to protect the group from participation in transactions that contravene the directives of sanctions enforcement agencies.

Compliance risk management training

Employees are made aware of their responsibilities in terms of current and emerging legislative, and regulatory requirements and developments through ongoing training and awareness initiatives. Statutory compliance training is conducted across the group. Employees, including senior management, are made aware of their legislative responsibilities either through e-learning, face-to-face interventions or through targeted awareness campaigns.

Environmental risk and social risk

Environmental and social risk assessment and management encompasses both the threats to global environmental systems which provide clean water, clean air and stable climate and risks to livelihoods, the health and rights of communities, and cultural heritage which might arise from business operations and lending activities. The group sustainability management unit develops the strategy, policy and management frameworks which enable the identification, management, monitoring and reporting of these issues. A new environmental and social risk policy was issued in 2011 and is being implemented across the group.

Environmental effects such as energy use, water use, waste production and carbon emissions resulting from our operations are recorded within an environmental management system, which is used both for improving efficiency and reporting to key stakeholders. Environmental efficiency targets have been set for SBSA, which is the group's largest subsidiary.

The group uses two approaches to screen and process projects, namely the Equator Principles for project finance loans and an internally developed appraisal system for other financial product types, including physical commodities which is a growth area for the group. Both tools are designed to identify the risks associated with a transaction and the customer's ability to manage environmental and social issues, as well as the risks associated with the transaction itself such as the nature and value of the loan, and the industry sector involved.

The group's material issues were grouped into six broad categories, in consultation with the group executive committee. These categories are:

- sustainable long-term financial performance;
- governance, regulation and stakeholder engagement;
- sustainable and responsible financial services;
- socioeconomic development;
- a positive and consistent employee experience; and
- the environment.

These issues form the basis of engagement on sustainability issues with the group executive committee and the board.

Equator Principles

The Equator Principles are a set of standards for managing social and environmental risks in project finance. As a signatory to the principles, the group must ensure that the customers to whom the group lends capital or provides advice evaluates and actively avoids, manages or mitigates the social and environmental impacts associated with the projects being financed. The principles apply to all new project finance loans of USD10 million or more, across all industry sectors. The group has fully integrated this performance assessment tool into the credit approval process and transaction life cycle of our project financing deals.

Business continuity management and resilience

Business continuity management is defined as a holistic management process that identifies potential impacts that threaten the group and provides a basis for planning in mitigation to these operational impacts. It further provides a framework for building resilience and the capability for an effective response that safeguards the interests of key stakeholders, reputation, brand and value-creating activities.

The group has business resiliency and continuity plans in place to ensure its ability to operate on an ongoing basis and limit losses in the event of severe business disruptions.

Crisis management is based on a command and control process for managing the business through a crisis to full recovery. These processes may also be deployed to manage non-operational crises, including business crises, at the discretion of senior management.

Business continuity management is an integral component of the group's risk management framework. The group's business continuity strategy is structured to ensure strong central monitoring and reporting and decentralised execution, and is supported by an entrenched governance process. The group continues to ensure that business continuity is managed in an effective manner through a framework of policies, procedures and tools to identify, assess, monitor, mitigate, control and report such risks.

Contingency and recovery plans for core services, key systems and priority business activities have been developed and are revisited as part of existing management processes to ensure that continuity strategies and plans remain relevant.

Information risk management

Information risk is defined as the risk of accidental or intentional unauthorised use, modification, disclosure or destruction of the group's information resources, which compromises confidentiality, integrity or availability. Information risk management deals with all aspects of information in its physical and electronic forms. It focuses on the creation, use, transmission, storage, disposal and destruction of information.

Information risk management is responsible for establishing an information security management system inclusive of an information risk management framework, and promotes consistent and sound information risk management policies and practices across the group.

Information risk policies and standards have been primarily developed to provide management direction and support for information risk in accordance with industry practice, business requirements and relevant laws and regulations. The adoption of standards and guidelines is directed by business requirements and practical implications.

The execution of these policies and standards is driven through a network of information security officers embedded within the business lines. This network is functionally overseen by the group chief information security officer.

Access to information

The Promotion of Access to Information Act 2 of 2000 was passed to give effect to the constitutional right of access to information that is held by a private or public body and that is required for the exercise or protection of any rights.

From January 2012 to date, the group has processed 12 (12 months ended 31 December 2011: 21) requests for access to information, of which 11 were granted and one denied. The reason for the denial of access was that the owner of personal information declined to give consent for access to be given to the requestor.

Financial crime control

The group's values enshrine honesty, integrity and ethics. The group will not condone any instance of financial crime or corruption. Where these instances arise, the group takes timely and appropriate remedial action.

Financial crime control is defined as the prevention, detection and response to all financial crime in order to mitigate economic loss, reputational risk and regulatory sanction.

Financial crime includes fraud, money laundering, violent crime and misconduct by employees, customers, suppliers, business partners, stakeholders and third parties. The group financial crime control unit is mandated by the GAC to provide financial crime control capabilities which support the group in minimising the overall impact of financial crime. This ensures the safety of our people and assets as well as trust from our stakeholders. The GAC is provided with a single holistic view of financial crime prevention, detection and response as well as emerging financial crime threats across all geographies.

The group financial crime control unit reports to the group head of governance and assurance and the GAC. The group head of financial crime control has direct access to executives and the chairperson of the GAC, thereby supporting the function's independence.

During 2012, governance policies dealing with matters relating to financial crime were updated to provide a more comprehensive and inclusive approach to financial crime control across all geographies.

Liberty's financial crime control has aligned its structure and governance to that of the group.

Occupational health and safety

The health and safety of all employees remains a priority. Training of health and safety officers and employee awareness is an ongoing endeavour. Guidelines which were developed and implemented during 2011 have contributed to the facilitation of health and safety initiatives. Such initiatives to reduce the frequency of occupational incidents are already proving successful.

Business risk

Business risk is the risk of loss, usually from inflexible cost structures or inefficiencies, due to adverse operating conditions caused by market-driven pressures such as decreased demand, increased competition or cost increases, or caused at group level through factors such as a poor choice of strategy, reputational damage or the decision to absorb costs or losses to preserve reputation. Business risk is governed by the group executive committee which is ultimately responsible for managing the costs and revenues of the group.

Business risk includes strategic risk and post-retirement obligation risk.

The group mitigates business risk in a number of ways, including:

- Extensive due diligence during the investment appraisal process, in particular for new acquisitions.
- All three business lines have a new product process through which the risks and mitigating controls for new/amended products and services are tabled and discussed.
- Stakeholder management to ensure favourable outcomes from external factors beyond the group's control.
- Consistently monitoring the profitability of product lines and customer segments.
- Maintaining tight control over the cost base of the group, including the management of its cost-to-income ratio. This allows for early intervention and management action to reduce costs where necessary.
- Being alert and responsive to changes in market forces, exploiting potentially favourable changes and managing the downside risk due to unfavourable changes.
- As part of the group's budget and revised estimate processes, there is a strong focus on achieving headline earnings growth while containing cost growth. In addition, contingency plans are built into the budget that allow for costs to be significantly reduced in the event that expected revenue generation does not materialise.
- The group continually aims to increase the ratio of variable costs to fixed costs, allowing for more flexibility to proactively reduce costs during economic downturn conditions.

Strategic risk

Strategic risk is the risk that the group's future business plans and strategies may be inadequate to prevent financial loss or protect the group's competitive position and shareholder returns.

The group's business plans and strategies are discussed and debated by appropriately qualified and experienced members of management and non-executive board members.

Post-retirement obligation risk

The group operates both defined contribution plans and defined benefit plans, with the majority of its employees participating in defined contribution plans.

Post-retirement obligation risk is the risk to the group's earnings that arises from the requirement to contribute as an employer to an under-funded defined benefit plan.

The risk arises due to either an increase in the estimated value of pension or medical liabilities or a decline in the market value of the fund's assets or reduction in their investment returns. The group maintains a number of defined benefit pension and medical aid provider schemes for past and certain current employees, collectively termed post-retirement obligations.

Reputational risk

Safeguarding the group's reputation is of paramount importance.

Each business line, legal entity or support function executive is responsible for identifying, assessing and determining all reputational risks that may arise within their respective areas of business. Risks to reputation can be evaluated by considering the likelihood of the risk occurring and the likely impact. The impact of such risks is considered alongside financial or other impacts.

Matters identified as a reputational risk to the group will be reported to the group head of governance and assurance who, if required, will escalate these matters to GROC and/or the group executive committee.

Should a risk event occur, the group's crisis management processes are designed to minimise the reputational impact of the event. Crisis management teams are in place both at executive and business line level to ensure the effective management of any such events. This includes ensuring that the group's perspective is fairly represented in the media.

Terms and conditions of capital instruments issued

Share capital

	June 2012 Rm	December 2011 Rm
Authorised		
2 000 000 000 (December 2011: 2 000 000 000) ordinary shares of 10 cents each	**200**	200
8 000 000 (December 2011: 8 000 000) 6,5% first cumulative preference shares of R1 each	**8**	8
1 000 000 000 (December 2011: 1 000 000 000) non-redeemable, non-cumulative, non-participating preference shares of 1 cent each	**10**	10
	218	218
Issued		
Ordinary share capital		
1 592 595 617 (December 2011: 1 588 747 130) ordinary shares of 10 cents each[1]	**159**	159
Ordinary share premium	**17 843**	17 576
A premium of R267 million (December 2011: R213 million) was raised on the allotment and issue during the year of 3 848 487 ordinary shares (December 2011: 3 709 809).		
Preference share capital and premium	**5 503**	5 503
8 000 000 (December 2011: 8 000 000) 6,5% first cumulative preference shares of R1 each – first preference shares	**8**	8
52 982 248 (December 2011: 52 982 248) non-redeemable, non-cumulative, non-participating preference shares of 1 cent each – second preference shares	**1**	1
Preference share premium – non-redeemable, non-cumulative, non-participating preference shares – second preference shares	**5 494**	5 494
The non-redeemable, non-cumulative, non-participating preference shares are entitled to an annual dividend, if declared, payable in two semi-annual instalments of not less than 70% of the prime interest rate multiplied by the subscription price of R100 per share.		
All classes of preference shares in issue are non-redeemable.		
	23 505	23 238

[1]*Prepared on a normalised basis. For further explanation, refer to pages 152 – 155 in book II of the group's 2011 annual integrated report.*

Subordinated debt

	Redeemable/ repayable date	Callable date	Notional value[1] LCm	Carrying value[1] 1H12 Rm	Notional value[1] 1H12 Rm	Carrying value[1] 1H11 Rm	Notional value[1] 1H11 Rm	Carrying value[1] FY11 Rm	Notional value[1] FY11 Rm
Subordinated bonds[2] – banking activities									
SBSA				19 456	18 398	15 771	15 398	16 095	15 178
SBK 10 (Tier III)	19 Nov 2012		ZAR 300	303	300	302	300	302	300
SBK 5	17 Nov 2016	17 Nov 2011	ZAR 2 000			2 028	2 000		
USA private placement	31 Jul 2017	31 Jul 2012	USD 355	2 978	2 548	2 435	2 548	2 925	2 548
SBK 8	10 Apr 2018	10 Apr 2013	ZAR 1 500	1 528	1 500	1 528	1 500	1 528	1 500
SBKI 11	9 Apr 2019	10 Apr 2014	ZAR 1 800	2 270	1 800	2 138	1 800	2 206	1 800
SBK 7	24 May 2020	24 May 2015	ZAR 3 000	3 032	3 000	3 034	3 000	3 033	3 000
SBK 12	24 Nov 2021	24 Nov 2016	ZAR 1 600	1 618	1 600	1 618	1 600	1 618	1 600
SBK 13	24 Nov 2021	24 Nov 2016	ZAR 1 150	1 159	1 150	1 159	1 150	1 159	1 150
SBK 15	23 Jan 2022	23 Jan 2017	ZAR 1 220	1 238	1 220				
SBK 14	1 Dec 2022	1 Dec 2017	ZAR 1 780	1 794	1 780			1 795	1 780
SBK 9	10 Apr 2023	10 Apr 2018	ZAR 1 500	1 529	1 500	1 529	1 500	1 529	1 500
SBK 16	15 Nov 2023	15 Mar 2018	ZAR 2 000	2 007	2 000				
Standard Bank Swaziland	2019 – 2020	2014 – 2015	E 80	80	80	80	80	80	80
Standard Bank Namibia	20 Nov 2016	19 Nov 2011	NAD 150			150	150		
Stanbic Botswana	2018 – 2022	2013 – 2017	BWP 280	302	302	208	208	216	216
Standard Bank Mozambique	29 Jun 2017	29 Jun 2012	MT 260	76	76	61	61	78	78
CfC Stanbic Bank (Kenya)	2011 – 2016		KES 5600	507	507	425	425	514	514
Stanbic Bank Uganda	10 Aug 2016	10 Aug 2014	UGX 30 000	100	100	83	82	98	98
Standard International Holdings				6 118	5 459	4 858	4 689	5 913	5 395
	27 Jul 2016	27 July 2016	USD 142	1 242	1 160	1 033	961	1 189	1 147
	2 Dec 2019		USD 500	4 665	4 094	3 485	3 390	4 522	4 046
	3 Dec 2019	3 Dec 2014	USD 25	211	205	170	169	202	202
Tier III	3 Dec 2011		USD 25			170	169		
Subordinated bonds issued to group companies				(675)	(667)	(621)	(621)	(666)	(648)
Total subordinated bonds – banking activities				25 964	24 255	21 015	20 472	22 328	20 911
Total subordinated loans – banking activities[3]				341	341	404	404	372	372
Total subordinated debt – banking activities				26 305	24 596	21 419	20 876	22 700	21 283
Liberty (qualifying as regulatory insurance capital)	12 Sep 2017	12 Sep 2012	ZAR 2 000	2 054	2 000	2 054	2 000	2 054	2 000
Total subordinated debt				28 359	26 596	23 473	22 876	24 754	23 283

[1] *The difference between the carrying and notional value represents accrued interest together with the unamortised fair value adjustments relating to bonds hedged for interest rate risk.*
[2] *Tier II, unless otherwise stated.*
[3] *Subordinated loans in Ghana, Mauritius, RDC (DR Congo), and Kenya.*

Definitions

Capital adequacy ratio (%)	Capital as a percentage of risk-weighted assets.
Cost-to-income ratio (%)	Operating expenses as a percentage of total income including share of profit from associates and joint ventures.
Dividend cover (times)	Headline earnings per share divided by dividend per share.
Gross specific impairment coverage ratio (%)	Specific credit impairments as a percentage of specifically impaired loans.
Headline earnings (Rm)	Earnings attributable to ordinary shareholders excluding goodwill gain or impairment, capital profits and losses, and recycled profits or losses on available-for-sale financial instruments.
International Financial Reporting Standards (IFRS)	International Financial Reporting Standards issued by the International Accounting Standards Board.
Loss given default (LGD)	Amount of counterparty's obligation to the group that is not expected to be recovered after default and is expressed as a percentage of the EAD.
Net interest margin (%)	Net interest income as a percentage of daily and monthly average total assets, excluding trading derivative assets.
Non-interest revenue to total income (%)	Non-interest revenue as a percentage of total income.
Portfolio credit impairments (Rm)	Impairment for latent losses inherent in groups of loans and advances that have not yet been specifically impaired.
Probability of default (PD)	Probability of a counterparty not making full and timely repayment of credit obligations over a specific time horizon.
Return on equity (%)	Headline earnings as a percentage of monthly average ordinary shareholders' funds.
Risk-weighted assets (Rm)	Determined by applying prescribed risk weightings to on- and off-balance sheet exposures according to the relative credit risk of the counterparty.
Shares in issue (number)	Number of ordinary shares in issue as listed on the exchange operated by the JSE Limited.
Specific credit impairments (Rm)	Impairment for specific identified credit losses on loans and advances, net of the present value of estimated recoveries.
Reinsurance	Insurance or investment risk that is ceded to another insurer in return for premiums. The ultimate obligation to the policyholder remains with the entity who issued the original insurance contract.
Risk appetite	An expression of the amount, type and tenor of risk the group is generally willing to take in pursuit of its financial and strategic objectives, reflecting its capacity to sustain losses and continue to meet its obligations as they fall due, under a range of stress conditions.
Risk capacity	The maximum amount of risk the group is able to support within its available financial resources.
Risk profile	The amount, type and tenor of risk the group currently holds.
Risk tendency	The forward-looking view of how the group's risk profile may change as a result of portfolio effects and/or changes in economic conditions. The changes in economic conditions may be articulated either in the form of formally approved macroeconomic stress scenarios as part of the budgeting process, the quarterly scenario analysis process or other stress scenarios as required.
Risk tolerance	The maximum amount, type or tenor of risk the group is prepared to take above risk appetite for short periods of time on the understanding that: • management action is taken to get back within risk appetite; and • the group does not breach the buffer between risk tolerance and risk capacity.
Special purpose entity (SPE)	An entity created to accomplish a narrow and well-defined objective.
Tutuwa	Tutuwa is the group's black economic empowerment ownership initiative entered into in terms of the Financial Sector Charter.

Acronyms and abbreviations

AIRB	Advanced internal ratings-based
ALCO	Asset and liability committee
AMA	Advanced measurement approach
Banks Act	Banks Act 94 of 1990
Basel	Basel Capital Accord
board	Board of directors
BSD	Bank Supervision Department
BWP	Botswana pula
CAR	Capital adequacy requirement
CoE	Cost of equity
CR	Country risk grade
CRO	Chief risk officer
E	Swazi emalangeni
EAD	Exposure at default
FCA	Financial Conduct Authority
FIRB	Foundation internal ratings-based
FSA	Financial Services Authority
FSB	Financial Services Board
GAC	Group audit committee
GBP	British pound Sterling
GCCO	Group chief compliance officer
GIA	Group internal audit
GORC	Group operational risk committee
GRCMC	Group risk and capital management committee
GROC	Group risk oversight committee
IAS	International Accounting Standards
ICAAP	Internal capital adequacy assessment process
IFRS	International Financial Reporting Standards
IRB	Internal ratings-based
IT	Information technology
KES	Kenyan shilling
LCm	Millions of local currency
LCR	Liquidity coverage ratio
LGD	Loss given default
LibFin	Liberty Financial Solutions
Liberty	Liberty Holdings Limited and its subsidiaries
Long-term Insurance Act	South African Long-term Insurance Act 52 of 1998
MT	Mozambican metical
NAD	Namibian dollar
NSFR	Net stable funding ratio
OCAR	Ordinary capital adequacy requirement
OTC	Over-the-counter
PD	Probability of default
pillar 3	Basel II pillar 3
PRA	Prudential Regulation Authority
QRRE	Qualifying revolving retail exposures
R	South African rand
RAPM	Risk-adjusted performance measurement
Rbn	Billions of rand
Rm	Millions of rand
SAM	Solvency assessment and measurement
SARB	South African Reserve Bank
SBSA	The Standard Bank of South Africa Limited
Short-term Insurance Act	South African Short-term Insurance Act 53 of 1998
SIL	Standard Insurance Limited
SPE	Special purpose entity
TCAR	Termination capital adequacy requirement
TCF	Treating customers fairly
TCM	Treasury and capital management
the group	Standard Bank Group
Tier I	Primary capital
Tier II	Secondary capital
Tier III	Tertiary capital
Tutuwa	Black economic empowerment ownership initiative
UGX	Ugandan shilling
UK	United Kingdom
USD	United States dollar
VaR	Value-at-risk
VAF	Vehicle and asset finance
ZAR	South African rand

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