Risk management report

Standard Bank

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for the six months ended 30 June 2008

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Introduction

Overview

Every bank has to hold a minimum level of capital to ensure that it is always in a position to repay customers' deposits and protect the long-term sustainability of the bank. The amount of capital held is based on the level of risk the bank accepts in its daily banking activities. Banks in South Africa adopted the new Basel II Capital Adequacy Framework (Basel II) on 1 January 2008. Basel II is a global regulatory standard which ensures consistency in the way banks calculate their capital requirements.

Basel II incentivises banks to improve their risk management processes through lower capital requirements. Its focus is mainly on improving the quantification and management of credit, market and operational risks, as well as the comprehensive assessment and management of all material risks, enhancements to the supervisory review process and more extensive risk disclosure.

Reporting requirements

This report meets the ongoing reporting requirements for semi-annual disclosure in terms of Basel II pillar 3 (pillar 3).

Pillar 3 disclosures, as set out in regulation 43 of the revised banking regulations (regulations), have been internally verified according to the group's governance processes. These disclosures are not subject to external verification and as such have not been audited although key aspects have been endorsed by internal audit.

The Basel II approaches adopted by the Standard Bank Group (group) on 1 January 2008 are summarised below.

Credit risk

The group obtained approval from the South African Reserve Bank (SARB or regulator) to adopt the advanced internal ratings based (AIRB) approach for all but certain insignificant credit portfolios in South Africa. Certain portfolios across the group that initially adopted the standardised and internal ratings based (IRB) approaches are being migrated to the AIRB approach over a three-year period.

Operational risk

The group obtained approval from the regulator to adopt the standardised approach (TSA) for operational risk. We continue to enhance the existing operational risk methodology and processes by investigating and adopting advanced techniques that are considered leading practice and fit for purpose.

Market risk

The group obtained approval from the South African regulator to adopt the internal model approach for the majority of trading desks. The remaining desks are currently being migrated to this approach.

Terms and definitions

A glossary of key risk terms and definitions is included at the end of this document.

Basel II exposures and financial accounting results

The group's consolidated financial statements are prepared in accordance with, and comply with, International Financial Reporting Standards (IFRS) as issued by the International Accounting Standards Board (IASB). Although they have different purposes, pillar 3 and IFRS share the overall objective of increasing transparency while allowing users of market information, including regulators, to be more informed in their decision making.

IFRS 7 *Financial Instruments: Disclosures* (IFRS 7) and pillar 3 serve different purposes. IFRS 7 deals with disclosures of financial instruments and is applied by all entities. Pillar 3 disclosures, which aim to enable an assessment of an institution's capital adequacy, intends to complement the minimum capital requirements and supervisory review process of Basel II. While the accounting and regulatory disclosure requirements differ in scope and objectives, they are not considered to be conflicting or inconsistent with one another. This is because all risk and financial disclosures come from one centralised set of reconciled data.

A subtle difference is that the analysis of credit risk exposures under IFRS 7 is presented by class of financial instrument while pillar 3 requires classification by exposure class. Classes for IFRS 7 purposes are determined by taking into account the nature of the information to be disclosed, as well as the characteristics of the underlying financial instruments. Basel II asset classes, under the 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 asset classes thus provide the dimensions for regulatory reporting. The principles in IFRS 7 complement the principles for recognising, measuring and presenting financial assets and financial liabilities in IAS 32 *Financial Instruments: Presentation* and IAS 39 *Financial Instruments: Recognition and Measurement*.

Fair value instruments

IAS 39 permits any financial asset or financial liability, on meeting specific criteria, to be accounted for at fair value with all changes in fair value being recognised in profit or loss. This is commonly referred to as the "fair value option". For liabilities that are designated in terms of the fair value option, any deterioration in the credit risk of the issuer will result in a decrease in fair value and a resultant profit which would ultimately be recognised within equity.

IFRS 7 requires the change in fair value attributable to changes in credit risk on such liabilities, both for the period and cumulative to date, to be disclosed in the financial statements.

From a pillar 3 perspective, recognising gains as a result of deterioration in creditworthiness would undermine the quality of capital measures and performance ratios. Fair value gains and losses attributable to credit risk are therefore excluded from the calculation of 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 assets classified in this manner are required to be measured at fair value with all unrealised gains and losses, with the exception of impairment losses, dividends and interest income, to be recognised in equity. Banking supervisors agree that the resulting unrealised profits and losses 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 the determination of 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. Objective evidence of impairment would result from one or more events that have occurred after the initial recognition of the asset (a loss event), which has an impact on the estimated future cash flows of the financial asset or group of financial assets and which can be reliably measured (incurred loss approach).

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

While IFRS clearly states that it is based on an incurred loss approach, Basel II focuses on expected and unexpected losses. Basel II's objective is to ensure that a bank has sufficient impairments to support its expected losses over the course of the next twelve months and capital to support any unexpected credit losses. Basel II works on statistical modelling of expected losses while 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 7 relates to timing. Basel II defines default as the obligor being 90 days past due date on the obligation. 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 balance sheet date. Basel II effectively results in the impairment of future losses while IFRS recognises impairments for incurred losses only.

Banks will compare the IRB measurement of expected losses with the total amount of impairments they have made, including portfolio and specific impairments. For any individual bank, this comparison will produce a "shortfall" if the expected loss amount exceeds total impairments, or an "excess" if total impairments exceed the expected loss amount.

Shortfall amounts are deducted from capital in the following manner: 50% from Tier I capital and 50% from Tier II capital. Excess impairments form part of Tier II capital within specified limits, similar to the current treatment of portfolio impairments.

Risk management

Overview

Effective risk management is fundamental to the business activities of the group. We remain committed to increasing shareholder value by developing and growing business that is consistent with our agreed risk appetite. We seek to achieve an appropriate balance between risk and reward in our business, and continue to build and enhance the risk management capabilities needed to deliver our growth plans in a controlled way.

Risk management is at the core of the management and operating structures of the group. We seek to limit adverse variations in earnings and equity by managing the balance sheet and capital within agreed levels of risk appetite. Managing and controlling risk, in particular avoiding undue concentrations of exposure, limiting potential losses from stress events and restricting significant positions in less quantifiable risk areas are essential elements of the group's risk management and control framework. This framework ultimately leads to the ongoing success of the group's operations. Responsibility and accountability for risk management resides at all levels within the group, from the executive through the organisation to each business manager and risk specialist.

Risk governance

Governance structure

The group's activities are complex and diverse. Most of its operations are concentrated in South Africa and other emerging markets. It is therefore important that there is strong independent oversight at all levels across the group.

Through various committees, the group's risk governance structure (on the following page) enables executive management and the board to evaluate the risks faced by the group and the effectiveness with which these risks are managed. The group audit committee (GAC) reviews the group's financial position and makes recommendations to the board on all financial matters including assessing the integrity and

effectiveness of accounting, financial, compliance and other control systems. It also ensures effective communication between the internal auditors, external auditors, the board, management and regulators. The group risk and capital management committee (GRCMC) and, in respect of credit risk and country risk, the group credit committee (GCC) provide independent and objective oversight of risk and capital management across the group.

The committees achieve this by:

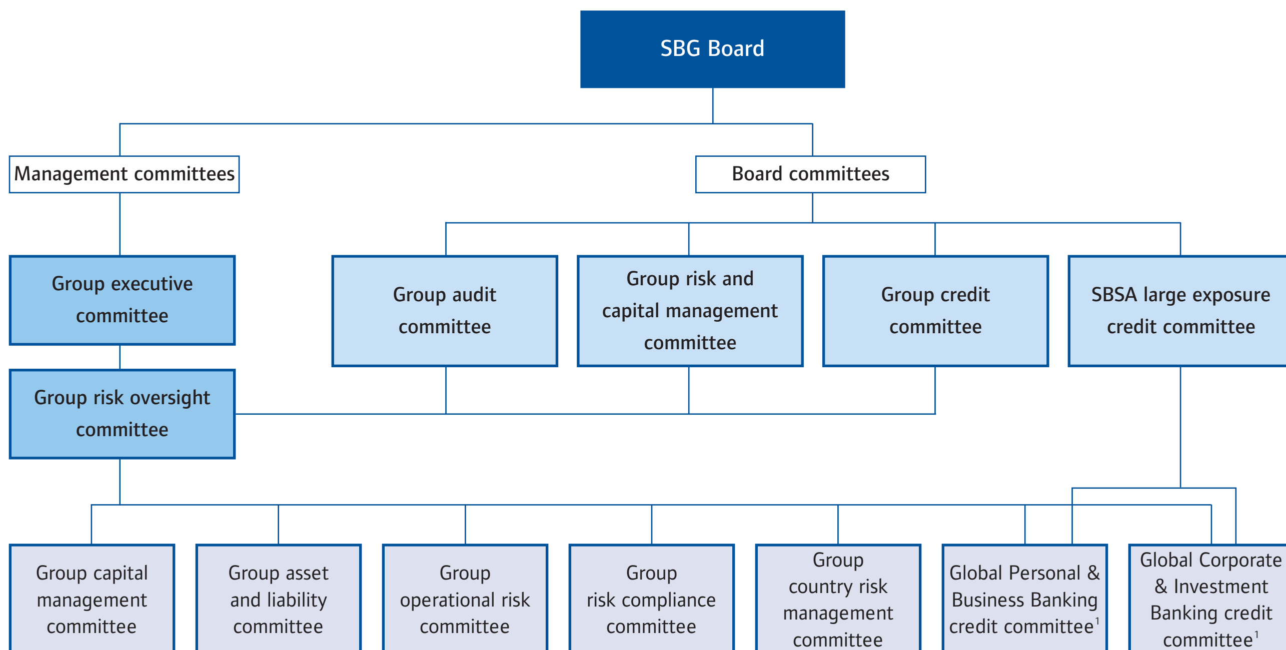
- reviewing and assessing the adequacy and effectiveness of the group's risk management control framework;
- ensuring that risk and capital management standards and policies are fit for purpose and effective in operation; and
- determining and monitoring the risk appetite of the group for each risk type.

The large exposures credit committee approves all South African exposures exceeding 10% of capital and reserves. These exposures are ratified by the SBSA board.

Group executive management oversight for all risks has been delegated by the group executive committee to the group risk oversight committee (GROC). Across the group, GROC considers and recommends for approval by the relevant board committees, the levels of risk appetite and tolerance, risk governance standards for each risk type, actions on the risk profile, risk strategy and key risk controls, capital planning and capital funding activities, utilisation of risk appetite, as well as usage and allocation of economic capital parameters for modelling, stress testing and scenario analysis.

The group risk management subcommittees set out in the table below report directly to GROC and through GROC to GRCMC, GCC and GAC.

SBG risk governance structure



[1]*The board has delegated authority to these committees to act as nominated "designated committees" in respect of the regulations*

Introduction

Organisational structure

The group's approach to risk management is based on well established governance processes and relies on both individual responsibility and collective oversight, supported by comprehensive reporting. This approach balances strong oversight at group level with independent risk management structures within the business units.

Business unit chief executive officers are responsible for the management of risk within their business. As such, they are responsible for ensuring that risk management frameworks are adequate in design, effective in operation and meet minimum group standards.

Business unit chief executive officers are supported by chief risk officers and chief financial officers. To ensure independence and the appropriate segregation of responsibilities between business and risk, chief risk officers and chief credit officers report operationally to chief executive officers and functionally to the group chief risk officer and the group chief credit officer, respectively.

Stress testing

Stress testing serves as a diagnostic and forward looking tool to improve the group's understanding of its risk profile under potential macroeconomic and event-based scenarios.

Credit risk stress tests involve single factor sensitivity shocks that evaluate changes in parameter distribution during a stress scenario, and macroeconomic stress tests of varying levels of severity conducted at asset class, portfolio, legal entity and group levels. Management reviews the outcome of stress tests and selects appropriate actions to minimise and manage the risk to the group. Residual risk is evaluated against group risk appetite and informs key business processes on a forward looking basis.

Risk categories

The principal risks to which the group is exposed are defined as follows:

Credit risk

Credit risk is the risk of loss to the group as a result of the failure by a customer or counterparty to meet contractual obligations to the group.

Country and cross-border risk

Country risk is the risk of loss arising when political or economic conditions or events in a particular country reduce the ability of counterparties in that country to meet their financial obligations to the group.

Cross-border risk is the risk that actions taken by a government may restrict the transfer and convertibility of funds of local currency into non-local currency, thereby impacting the ability to obtain payment from counterparties on their financial obligations to the group.

Market risk

Market risk is defined as the risk of a change in the actual or effective market value or earnings of a portfolio of financial instruments caused by adverse 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 the above.

Liquidity risk

Liquidity risk arises when the group is unable to meet its payment obligations when they are due. This may be caused by the group's inability to liquidate assets or to obtain funding to meet its liquidity needs.

Operational risk

Operational risk is defined as the risk of loss resulting from inadequate or failed internal processes, people and systems or from external events. This includes information risk and legal risk but excludes reputational risk and strategic risk.

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 by group specific causes such as a poor choice of strategy, reputational damage or the decision to absorb costs or losses to preserve reputation.

Scope of application

Basel II consolidation

Pillar 3 disclosures as set out in the regulations apply to the group and disclosures related to individual banks within the group are not required. Basel II information has been disclosed in accordance with the consolidation approaches described below:

Consolidated

Includes the full risk-weighted exposure of subsidiaries in the group consolidated risk-weighted exposures e.g. banking and financial entities.

Proportionately consolidated

Includes the pro rata portion of the risk-weighted exposure of the entity in the group consolidated risk-weighted exposures e.g. banking and financial entities where joint control exists.

Deduction

The respective investment in the entity is deducted from the consolidated capital and reserve funds, and the related assets are removed from the consolidated balance sheet e.g. insurance and commercial entities or financial entities where no control exists.

	Number of entities				
Consolidation approach	Banks	Securities firms	Financial entities	Commercial entities	Insurance entities
Consolidated	24	10	83		
Proportionately consolidated			8		
Deduction			6	117	8
Total	**24**	**10**	**97**	**117**	**8**

IFRS consolidation

All subsidiaries of the group are consolidated for IFRS accounting purposes. In terms of IFRS, where a parent company has the power to govern the financial and operating policies of an entity so as to obtain benefits from its activities, it is consolidated as a subsidiary.

Those entities over which the parent has either significant influence or joint control are equity accounted.

In summary

According to IFRS, a parent company must consolidate all entities under its control and equity account or proportionately consolidate jointly controlled entities. From a Basel perspective, consolidation embraces only those companies of a group – subsidiaries, joint ventures and voluntarily consolidated minority-owned entities – that conduct banking and other financial operations, including credit institutions, securities firms and financial enterprises etc.

Capital

Capital composition

The group is subject to regulation and supervision by the SARB and other international regulators. The 24 banks in the group are required to meet minimum capital requirements in the countries in which they operate. Banking regulations are generally based on the guidelines developed by the Basel Committee under the auspices of the Bank for International Settlements. The group's consolidated capital adequacy is required to comply with the regulations.

The capital adequacy ratio, which reflects the capital strength of an entity compared to the minimum regulatory requirement, is calculated by dividing capital by risk-weighted assets.

Capital is split into three tiers. Tier I (primary capital) represents the permanent forms of capital such as share capital, share premium and retained earnings. Perpetual, non-cumulative preference shares also qualify as Tier I capital. Tier II (secondary capital) includes medium- to long-term subordinated debt, impairments for performing loans and revaluation reserves. Tier III (tertiary capital) represents short-dated subordinated debt instruments to support a bank's trading activities.

Risk-weighted assets are determined on a granular basis by using risk weights calculated from internally derived risk parameters. Both on- and off-balance sheet exposures are ranked according to relative risk and included in the overall credit risk-weighted assets of the group. Notional risk-weighted assets for the market and operational risk components are determined using the risk drivers that impact on regulatory capital as inputs.

In March 2008 the group issued 152,5 million ordinary shares to Industrial and Commercial Bank of China (ICBC) at R104,58 per share. The value of capital raised amounted to R15,9 billion.

The group's total capital adequacy ratio increased to 13,9% at June 2008 from 11,3% at December 2007, and Tier I capital adequacy increased to 11,2% from 8,5% over the same period. The capital raised from the ICBC transaction, together with retained earnings growth, resulted in the capital base growing by 28,6%, substantially above the growth in risk-weighted assets of 4,6%.

Capital adequacy ratios

The table below shows the group's capital adequacy ratios as at June 2008 and December 2007.

	June 2008 %	December 2007 %
Total capital adequacy ratio	**13,9**	11,3
Tier I capital adequacy ratio	**11,2**	8,5

Capital transferability

Restrictions on the transfer of funds and regulatory capital within the group are limited to those entities that operate in countries with exchange controls. The transfer of funds and regulatory capital within the group is conducted with due consideration given to the appropriateness of each action.

Group Basel II capital composition

The table below sets out the eligible regulatory capital for the group.

	June 2008 Rm	Pro forma December 2007 Rm
Tier I		
Issued primary capital and unimpaired reserve funds		
Ordinary share capital and premium	**17 301**	1 368
Ordinary shareholders' reserves	**63 392**	53 321
Preference share capital and premium	**5 495**	5 495
Minority interest	**4 607**	3 054
Regulatory deductions		
Goodwill and other intangible assets	**(7 801)**	(5 436)
Other – 50% deducted from Tier II	**(4 257)**	(3 303)
Regulatory exclusions		
Non-qualifying entities' ordinary shareholders' reserves	**(3 923)**	(2 702)
Other reserves	**(7 647)**	(2 945)
	67 167	48 852
Tier II		
Issued secondary capital		
Preference share capital and premium	**8**	8
Subordinated debt	**17 558**	16 683
Secondary unimpaired reserve funds		
Impairments for performing loans	**772**	722
Revaluation reserve	**208**	189
Regulatory deductions – 50% deducted from Tier I		
Expected loss exceeding eligible provision	**(1 149)**	(1 147)
Investment in insurance and financial entities not consolidated	**(2 879)**	(1 941)
Other	**(229)**	(215)
	14 289	14 299
Tier III		
Issued tertiary capital		
Subordinated debt	**2 196**	1 879
Total eligible capital [1]	**83 652**	65 030
Total capital requirement	**58 651**	56 048
Total risk-weighted assets	**601 544**	574 850

[1] *Unappropriated profits have been included in Tier I capital*

Capital adequacy

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

Risk-weighted assets

The table below shows the group's risk-weighted assets as generated under Basel II.

	June 2008 Rm	Pro-forma December 2007 Rm
Credit risk	**463 027**	452 676
Portfolios subject to the standardised approach	**121 601**	111 658
Corporate	**61 516**	58 749
Sovereign	**22 846**	24 664
Banks	**14 154**	6 841
Retail mortgages	**1 710**	1 534
Retail – other	**21 181**	18 637
Securitisation exposure	**194**	1 233
Portfolios subject to the FIRB approach	**96 533**	76 536
Corporate	**81 150**	64 242
Sovereign	**377**	555
Banks	**15 006**	11 739
Portfolios subject to the AIRB approach	**221 942**	242 224
Corporate	**77 340**	110 905
Sovereign	**2 859**	36
Banks	**8 910**	5 093
Retail mortgages	**65 141**	64 029
Qualifying retail revolving exposure (QRRE)	**36 593**	34 114
Retail – other	**29 296**	26 967
Securitisation exposure	**1 803**	1 080
Credit concentration [1]	**3 915**	0
Other assets	**19 036**	22 258
Equity risk	**17 688**	12 391
Portfolios subject to:		
Market based approach	**9 882**	3 474
Listed	**2 057**	1 274
Unlisted	**7 825**	2 200
PD/LGD approach	**7 806**	8 917
Market risk	**46 956**	53 930
Capital requirements for portfolios subject to:		
Standardised approach	**38 767**	42 439
Internal models approach	**8 189**	11 491
Operational risk		
Standardised approach	**73 873**	55 853
Total risk-weighted assets	**601 544**	574 850

[1] *Relates to single name concentrations in the Rest of Africa subsidiaries*

Economic capital

Economic capital is the basis for measuring and reporting quantifiable economic risks faced by the group. Economic capital is used for risk management, capital management, capital planning, capital allocation, evaluation of new business and performance measurement.

The group's economic capital management framework informs the governance and quantification methodology of economic capital, and assigns roles and responsibilities for the management and allocation of economic capital across the group. Economic capital underpins the group's disciplined approach to risk and return decisions.

The methodologies that govern the quantification of economic capital have evolved rapidly over the past two years. The methodologies are subject to regular reviews to ensure that the results are a true reflection of the underlying portfolios and risk drivers that impact the group. Further refinement of methodologies and models are planned to ensure that changes in the risk profile of the group are assessed.

Economic capital is the amount of permanent capital that a transaction or business unit or risk type must hold to support the economic risk. For potential losses arising from risk types that are statistically quantifiable, economic capital reflects the worst case loss commensurate with the group's targeted financial strength. This is based on the group ensuring that our credit rating is no more than one notch below the South African country ceiling. We currently target a credit rating of "A-".

Economic capital is calculated for each of the following main risk types as defined in the group's risk taxonomy:

- credit risk;
- market risk;
- operational risk;
- interest rate risk in the banking book (IRRBB); and
- business risk.

The board and senior management regularly review economic capital results, facilitating improved risk management across the group.

The group has refined its internal capital adequacy assessment process (ICAAP) over the period under review to incorporate the impact of residual risk, risk concentrations, correlation of risk, diversification impacts and stress tests in ensuring that the group is adequately capitalised on an economic basis.

Economic capital by risk type

The table below reflects the economic capital by risk type.

	Closing June 2008 Rm
Credit risk	**27 440**
Market risk	**1 287**
Operational risk	**3 945**
Business risk	**1 225**
Interest rate risk in the banking book	**2 575**
Banking activities – Economic capital	**36 472**
Available financial resources (AFR)	**81 483**

Credit risk represents the largest source of risk to which the banking entities in the group are exposed and as such accounts for the majority of total economic capital.

The minimum economic capital requirement of R36 billion for the group is reflective of the capital required to cover the risk profile of the group.

The available financial resources (AFR) is the capital supply defined on an economic basis, which essentially comprises permanent capital, and is broadly equivalent to equity capital. AFR of R81 billion covers the minimum economic capital requirement of R36 billion by a factor of 2.2 times, indicating a substantially higher capital position relative to risks assumed or banking activities.

Capital ratios for banking operations

The table below sets out the capital ratios for banking operations in the group and the overall consolidated view at June 2008 and December 2007.

	June 2008				Pro-forma December 2007				
	Tier I capital %	**Tier II capital %**	**Tier III capital %**	**Total capital %**	Tier I capital %	Tier II capital %	Tier III capital %	Total capital %	**Host regulatory requirement %**
Standard Bank Group	**11,2**	**2,3**	**0,4**	**13,9**	8,5	2,5	0,3	11,3	9,75[1]
The Standard Bank of South Africa	**8,8**	**3,0**	**0,1**	**11,9**	8,1	3,2	0,1	11,4	9,75[1]
Rest of Africa									
CfC Stanbic Bank Kenya	**10,6**	**2,8**		**13,4**	12,2	0,7		12,9	12
Stanbic Bank Botswana	**8,6**	**8,6**		**17,2**	8,1	7,6		15,7	15
Stanbic Bank Congo	**14,7**	**0,5**		**15,2**	20,4	0,6		21,0	10
Stanbic Bank Ghana	**10,3**	**3,3**		**13,6**	10,3	3,2		13,5	10
Stanbic Bank Tanzania	**15,1**	**2,0**		**17,1**	11,0	1,6		12,6	12
Stanbic Bank Uganda	**12,6**			**12,6**	13,4	0,1		13,5	12
Stanbic Bank Zambia	**15,3**	**3,4**		**18,7**	12,8	4,1		16,9	10
Stanbic Bank Zimbabwe	**8,4**	**7,5**		**15,9**	9,1	8,0		17,1	10
Stanbic IBTC Bank Nigeria	**22,8**	**0,2**		**23,0**	27,1	0,4		27,5	10
Standard Bank Malawi	**14,3**	**3,4**		**17,7**	13,0	3,7		16,7	10
Standard Bank Mauritius	**12,8**	**0,5**		**13,3**	15,1	0,7		15,8	10
Standard Bank Mozambique	**7,5**	**3,6**		**11,1**	8,7	4,1		12,8	8
Standard Bank Namibia	**11,4**	**3,1**		**14,5**	9,7	3,2		12,9	10
Standard Bank Swaziland	**9,4**	**3,5**		**12,9**	9,8	2,7		12,5	8
Standard Lesotho Bank	**16,4**	**0,8**		**17,2**	9,8	0,8		10,6	8
Standard International Holdings, incorporating	**8,0**	**3,2**	**1,4**	**12,6**	6,4	3,3	1,5	11,2	10,6
– Banco Standard de Investimentos (Brazil)									
– Standard Bank Argentina									
– Standard Bank Asia (Hong Kong)									
– Standard Bank Plc (United Kingdom)									
– Standard Merchant Bank (Asia) (Singapore)									
– ZAO Standard Bank (Russia)									
Standard Bank Isle of Man	**8,4**	**3,4**		**11,8**	7,5	3,9		11,4	10
Standard Bank Jersey	**8,4**	**3,7**		**12,1**	8,1	3,8		11,9	10
Aggregate regulatory capital ratio				**10,1**				10,4	

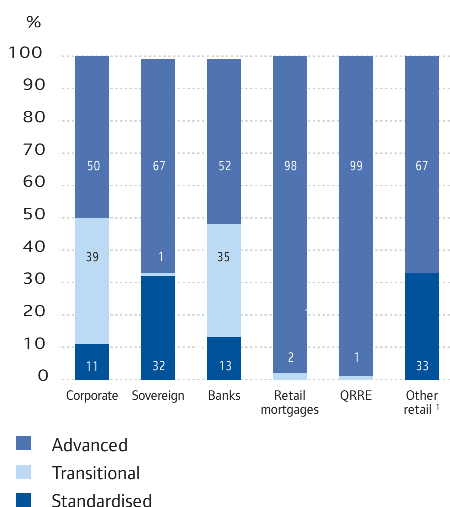
[1] *Home regulator requirement*

Approaches adopted

The group has chosen to adopt the AIRB approach for credit risk. This approach has been implemented throughout the group in a consistent way with certain subsidiaries and portfolios that are not currently on the AIRB approach migrating over a three-year transition period.

The graph below summarises the group's Basel II exposures.

Group Basel II exposure by asset class and approach



[1]Other retail consists of SME retail and retail other

Standardised approach

The group has adopted the standardised approach for some of its non-material subsidiaries and portfolios for which the calculation of regulatory capital is based on net counterparty exposures after recognising a limited set of qualifying collateral. A prescribed percentage, the risk weighting which is based on the perceived credit rating of each counterparty, is then applied to the net exposure.

The external credit assessment institutions approved by the regulator for determining the counterparty credit ratings are set out below by relevant asset class.

Asset class	Moody's Investor Services	Standard & Poor's	Fitch
Corporate		✓	
Sovereign	✓	✓	
Banks		✓	
SMEs			✓

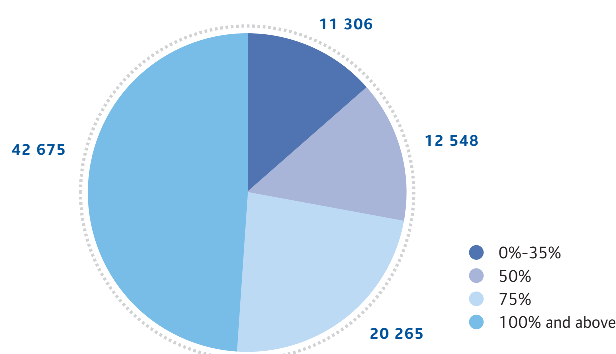
For exposures that have been rated by approved credit assessment institutions, the process prescribed by the regulator is used to transfer public issue ratings onto comparable assets in the banking book. For counterparties for which there are no credit ratings available, exposures are classified as unrated and a 100% risk weighting is applied for determining regulatory capital usage.

Analysis of exposures by risk weighting

Summarised below are the group's exposures subject to the standardised approach per risk weighting.

June 2008	Exposure Rm	Mitigation Rm	Net exposure after mitigation Rm
Based on risk weighting			
0% – 35%	15 133	3 827	11 306
50%	41 060	28 512	12 548
Rated	1 880	475	1 405
Unrated	39 180	28 037	11 143
75%	33 031	12 766	20 265
100% and above	57 556	14 881	42 675
Rated	1 023	15	1 008
Unrated	56 533	14 866	41 667
Total	146 780	59 986	86 794

The diagram below represents the group's net standardised approach exposure by risk-weighting after mitigation.



Specialised lending exposures subject to the slotting approach

For certain specialised lending asset classes, the slotting approach under the standardised approach has been adopted.

The table below summarises the group's specialised lending exposures adopting this approach.

Exposure	June 2008 Rm
Based on risk weight	
50%	25
70%	1 649
90%	417
115%	654
250%	54
Total	2 799

Specialised lending portfolios on the IRB approach, incorporated under the corporate asset class, are disclosed in the analysis by asset class.

Equity exposures subject to the simple risk weight method

A portion of equity exposures are treated under the simple risk-weighted method under the standardised approach and are set out in the table below. For this method, unlisted equity exposures attract a 400% risk weighting and listed equities a risk weighting of 300%.

Exposure	June 2008 Rm
Categories	
Listed	853
Unlisted	794
Total	1 647

Most equity exposures are treated under the probability of default (PD), loss given default (LGD) approach as described later in the analysis of PDs, exposures at default (EAD) and LGDs by asset class and risk grade.

Internal ratings based (IRB) approach

Measuring credit risk under the IRB approach requires the assessment of its core components, which are PD, EAD and LGD.

The way in which the group measures these components for specific asset classes are described below.

Corporate, sovereign and bank exposures

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

Each borrower is assigned a risk grade using an appropriate rating model. Rating models are used to achieve objectivity, comparability, transparency and consistency in the rating assignment process.

Most of the models consist of quantitative factors, taking into account financial statements and qualitative factors. These are combined to produce a stand-alone rating. The models factor in differences across geographic regions. Support, both explicit and implicit, is also used to determine the final risk grade.

The group makes use of an internationally comparable 25-point master rating scale for all counterparties. Each performing risk grade is mapped to a PD that is used to quantify the credit risk for each borrower. The mapping of the master rating scale against SARB risk buckets, external credit assessment institutions' alphanumerical rating scales and grading categories is shown in the following table.

Relationship between the group master rating scale and external ratings

Group master rating scale	SARB risk bucket	Moody's Investors Services	Standard & Poor's	Fitch	Grading
1-4	AAA to AA-	Aaa, Aa1, Aa2, Aa3	AAA, AA+, AA, AA-	AAA, AA+, AA, AA-	Investment grade
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-	
Default	Default		D	D	Default

Absolute default probabilities are assigned to risk grades so that the long-run average default rate predicted by a model is the best estimate of the population default rate over the economic cycle. This is done through a calibration process that uses historical default rates and other data from the applicable portfolio. In low default portfolios, such as the sovereign and bank asset classes, the group uses internal data where available and external benchmarks and studies particularly from rating agencies.

EAD and LGD parameters are derived using approved methodologies and are based on a combination of internal and external historical default and recovery data. EAD is the exposure amount that the group estimates will be outstanding at the time of default. This estimation is most relevant for the group's revolving/working capital facilities and the methodology used is based on the borrower's risk grade.

LGD is measured as a percentage of the EAD that the group estimates it will lose as a result of a default. It is based largely on the customer type and level of collateralisation.

Specialised lending exposures

Specialised lending exposures include project, object and commodity finance as well as real estate finance developer transactions. Creditworthiness is assessed on a transactional level as the group relies on repayment from the cash flows generated by the underlying asset being financed, as opposed to the financial strength of the borrower.

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.

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, firstly a realisable value is calculated for the underlying asset. Thereafter, additional forms of loss mitigation such as additional collateral (cash pledges, mortgages bonds, equity, etc), third or related party guarantees and insurance policies are taken into account to derive the total value of all collateral held.

A blended scorecard approach is used to derive the credit risk grade of project, object and commodity finance deals which is then converted to a unique PD.

The property finance developer model is used to generate risk parameters for developer transactions originated by the property finance division of Corporate & Investment Banking and is in use only in South Africa. The model uses a scorecard approach and combines quantitative and qualitative factors to calculate both a PD and an LGD.

Equity exposures

The "PD/LGD approach" is used to model the credit risk and capital requirement for equities excluding strategic investments in the banking book portfolio. The group's standard approved risk grade models, described earlier, are used in this process together with the regulatory prescribed LGD of 90% and a maturity factor of five years.

The approach is used for 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.

Retail mortgages

Retail mortgage exposures cover mortgage loans to individuals. The credit behaviour of the loans is measured using internally developed scorecards. The PDs are mapped to the behaviour scores using statistical calibration of internal historical default experience for the residential mortgage portfolio.

The LGDs per product are estimated using historic recovery data. The EAD is estimated per segment using internal historic data on limit utilisation.

Qualifying revolving retail exposures (QRRE)

QRRE covers cheque accounts, credit cards and revolving personal loans. The credit behaviour of each portfolio is measured using internally developed scorecards specific to each portfolio. Mapping from behaviour score to PD is performed for each portfolio using a statistical calibration of portfolio specific historical default experience.

The LGDs are estimated for portfolio specific segmentations using historic recovery data. The EAD is estimated per portfolio and per portfolio specific segmentation using internal historic data on limit utilisation.

Other retail

Other retail covers other branch lending and auto loans. The credit behaviour of each portfolio is measured using internally developed scorecards specific to each portfolio. Mapping from behaviour score to PD is performed for each portfolio using a statistical calibration of portfolio specific historical default experience. As with QRRE portfolios, the LGDs are estimated for portfolio specific segmentations using historic recovery data and the EAD is estimated per portfolio and per portfolio specific segmentation using internal historic data on limit utilisation.

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

The table below sets out the group's PDs, EADs and LGDs for specific Basel II asset classes under the IRB approach by risk grade bands as at June 2008. Approximately 47% of the asset class exposures presented below fall within the investment grade category. As per the group master rating scale, investment grade is represented by risk grades 1-12. The group monitors rating migration on an ongoing basis.

	Average	Corporate[1]			Sovereign			Banks		
June 2008	PD %	EAD Rm	LGD %	Exposure weighted average risk weight %	EAD Rm	LGD %	Exposure weighted average risk weight %	EAD Rm	LGD %	Exposure weighted average risk weight %
Risk grade										
Non-default		239 562			48 858			105 359		
1-4	0,03	4 040	31,66		1 769	25,32		48 498	37,33	0,01
5-7	0,05	5 465	43,81		7	24,08		26 216	35,06	
8-12	0,28	109 334	35,31	0,04	46 974	12,85	0,03	20 494	36,67	0,02
13-21	2,73	120 088	33,64	0,46	107	43,19		9 576	41,71	0,10
22-25	27,75	635	43,43	0,03	1	45,00		575	45,00	0,07
Default	100,00	1 147	43,40	0,21	27	45,00	0,03	42	45,00	0,02
Total		240 709	34,67		48 885	13,38		105 401	37,08	

	Retail mortgages			Qualifying retail revolving exposure			Retail other			Equity	
June 2008	EAD Rm	LGD %	Exposure weighted average risk weight %	EAD Rm	LGD %	Exposure weighted average risk weight %	EAD Rm	LGD %	Exposure weighted average risk weight %	Exposure Rm	PD %
Risk grade											
Non-default	222 290			47 845			22 232			2 927	
1-4				42	40,08						
5-7				1 167	41,80						
8-12	61 321	14,54	0,01	5 985	43,74	0,01	227	21,89		449	0,4
13-21	155 109	14,93	0,27	31 726	60,79	1,05	19 414	30,89	0,71	2 478	0,18
22-25	5 860	14,80	0,10	8 925	65,08	3,21	2 591	30,18	0,94		
Default	9 002	15,01	0,58	2 330	62,99	2,93	749	33,48	1,09		
Total	231 292	14,83		50 175	59,16		22 981	30,81		2 927	

[1] *Corporate excludes specialised lending and SME corporate*

Analysis of credit loss experience for the six months ended June 2008

The group's credit loss ratio deteriorated to 1,27% for the six months to June 2008 (June 2007: 0,78%) and credit impairment charges increased significantly by 113% for the six month period ended June 2008 compared to June 2007.

In Personal & Business Banking, financial pressure on South African consumers brought about by interest rate increases, rising inflation and declining disposable income combined to increase impaired loans (previously referred to as non-performing loans) as at June 2007 by 122% compared to June 2008, and by 75% comparing June 2007 to December 2007. This increased the charge for impaired loans by 137% for the six months period ended June 2008 compared to the six month period to June 2007 and resulted in a credit loss ratio for Personal & Business Banking of 2,18% for the six months ended June 2008 (June 2007: 1,31%).

Mortgage loan customers began experiencing increasing difficulty in meeting their full contractual repayments towards the end of 2007. This has been exacerbated by a contraction in house prices, affecting the expected realisation values of security. The credit loss ratio for mortgages rose to 1,30% for the six months ended June 2008 (June 2007: 0,61%). The component of this impairment attributable to the discounting of expected recoveries increased to 78 basis points for the six months ended June 2008 (June 2007: 25 basis points).

The credit loss ratio for the six months ended June 2008 of 2,00% (June 2007: 1,38%) in instalment sale and finance leases reflected the pressure on the recovery value of used passenger vehicles in a market that became increasingly saturated due to the extent of delinquencies and higher fuel prices.

The credit loss ratio in card debtors for the six months ended June 2008 increased to 9,44% (June 2007:6,34%).

In Corporate & Investment Banking the credit loss ratio for the six months ended June 2008 increased to 0,29% (June 2007: 0,16%), with the increase mostly arising in the rest of Africa.

Credit portfolio analysis

Analysis by asset class

The table below sets out the group's total Basel II exposures and EADs by approach and asset class as at June 2008.

The two most material asset classes, corporate and retail mortgages, have significant levels of collateralisation in place.

Group Basel II exposures by type of asset, approach and asset class

June 2008	On-balance sheet exposure Standardised Rm	Transitional Rm	Advanced Rm	Off-balance sheet exposure Standardised Rm	Transitional Rm	Advanced Rm	Repurchase and resale agreements exposure Standardised Rm	Transitional Rm	Advanced Rm	Derivative instruments exposure Standardised Rm	Transitional Rm	Advanced Rm
Asset class												
Corporate	31 082	45 491	80 192	6 988	22 257	56 522	60	34 940	29 981	1 233	32 566	8 659
Sovereign	24 205	496	47 265	41	352	27	262		2 793		14	
Banks	31 826	15 431	38 755	3 845	3 095	6 269	716	37 490	29 231	178	39 856	65 153
Retail exposure	36 869		296 200	9 475		79 548			183		2	139
Retail mortgages	5 938		199 181			35 413						
QRRE	436		33 024			27 473						
Other retail	30 495		63 995	9 475		16 662			183		2	139
Total	123 892	61 418	462 412	20 349	25 704	142 366	1 038	72 430	62 188	1 411	72 438	73 951

June 2008	Total exposure by approach Standardised Rm	Transitional Rm	Advanced Rm	Total exposure Rm	EAD Transitional Rm	Advanced Rm	Gross[1] defaulted exposures Rm	Impairment of exposures Specific Rm	Portfolio Rm
Asset class									
Corporate	39 363	135 254	175 354	349 971	109 708	157 891	2 743	1 218	
Sovereign	24 508	862	50 085	75 455	717	48 168	27	13	
Banks	36 565	95 872	139 408	271 845	42 676	62 726	51	33	
Retail exposure	46 344	2	376 070	422 416	8	361 618	15 101	4 696	
Retail mortgages	5 938		234 594	240 532		231 291	9 016	1 889	
QRRE	436		60 497	60 933		50 175	2 330	1 328	
Other retail	39 970	2	80 979	120 951	8	80 152	3 755	1 479	
Total	146 780	231 990	740 917	1 119 687	153 109	630 403	17 922	5 960	4 023

[1] *Gross amount before the application of an offset, mitigation or netting*

Impairments and roll forward

Financial assets carried at amortised cost

The group assesses at each balance sheet date whether there is objective evidence that a financial asset or group of financial assets is impaired.

The group first assesses whether there is objective evidence of impairment for financial assets that are individually significant, and for financial assets that are not individually significant this is done collectively.

Non-performing loans are impaired for doubtful debts identified during periodic evaluations of advances. Retail loans and advances are considered non-performing when amounts are due and unpaid for three months. Corporate loans are analysed on a case-by-case basis taking into account breaches of key loan conditions. The impairment of non-performing loans takes account of past loss experience adjusted for changes in economic conditions and the nature and level of risk exposure since the recording of the historic losses. The methodology and assumptions used for estimating future cash flows are reviewed regularly to reduce any differences between loss estimates and actual loss experience.

When a loan carried at amortised cost has been identified as impaired, the carrying amount of the loan is reduced to an amount equal to the present value of estimated future cash flows, including the recoverable amount of any collateral, discounted at the financial asset's original effective interest rate. The carrying amount of the asset is reduced through the use of an allowance account and the amount of the loss is recognised as credit impairment in the income statement.

If the group determines that no objective evidence of impairment exists for an individually assessed financial asset, whether significant or not, it includes the asset in a group of financial assets with similar credit risk characteristics and collectively assesses them for impairment. Assets that are individually assessed for impairment and for which an impairment loss is recognised are not included in a collective assessment for impairment.

Impairment of performing loans can only be accounted for if there is objective evidence that a loss event has occurred after the initial recognition of the financial asset but before the balance sheet date. To provide for latent losses in a portfolio of loans that have not yet been individually identified as impaired, a credit impairment for incurred but not reported losses is recognised based on historic loss patterns and estimated emergence periods. Loans are also impaired when adverse economic conditions develop after initial recognition which may impact future cash flows.

Increases in loan impairments and any subsequent reversals or recoveries of amounts previously impaired are reflected in the income statement. Previously impaired advances are written off once all reasonable attempts at collection have been made and there is no realistic prospect of recovering outstanding amounts. Any subsequent reductions in amounts previously impaired are reversed by adjusting the allowance account and the amount of the reversal is recognised as a reduction in impairment for credit losses in the income statement. Subsequent recoveries of previously written off advances are recognised in the income statement.

Subsequent to impairment, the effects of discounting unwind over time as interest income.

Financial assets classified as available-for-sale

Financial assets available-for-sale are impaired if there is objective evidence of impairment, resulting from one or more loss events that occurred after initial recognition but before the balance sheet date, that have an impact on the future cash flows of the asset. In addition, an available-for-sale equity instrument is generally considered impaired if a significant or prolonged decline in the fair value of the instrument below its cost has occurred. Where an available-for-sale asset, which has been remeasured to fair value directly through equity, is impaired, the impairment loss is recognised in the income statement. If any loss on the financial asset was previously recognised directly in equity as a reduction in fair value, the cumulative net loss that had been recognised in equity is transferred to the income statement and is recognised as part of the impairment loss.

The amount of the loss recognised in the income statement is the difference between the acquisition cost and the current fair value, less any previously recognised impairment loss. If, in a subsequent period, the amount relating to an impairment loss decreases and the decrease can be linked objectively to an event occurring after the impairment loss was recognised in the income statement, and where the instrument is a debt instrument, the impairment loss is reversed through the income statement. An impairment loss in respect of an equity instrument classified as available-for-sale is not reversed through the income statement but accounted for directly in equity.

The following table represents the movement in allowance for impairments relating to loans and advances to customers for the six months ending June 2008.

Movement in group loans and advances impairment for the six months to June 2008

June 2008	Corporate Rm	Retail secured Rm	Retail unsecured Rm	Total Rm
Impaired loans – impairments				
Balance at beginning of the period	720	1 877	1 326	3 923
Acquisitions		16	96	112
Net impairments raised and released	225	2 009	1 885	4 119
Impaired accounts written off	(114)	(376)	(1 343)	(1 833)
IAS 39 discount recycled to net interest income		(410)	(43)	(453)
Exchange and other movements	64	(131)	159	92
Balance at end of the period	895	2 985	2 080	5 960
Performing loans – impairments				
Balance at beginning of the period	1 364	912	1 064	3 340
Acquisitions		5	10	15
Net impairments raised	262	222	80	564
Exchange and other movements	66	(48)	86	104
Balance at end of the period	1 692	1 091	1 240	4 023
Total	2 587	4 076	3 320	9 983

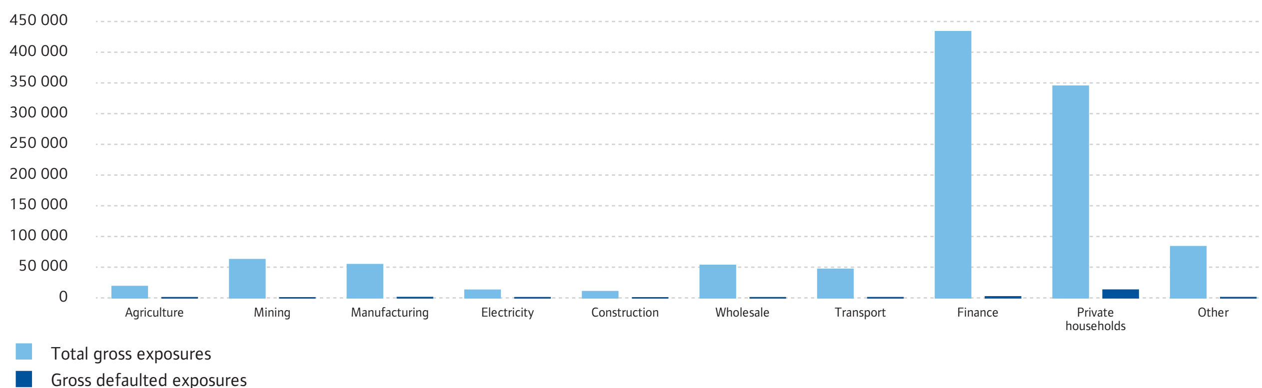
Analysis by industry

The table and graph which follow represent the group's Basel II exposures by type of asset and industry as at June 2008.

Group Basel II exposures by type of asset and industry

							Impairment of exposures	
June 2008	On-balance sheet Rm	Off-balance sheet Rm	Repurchase and resale agreements Rm	Derivative instruments Rm	Total gross exposure Rm	Gross defaulted exposures Rm	Specific Rm	Portfolio Rm
Industry								
Agriculture	11 427	6 780	84	309	18 600	400	192	
Mining	27 267	17 027	637	17 459	62 390	114	66	
Manufacturing	36 662	14 436		3 182	54 280	663	220	
Electricity	7 590	2 897	18	2 108	12 613	421	174	
Construction	5 486	4 444		371	10 301	79	19	
Wholesale	27 343	14 914	600	10 173	53 030	366	152	
Transport	34 865	10 820	6	943	46 634	470	261	
Finance	144 231	42 162	134 068	113 084	433 545	1 828	779	
Private households	275 998	68 465	183	145	344 791	12 756	3 528	
Other	76 943	6 474	60	26	83 503	825	569	
Total	647 812	188 419	135 656	147 800	1 119 687	17 922	5 960	4 023

Basel II exposures by type of industry (Rm)



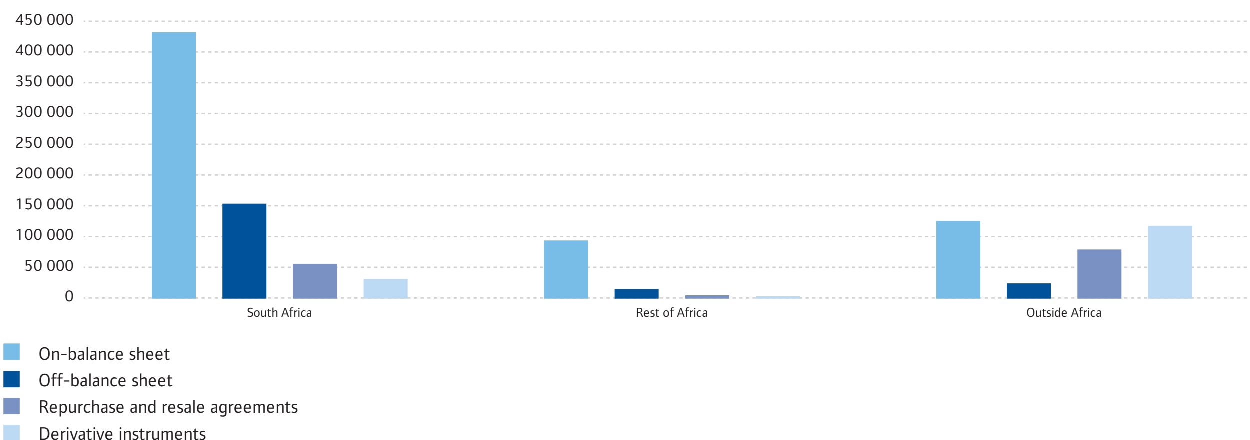
Analysis by geographic region

The table and graph below represents the group's Basel II exposures by type of asset and geographic region as at June 2008.

Group Basel II exposures by type of asset and geographic region

June 2008	On-balance sheet Rm	Off-balance sheet Rm	Repurchase and resale agreements Rm	Derivative instruments Rm	Total gross exposure Rm	Gross defaulted exposures Rm	Impairment of exposures Specific Rm	Impairment of exposures Portfolio Rm
Geographic region								
South Africa	431 068	152 314	54 573	29 716	667 671	15 203	4 542	
Rest of Africa	92 487	13 398	3 292	1 690	110 867	1 732	1 081	
Outside of Africa	124 257	22 707	77 791	116 394	341 149	987	337	
Europe	51 745	6 119	36 871	84 648	179 383	105	105	
Asia	33 159	8 162	16 990	6 239	64 550	156		
North America	5 803	1 593	7 613	21 996	37 005	209	98	
South America	33 128	6 831	16 145	2 888	58 992	517	134	
Other	422	2	172	623	1 219			
Total	647 812	188 419	135 656	147 800	1 119 687	17 922	5 960	4 203

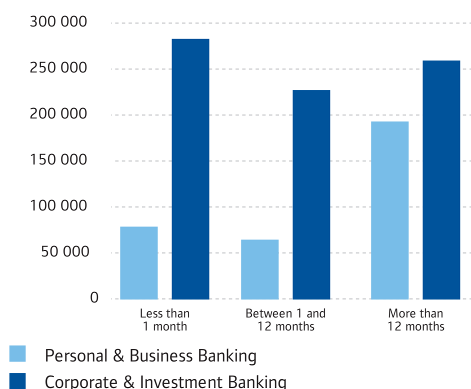
Basel II exposures by geographic region (Rm)



Residual contractual maturity

The graph below represents the group's Basel II exposures by residual contractual maturity at June 2008.

Group Basel II exposures by residual contractual maturity (Rm)



Credit risk mitigation and hedging

Collateral, guarantees, credit derivatives and on- and-off balance sheet netting are widely used by the group for credit risk mitigation. The amount and type of credit risk mitigation depends on the circumstances of each case. Credit risk mitigation policy and procedure guidelines ensure that credit risk mitigation techniques are used in a consistent manner, are acceptable types of mitigation, are valued appropriately and regularly, and meet operational management risk requirements for their legal, practical and timely enforceability. These are supported by detailed processes and procedures for the ongoing management of each type of mitigation used.

The main types of collateral taken comprise mortgage bonds over residential, commercial and industrial properties, cession of book debts, bonds over plant and equipment and, for leases and instalment sales, the underlying moveable assets financed. All security is valued on an annual basis. Reverse repurchase agreements are underpinned by the assets being financed, which are mostly liquid, tradeable financial instruments.

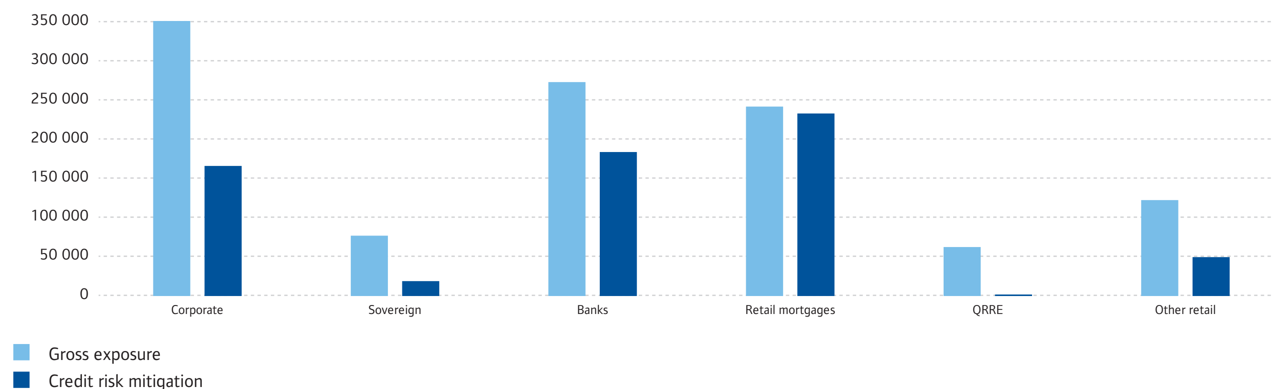
Guarantees and analogous legal contracts are often required particularly in support of credit extension to groups of companies and weaker credits. Guarantor counterparties include banks, parent companies, shareholders and associated counterparties. Creditworthiness is established for the guarantor in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

For derivative transactions, the group uses internationally recognised and enforceable Institute of Swap Dealers Association agreements with a credit support annex, where necessary, with most of the group's largest trading counterparties. Exposures are generally marked-to-market daily, netting is applied to the full extent contractually agreed by the parties, and cash/near cash collateral posted where contractually provided for. Since counterparty credit risk of derivatives can vary over time with the movement of underlying market factors, exposures to counterparty credit risk are calculated by adding increases in future potential exposure to the balance of present exposure.

To manage actual or potential portfolio risk concentrations, areas of higher credit risk and credit portfolio growth, the group from time to time implements hedging and other strategies typically at individual counterparty, sub-portfolio and portfolio levels. Syndication, distribution and sale of assets, asset and portfolio limit management, credit derivatives and credit protection are used. Implementation and performance are measured regularly and reporting tools are in place to ensure effective ongoing monitoring.

The group's Basel II exposure and total credit risk mitigation for portfolios under the IRB and Standardised approaches per primary asset class are analysed below.

Group Basel II exposure and credit risk mitigation by primary asset class (Rm)



Policy for securing collateral

Each credit division has specialised legal practitioners which are responsible for ensuring legally valid, binding and enforceable loan agreements and amendments to standard security documents. Security is provided to the bank by counterparties accepting lending facilities from the bank.

In certain instances, further counsel is obtained from external attorneys, e.g. with respect to security to be registered in a deeds office, taking any unusual forms of security or where security is provided by foreign companies.

Wrong way risk exposures

Wrong way risk arises where there is positive correlation between counterparty default and transaction exposure. Transaction types where this may arise are, by way of example, reverse repurchase and collateralised forward sale transactions. This risk is addressed by taking into consideration the higher than normal correlation between the default event and exposure to a counterparty when calculating the potential exposure on these transactions.

Collateral required in the event of a credit rating downgrade

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.

Certain counterparties require that the group provide similar credit protection terms. From time to time, the group may agree to provide those terms, on a restrictive basis. Rating downgrades as a collateralisation or termination event are generally conceded only to highly rated counterparties and, whenever possible, on a bilateral reciprocal basis. Exceptionally, such rating downgrades may be conceded to unrated counterparties when their size, credit strength and business potential are deemed acceptable.

The impact on the group of the amount of collateral it would have to provide given a credit downgrade is determined by the negative mark-to-market on derivative contracts where such a collateralisation trigger has been conceded. Where the impact on the group's liquidity of a collateral call linked to downgrading is deemed to be material, the potential exposure is taken into account in model stress testing. Generally, however, the extent of legal commitments which could result in collateral calls triggered by a rating downgrade is not material and would not have an adverse effect on the group's financial position.

A detailed analysis of the credit risk mitigation utilised by the group, as described above, is provided per asset class for the IRB and Standardised approaches in the tables below.

Group Basel II credit risk mitigation for portfolios under the IRB approach

June 2008	Eligible financial collateral Rm	Other eligible IRB collateral Rm	Guarantees and credit derivatives Rm	Effects of netting agreements Rm	Total Rm
Asset class					
Corporate	88 308	30 112	14 075	22 256	154 751
Sovereign	1 904	38			1 942
Banks	67 811	291	243	90 456	158 801
Retail exposures		268 846	28		268 874
Retail mortgages		231 710			231 710
QRRE		196			196
Other retail		36 940	28		36 968
Total	158 023	299 287	14 346	112 712	584 368

Group Basel II credit risk mitigation for portfolios under the Standardised approach

June 2008	Eligible financial collateral Rm	Guarantees and credit derivatives Rm	Total Rm
Asset class			
Corporate	9 877	21	9 898
Sovereign	15 407		15 407
Banks	23 324	294	23 618
Retail exposure	11 055	8	11 063
Total	59 663	323	59 986

Analysis of over-the-counter derivatives

The tables below represent the group's exposure in terms of over-the-counter derivatives across various markets such as equities, foreign exchange and gold for all relevant Basel II asset classes and collateral held.

Group Basel II over-the-counter derivatives notional principal amount

Notional principal amount	June 2008 Rm
Over-the-counter derivatives [1]	
Interest rate products	5 936 319
Forex and gold	1 127 807
Equities	428 814
Precious metals	63 893
Other commodities	348 566
Credit derivatives	118 741
Protection bought	61 943
Protection sold	56 798
Total	8 024 140

Group Basel II over-the-counter derivatives exposure

Exposure	June 2008 Rm
Over-the-counter derivatives [1]	
Gross positive fair value of over the counter derivatives	147 739
Interest rate products	67 282
Forex and gold	27 003
Equities	4 266
Precious metals	4 477
Other commodities	41 943
Credit derivatives	2 768
Protection bought	2 355
Protection sold	413
Netting benefits	112 711
Netted current credit exposure (i.e. net fair value)	35 028
Exposure at default	69 800

Group Basel II over-the-counter derivatives collateral

Collateral	June 2008 Rm
Over-the-counter derivatives [1]	
Cash	17 021

[1] *Derivative transactions traded on recognised exchange or with a central counterparty (e.g. a clearing house) have been excluded as such exposures are not subject to capital requirements in respect of counter-party credit risk.*

Analysis of securities financing transactions

The table below represents the group's exposure in terms of securities financing transactions such as repurchase agreements, resale agreements, security lending and securities borrowing agreements for all relevant Basel II asset classes and collateral held.

Group Basel II securities financing transactions exposure

Gross exposure amount	June 2008 Rm
Securities financing transactions [2]	
With master netting agreement	17 164
Without master netting agreement	118 433
Total	135 597

Group Basel II securities financing transactions collateral

Collateral	June 2008 Rm
Securities financing transactions [2]	
Cash	44 014
Commodities	903
Debt securities	73 789
Equities	4 374
Total	123 080
Exposure at default	9 339

[2] *Securities financing transactions consist of repurchase agreements, resale agreements, security lending and security borrowing agreements.*

Securitisation

The group uses securitisation primarily as a component of its liquidity funding for its South African operations, providing added flexibility in terms of mitigating structural liquidity risk and diversifying the funding base. Credit risk transfer and capital relief are factored in when deciding the economic merits of each new securitisation issue.

The group enters into transactions in the normal course of business by which it transfers recognised financial assets directly to third parties or special purpose vehicles (SPVs). These transfers may give rise to full derecognition of the financial assets concerned. Full derecognition occurs when the group transfers its contractual right to receive cash flows from the financial assets and substantially all the risks and rewards of ownership. The risks include interest rate, currency, prepayment and other price risks.

The group complies with IFRS in recognising and accounting for securitisation transactions. SPVs are consolidated into the group when required by IFRS. The bank discloses undrawn facilities provided to conduits as part of the notes to the financial statements. In accordance with IAS 39, securitised assets are derecognised when required to reflect the element of risk and reward transfer. No gain or loss on sale is recognised, as these assets are sold at book value. The group's investment in these securities is classified as available-for-sale, with changes in fair value recognised in equity.

The following external credit assessment institutions have been used to rate the group's securitisations.

Securitisation exposure	Rating agency
Corporate	Fitch
Retail mortgages	Fitch
Retail instalment sale and leasing	Moody's Investor Services and Fitch
Retail other	Fitch

The group fulfils a number of roles in the process of securitising any of its assets including that of sponsor, administrator, hedge counterparty, commercial paper dealer, liquidity facility provider of asset backed commercial paper conduits (special purpose legal entities), originator, seller, dealer, settlement agent, subordinated lender, shareholder, calculating agent, settlement agent and account bank.

For regulatory capital calculation, the group uses both the AIRB and the standardised approaches and has adopted the ratings based approach.

Analysis of securitisation activity for the period

The table below represents the group's securitisation activity for the six months to June 2008. The group has only entered into securitisation schemes in the secondary role of investor in the period. The group has not entered into any synthetic securitisation schemes and there are no exposures subject to early amortisation. The group's risk of first loss through subordinated loans was R292 million as at June 2008.

Group Basel II securitisation activity for the year

June 2008	Retail mortgages Rm	Retail loans[1] Rm	Total Rm
As investor	2 000	2 185	4 185

[1] Retail loans consist of retail instalment sales and leasing and retail revolving products.

Analysis of retained securitised investments

The tables below present an analysis of the retained securitised investments of the group under the IRB and standardised approaches as at June 2008 by creditworthiness (defined in terms of the group master rating scale).

Group Basel II retained securitised investments under the IRB approach by asset class

June 2008	Corporate Rm	Retail mortgages Rm	Retail loans Rm	Total Rm
IRB				
Personal & Business Banking		936	256	1 192
Investment grade		620	161	781
Sub-investment grade		316	95	411
Corporate & Investment Banking	39	2 322	2 270	4 631
Investment grade	39	2 322	2 270	4 631
Total IRB exposures	39	3 258	2 526	5 823

Group Basel II retained securitised investments under the standardised approach by asset class

June 2008	Retail mortgages Rm	Total Rm
Standardised		
Personal & Business Banking	320	320
Investment grade	320	320
Total standardised exposures	320	320

Analysis of derecognised securitised investments

The table below presents an analysis of the derecognised securitised investments of the group under the IRB approach as at June 2008 by creditworthiness (defined in terms of the group master rating scale).

Group Basel II derecognised securitised investments under the IRB approach by asset class

	Corporate Rm	Retail mortgages Rm	Retail loans Rm	Total Rm
IRB				
Corporate & Investment Banking	1 146	8 253	2 029	11 428
Investment grade	1 146	8 253	2 029	11 428
Total IRB exposure	1 146	8 253	2 029	11 428

There have been no derecognised securitised investments under the standardised approach for the period under review.

Analysis of capital deductions with respect to securitised investments

The table below represents the capital deductions required with respect to the securitised investments under the IRB and standardised approaches.

June 2008	Capital deductions
By approach	
IRB	458
Standardised	1
Total	459

Market risk

The identification, management, control, measurement and reporting of market risk, which is consistent with the previous financial reporting period, has been categorised as follows:

- Trading market risk

  These risks arise in trading activities where the group acts as a principal for customers in the market. The group policy is to contain all trading activities within the group's trading operations.

- Banking book interest rate risk

  These risks arise from the structural interest rate risk caused by the differing repricing characteristics of banking assets and liabilities.

- Equity investments

  These risks arise from equity price changes caused by listed and unlisted investments approved by the appropriate equity governance committees across the group.

Market risk management and control responsibilities

The board grants general authority to take on market risk exposure to GROC, which delegates to the group asset and liability committee (ALCO). Group ALCO sets market risk standards to ensure that the measurement, reporting, monitoring and management of market risk across the group follows a common governance framework. Each bank within the group has an ALCO to monitor compliance with these market risk standards. Both the Africa ALCO and International ALCO report into the group ALCO, chaired by a group chief operating officer.

Market risk management units, independent of trading operations and accountable to business unit ALCOs, monitor market risk exposures due to trading and banking activities. These units monitor exposures and respective excesses daily, report monthly to business unit ALCOs and quarterly to the group ALCO, GROC and GRCMC.

Market risk measurement

The techniques used to measure and control market risk include:

- daily value-at-risk;
- stress tests;
- other market risk measures;
- annual net interest income at risk ;
- economic capital sensitivity; and
- economic capital.

Daily value-at-risk (VaR)

The group generally uses the historical VaR approach to derive quantitative measures, specifically for market risk under normal conditions. Normal VaR is based on a holding period of one day and a confidence interval of 95%. Daily losses exceeding the VaR are likely to occur, on average, 13 times in every 250 days.

The use of historic VaR has limitations as it is based on historical correlations and volatilities in market prices and assumes that future prices will follow the observed historical distribution.

The group back-tests its VaR models to verify the predictive ability of the VaR calculations, thereby ensuring the appropriateness of models. Back-testing compares the daily hypothetical profit and losses under the one-day buy and hold assumption to the previous day's VaR.

Stress tests

Stress testing provides an indication of the potential losses that could occur in extreme market conditions. The stress tests carried out include individual market risk factor testing and combinations of market factors per trading desk and for combinations of trading desks. Stress tests include a combination of historical, hypothetical and Monte Carlo type simulations.

Other market risk measures

Other market risk measures 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 market risk departments independently validate and document new pricing models and perform an annual review of existing models to ensure they are still relevant and behaving within expectations. In addition, the market risk departments assess the liquid closing price inputs used to value instruments daily and perform at least a monthly review of less liquid prices from a reasonableness perspective. Where differences are significant, mark-to-market adjustments are made.

Annual net interest income at risk

A dynamic forward looking annual net interest income forecast is used to quantify the bank's anticipated interest rate exposure. This approach involves the forecasting of both changing balance sheet structures and interest rate scenarios, to determine the effect these changes may have on future earnings. The analysis is completed under both normal market conditions as well as stressed market conditions.

Economic capital sensitivity

By capturing all expected future cash flows, economic capital is the preferred measure for determining long-term sensitivity to interest rate changes. However, the cash flows of certain asset and liability classes, in particular those associated with ambiguous maturity behaviour, are highly dependent on the

underlying assumptions. To reduce the potential for error, the sensitivity of capital has been calculated as the expected change in net interest income under a five-year horizon, given a considered rate shock and stated in present value terms.

Economic capital

Economic capital methodologies are used to calculate all categories of market risk sensitive capital allocations and are used to determine each business unit's capital charge.

Analysis of trading book positions

Analysis of trading book market risk exposures

The table below shows the aggregated historical VaR for the group's trading positions. The maximum and minimum VaR amounts show the bands in which the values at risk fluctuated during the periods specified. VaR models have been approved by the regulators for all South African trading units except exotics and specific risk on interest rates. Standard Bank Plc has obtained regulatory approval for its resource and local markets businesses with applications for its remaining businesses in progress.

Trading book value-at-risk analysis (Rm)

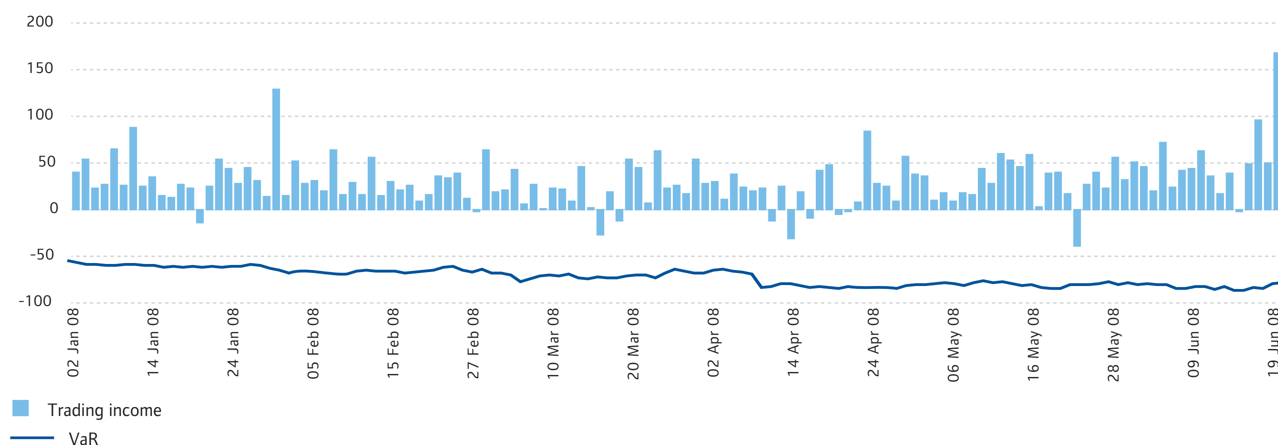
	Normal VaR			
Market variable	**Maximum[1]**	**Minimum[1]**	**Average**	**Closing**
June 2008				
Commodities	**33,0**	**14,9**	**21,9**	**24,5**
Forex	**11,6**	**1,3**	**4,7**	**2,9**
Equities	**87,8**	**7,6**	**24,9**	**30,6**
Debt securities	**87,0**	**53,3**	**71,5**	**76,8**
Other	**34,0**	**9,9**	**21,1**	**15,8**
Diversification benefit[2]			**(72,2)**	**(74,5)**
Aggregate	**84,4**	**53,2**	**72,0**	**76,1**
December 2007				
Commodities	37,0	14,6	22,8	15,8
Forex	11,0	1,2	3,5	2,9
Equities	39,5	6,7	13,5	35,4
Debt securities	101,5	62,6	78,5	65,4
Other	34,0	9,3	23,5	12,6
Diversification benefit[2]			(67,2)	(64,1)
Aggregate	92,1	63,6	74,6	68,0

[1] The maximum and minimum VaR figures reported for each market variable did 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 have occurred on different dates.

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

The graph below shows the VaR analysis and actual income of the trading units throughout the year. The graph shows the VaR model to be conservative, which is as a result of not all diversification benefit being taken and prudency in the VaR model's construction.

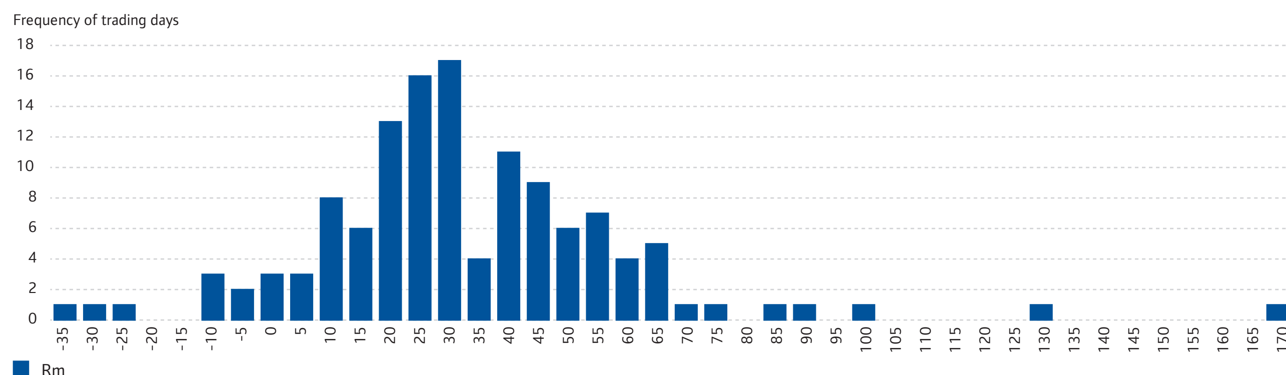
Income of trading units and value-at-risk (Rm)



Analysis of trading revenue

The graph below shows the distribution of daily income and losses during the first six months of 2008. It captures trading volatility and shows the number of days in which the bank's trading-related revenues fell within particular ranges. The distribution is skewed to the profit side. In the first half of 2008 the trading profit and loss was positive for 162 days out of 170.

Distribution of income of trading units – six months ended June 2008



Analysis of banking book equity positions

As with trading book equity investments, listed and unlisted investments are approved by the appropriate equity governance committees in accordance with delegated authority limits. Market risk on investments is managed in accordance with the purpose and strategic benefits of such investments, rather than purely on mark-to-market considerations. Periodic reviews and reassessments are undertaken on the performance of the investments.

Accounting techniques and valuation methodologies

Initial recognition and measurement

Financial instruments include all financial assets and liabilities held for liquidity, investment, trading or hedging purposes. All financial instruments are initially recognised at fair value plus transaction costs, except those carried at fair value through profit or loss where transaction costs are recognised immediately in the income statement. Financial instruments are recognised on the date the group commits to purchase or sell the instruments (trade date).

Subsequent measurement

Subsequent to initial measurement, financial instruments are measured either at fair value or amortised cost, depending on their classification.

Financial assets and liabilities designated at fair value through profit or loss

The group has designated financial assets and liabilities, other than those held for trading, at fair value through profit or loss when:

- this designation eliminates or significantly reduces measurement or recognition inconsistencies that would otherwise arise from measuring financial assets or liabilities, or recognising gains and losses on these assets and liabilities on different bases. Under this criterion, the main classes of financial instruments designated by the group are loans and advances to customers and debt securities in issue where doing so significantly reduces measurement inconsistencies that would arise if the related derivatives were treated as held-for-trading and the underlying financial instruments were carried at amortised cost;
- groups of financial assets, financial liabilities or both are managed, and their performance evaluated, on a fair value basis in accordance with a documented risk management or investment strategy, and information about groups of financial instruments is reported to the group’s key management personnel on that basis. Under this criterion, certain private equity, short-term insurance and other investment portfolios have been designated at fair value through profit or loss. The group has documented risk management and investment strategies designed to manage such assets at fair value; or
- financial instruments contain one or more embedded derivatives that significantly modify the cash flows resulting from those financial instruments.

The fair value designation, once made, is irrevocable. Subsequent to initial recognition, fair values are remeasured at each reporting date. Gains and losses arising from changes are recognised in interest income for all dated financial assets and in other revenue (non-interest revenue) for all undated financial assets.

Private equity and property equity investments designated, on initial recognition, at fair value through profit or loss in terms of the scope exemption in IAS 28 *Investment in Associates*, are accounted for in the designated at fair value through profit or loss category.

Changes in fair value attributable to changes in credit risk, both for the period and cumulatively to date, relating to financial liabilities and loans and receivables designated at fair value through profit or loss are disclosed in the financial statements. These credit risk amounts are determined as the amount of change in the fair value that is not attributable to changes in market conditions that give rise to market risk.

Available-for-sale

Financial assets classified by the group as available-for-sale are generally strategic capital investments held for an indefinite period of time, which may be sold in response to needs for liquidity or changes in interest rates, exchange rates or equity prices, or financial assets that are not designated as another category of financial assets.

Available-for-sale financial assets are subsequently carried at fair value. Unrealised gains or losses arising from changes in the fair value of available-for-sale financial assets are recognised directly in the available-for-sale reserve until the financial asset is derecognised or impaired. When available-for-sale financial assets are disposed of, the fair value adjustments accumulated in equity are recognised in the income statement.

Interest income, calculated using the effective interest method, is recognised in the income statement. Dividends received on available-for-sale instruments are recognised in the income statement when the group's right to receive payment has been established. Foreign exchange gains or losses on available-for-sale debt instruments are recognised in the income statement.

Fair value

The best evidence of the fair value of a financial instrument on initial recognition is the transaction price, i.e. the fair value of the consideration paid or received. This is unless the fair value is evidenced by comparison with other observable current market transactions in the same instrument, without modification or repackaging, or based on discounted cash flow models and option pricing valuation techniques whose variables include only data from observable markets.

When such valuation models, with only observable market data as input, indicate that the fair value differs from the transaction price, this initial difference, commonly referred to as day one profit or loss, is recognised in the income statement immediately. If non-observable market data is used as part of the input to the valuation models, any resulting difference between the transaction price and the model value is deferred. The timing of recognition of deferred day one profit or loss is determined individually. It is either amortised over the life of the transaction, deferred until the instrument's fair value can be determined using market observable inputs, or realised through settlement, depending on the nature of the instrument and availability of market observable inputs.

Subsequent to initial recognition, the fair values of financial assets and liabilities are based on quoted market prices or dealer price quotations for financial instruments traded in active markets. If the market for a financial asset is not active or the instrument is an unlisted instrument, the fair value is determined by using applicable valuation techniques. These include the use of recent arm's length transactions, discounted cash flow analyses, pricing models and valuation techniques commonly used by market participants.

Where discounted cash flow analyses are used, estimated future cash flows are based on management's best estimates and the discount rate is a market-related rate at the balance sheet date for a financial asset with similar terms and conditions. Where pricing models are used, inputs are based on observable market indicators at the balance sheet date and profits or losses are only recognised to the extent that they relate to changes in factors that market participants will consider in setting a price.

The table below sets out the group's equity positions in the banking book as at June 2008.

June 2008	Book value[1] Rm	Fair value Rm
Banking book equity positions		
Listed	1 418	1 418
Unlisted	3 197	3 206
Total	**4 615**	**4 624**

[1] *The book value of banking book equity positions includes associates that are equity accounted.*

The table below presents the group's realised gains from the sale or liquidation of its equity positions in the banking book as at June 2008.

June 2008	Total Rm
Cumulative realised gains	
Investments classified as available-for-sale	156
Total	**156**

The table below presents the group's unrealised gains recognised on the balance sheet on its equity positions in the banking book as at June 2008.

June 2008	Total Rm
Unrealised gains	
Available-for-sale movements recognised directly in equity	139
Total	**139**

Interest rate risk

Banking-related market risk exposure is primarily due to structural interest rate risk arising from the different repricing characteristics of banking assets and liabilities. Interest rate risk of the banking book (IRRBB) is the exposure of a bank's financial position to adverse movements in interest rates. This risk is a normal part of banking, but at excessive levels can pose a significant threat to the bank's future earnings and economic value. IRRBB is transferred to and managed within the group's treasury operations under supervision of the local ALCO. Each bank within the group manages this risk on a stand-alone basis. The most important sources of banking book interest rate risk that need to be quantified and managed are:

- repricing risk – refers to the timing differences in the maturity and repricing of bank assets and liabilities;
- yield curve risk – arises from changes in the slope and shape of the yield curve;
- basis risk – arises from the imperfect correlation in the adjustment of rates earned and paid on different instruments with otherwise similar repricing characteristics;
- optionality risk – arises from the options embedded in many bank asset and liability portfolios, providing the holder with the right but not the obligation to buy, sell or in some manner alter the cash flow of an instrument or financial contract; and
- endowment risk – arises from non-repricing balance sheet items, for example capital, non-paying liabilities, notes and coins, fixed assets, etc.

These risks are managed and quantified on a monthly basis, mainly by the following techniques as prescribed by the approved ALCO policies:

- Net interest income forecasting – a dynamic forward looking analysis, which includes the forecasting of both changing balance sheet and interest rate scenarios, to determine the effect these changes may have on future earnings. This incorporates the following analysis:
    - IRRBB under normal conditions, utilising three interest rate scenarios, based on bearish, bullish and expected base interest rates and yield curve forecasts;
    - IRRBB under stress market conditions, utilising a standardised parallel rate shock;
    - IRRBB under multiple yield curve simulations e.g. Monte Carlo techniques to reflect a wide range of yield curve dynamics i.e. in addition to parallel shifting, yield curve tilting and bowing; and
- Economic value analysis – measured as the change in the present value of the expected future net cash flows due to a standardised interest rate shock.

The group uses comprehensive asset liability management application software to quantify the banking book interest rate risk. The software takes into account the underlying transaction-specific repricing and maturity characteristics of all banking book assets and liabilities, and calculates the aggregate banking book interest rate risk. The main analytical techniques used to quantify banking book interest rate risk are earnings and value-based measures. In doing so, cognisance is taken of embedded optionality, such as loan prepayments and accounts where the behaviour differs from the contractual position.

The results obtained from dynamic scenario analyses, as well as Monte Carlo simulations, assist in evaluating the optimal hedging strategies on a risk-return basis. Desired changes to a particular interest rate risk profile are achieved through the restructuring of the balance sheet and, where possible, the use of derivative instruments, such as interest rate swaps. The shape of the yield curve and the group's own view of future interest rates are used as inputs in developing hedging strategies. Interest rate risk limits are set in terms of both changes in forecast net interest income and economic value of equity.

Analysis of banking book positions

The table below indicates the sensitivity in Rand equivalents of the group's net interest income and equity in response to a parallel yield curve rate shock after taking into account all risk mitigating instruments, with all other variables held constant.

June 2008	Rand	US Dollar	Sterling	Euro	Other	Total
Increase in basis points	**200**	**100**	**100**	**100**	**100**	**100**
Sensitivity of annual net interest income	**1 478**	**23**		**(13)**	**92**	**1 580**
Sensitivity of equity[1]	**151**	**(72)**			**(204)**	**(125)**

December 2007	Rand	US Dollar	Sterling	Euro	Other	Total
Increase in basis points	200	100	100	100	100	100
Sensitivity of annual net interest income	1 286	12	(1)	(9)	147	1 435
Sensitivity of equity[1]	133	(83)			(64)	(14)

[1]Actual change in equity resulting from the changes in reserves caused by the change in mark-to-market of derivatives held as cash flow hedges or available-for-sale positions.

Assuming no management intervention, a parallel 100 basis points increase in all yield curves would increase the forecast net interest income for the next 12 months by R842 million, while parallel decreases in all yield curves would decrease the forecast net interest income by R822 million. The variance of the parallel decrease and increase reflects the optionality that exists where certain products deviate from their original repricing assumptions.

Liquidity risk

The nature of banking and trading activities results in continuous exposure to liquidity risk. The group's liquidity risk management framework, which is consistent with the previous financial reporting period, is designed to measure and manage the liquidity position at various levels of consolidation such that, at all times, payment obligations can be met under both normal and considerably stressed conditions. Under the delegated authority of the board, the group ALCO sets liquidity risk standards in accordance with regulatory requirements and international best practice. This ensures that a comprehensive and common governance framework for liquidity risk management is followed across the group. Limits and guidelines are prudently set and reflect the group's conservative appetite for liquidity risk. Each banking entity within the group has an ALCO charged with ensuring compliance with liquidity risk standards and policies. Both the Africa ALCO and International ALCO report into the group ALCO, chaired by a chief operating officer of the group.

Liquidity and funding management

In terms of the group's decentralised approach to the management of liquidity and funding, each bank is required to incorporate the following elements as part of a cohesive liquidity management process:

- short- and long-term cash flow management;
- maintaining a structurally sound balance sheet;
- foreign currency liquidity management;
- ensuring the availability of sufficient contingency liquidity;
- preserving a diversified funding base;
- undertaking regular liquidity stress testing; and
- maintaining adequate liquidity contingency plans.

The cumulative impact of the above elements is monitored on at least a monthly basis by the group's ALCOs and the process is underpinned by a system of extensive controls. The latter includes the application of purpose-built technology, documented processes and procedures, independent oversight and regular independent reviews and evaluations of the effectiveness of the system.

Cash flow 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 ALCO requirements. Long-term funding needs are derived from projected balance sheet structures and positions are regularly updated.

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

Limits and guidelines are set to restrict the mismatch between the expected inflows and outflows of funds in different time buckets. Forward looking term liquidity measures are used to anticipate and proactively manage mismatch requirements. The group structural mismatch was maintained within best-practice banking guidelines.

Foreign currency liquidity management

A number of parameters are observed to monitor changes in either market liquidity or exchange rates. Key to this is the restriction of foreign currency loans and advances in relation to foreign currency deposits.

Contingency liquidity

Portfolios of highly marketable assets over and above prudential requirements are maintained as protection against unexpected disruptions in cash flows. These portfolios are managed within limits and, apart from acting as a buffer under going concern conditions, also form an integral part of the broader liquidity generation strategy in the unlikely event of a liquidity crisis. The value of total unencumbered marketable assets, over and above prudential requirements, was R75 billion as at 30 June 2008, compared to R60 billion as at 31 December 2007. The range of contingency liquidity furthermore includes access to a USD600million committed liquidity facility as well as readily accessible call loans.

Diversified funding base

Concentration risk limits are used to ensure that funding diversification is maintained across products, sectors, geographic regions and counterparties. Primary sources of funding are in the form of deposits across a spectrum of retail and wholesale customers, as well as long-term capital market funding. The group remains committed to increasing its core deposits and further diversifying its funding sources.

Liquidity stress testing

Anticipated on- and off-balance sheet cash flows are subjected to a variety of bank specific and systemic stress scenarios to evaluate the impact of unlikely but plausible events on liquidity positions. Scenarios are based on both historical events, such as past emerging markets crises, and hypothetical events, such as bank specific crises. The results obtained from stress testing provide meaningful input when defining target liquidity risk positions.

Liquidity contingency plans

Liquidity contingency 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 extensive early warning indicator methodology supported by a clear and decisive crisis response strategy. Early warning indicators span both bank specific and systemic crises and are monitored according to assigned frequencies and tolerance levels. The crisis response strategy is

formulated around the relevant crisis management structures and addresses internal and external communication, liquidity generation, operations, as well as heightened and supplementary information requirements.

Structural requirements

The maturity analysis for financial liabilities represents the basis for effective management of exposure to structural liquidity risk. Behavioural profiling is applied to assets, liabilities and off-balance sheet commitments with an indeterminable maturity or draw-down period, as well as to certain liquid assets. This process 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 that although they are repayable on demand or at short notice, exhibit stable behaviour.

By way of illustration, the table below shows the group's cumulative maturity mismatch between assets and liabilities for the overnight – 1-month bucket up to the 3-6 months bucket, after applying behavioural profiling.

June 2008 (Rm)	0-1 month	1-2 months	2-3 months	3-6 months
Net liquidity mismatch	(4 475)	(46 976)	1 502	(15 603)
Cumulative mismatch	(4 475)	(51 451)	(49 949)	(65 552)

Operational risk

The group's approach to managing operational risk is to adopt practices that are fit-for-purpose to suit the organisational maturity and particular environments applicable to our business. Operational risk management has been embedded to increase the efficiency and effectiveness of the group’s resources, to minimise losses and utilise opportunities.

Responsibility for operational risk management and oversight

The GRCMC, as the board delegated risk oversight body, has ultimate responsibility for operational risk. GROC ensures that the operational risk management (ORM) framework provides optimal benefit for the group while ensuring regulatory compliance.

The group operational risk committee serves as the oversight body in the application of the group’s ORM framework, including business continuity management and information risk. This is achieved through enforcing standards for identifying, assessing, controlling, monitoring and reporting. The group operational risk committee approves group-level ORM policies and methodologies and recommends risk appetite and risk tolerance to GROC.

The roles and responsibilities for managing operational risks are stipulated in the various ORM policies. These policies indicate the responsibilities of operational risk practitioners (at all levels) and of the risk owners (line management). Business unit heads of ORM may develop their own policies and procedures to better suit their unique environments. These policies and procedures must align to the group-level policies and procedures and must be approved by their respective executive committees.

The management and measurement of operational risk

The ORM framework ensures that risk owners are clearly accountable for the risk inherent in the group’s business activities. The key elements in the ORM framework include methodologies and tools to identify, measure, monitor and manage operational risks, a governance model, and processes to ensure internal training, communication and change management.

Risk and control self-assessments are designed to be forward looking. Management is required to identify risks that could threaten the realisation of business objectives, together with the required set of controls and actions to mitigate the risks. Risk assessment incorporates a regular review of identified risks to monitor significant changes.

The loss data collection process ensures that all operational risk loss events and near misses are captured into a centralised database. The flow of information into the loss event database uses a bottom-up approach. The data capture process identifies and classifies all incidents in terms of an incident classification list. This information is used to monitor the state of operational efficiency, address trends, implement corrective action and manage recovery, where possible.

The group uses key risk indicators to monitor the risks highlighted in the risk and control self-assessments process. The implementation of the key risk indicator process is an integral element of ORM and is compulsory throughout the group.

Business units are required to report on both a regular and an event-driven basis. The reports include a profile of the key risks to the achievement of their business objectives, control issues of group-level significance, and operational risk events. Specific reports are prepared on a regular basis for the GROC, the GRCMC and GAC.

The group maintains adequate insurance to cover key risks, operational and otherwise. The group’s insurance processes and requirements are the responsibility of the group Insurance Division in consultation with the business units.

Business continuity management (BCM)

The group continues to use the Business Continuity Institute standards (BS 25999) definition for BCM as a guide for developing its BCM programme. In line with these standards, the core focus for 2008 was to build resilience by establishing dual site processing for additional core and critical business areas. The remaining business areas focused on establishing and testing their recovery site infrastructure to determine its ability to meet recovery time objectives.

The group also conducted a BCM awareness campaign to enhance the BCM culture. This is important in maintaining readiness and effective responses at all levels of the bank.

As part of an ongoing process, the group conducted the “executive crisis team” simulation during the first six months of 2008 with the South African business units, Corporate & Investment Banking and Personal & Business Banking, to rehearse the business continuity plans. These plans focus on:

- long-term recovery;
- communication flows between various teams; and
- management of scarce resources.

BCM ownership and accountability now resides with the business units, while monitoring and oversight is undertaken by group operational risk management. BCM governance continues to become more comprehensive with the revised BCM framework reflecting the current state of BCM maturity.

Information risk management

Information risk is defined as the risk of accidental or intentional unauthorised use, modification, disclosure or destruction of information resources, which compromises confidentiality, integrity or availability of information.

From a strategic perspective, information risk management is treated as a particular discipline within the operational risk framework. Essentially, information risk management not only protects the group's information resources from a wide range of threats, but also enhances business operations, ensures business continuity, maximises return on investments and supports the implementation of various services. The approach to the management of information risk in the group is in accordance with global best practice, applicable laws, regulations and standards.

Notably, a number of information risk management specific policies and standards have been approved and implemented. These will be accompanied by an enterprise-wide comprehensive awareness/education campaign to ensure that the culture of information protection is entrenched and the risks associated with information handling are mitigated.

Fraud risk management

Group forensic services, which is mandated by the GAC, is responsible for fraud risk management practices throughout the group. There is a "zero tolerance" approach to fraud and corruption. Where necessary, disciplinary, civil and criminal action is taken against employees. Staff found guilty of dishonesty through the group's disciplinary processes are listed on appropriate industry databases of dismissed employees. Losses incurred as a result of criminal activity from staff and third parties are investigated in conjunction with law enforcement agencies with the end result being a criminal conviction and recovery of the proceeds of the crime where possible.

In the main, most of the group's large losses are incurred in cheque, card and cash centre environments. There are numerous anti-fraud mechanisms and campaigns in place to mitigate these losses. These campaigns and mechanisms include constant reviews and re-engineering of the group's internal processes, as well as engaging law enforcement agencies and industry forums on initiatives to combat fraud and theft.

Environmental risk

The group acknowledges that the development of a corporate culture in which environmental protection and the sound management of natural resources, both in its own operating environment and that of the parties with which it has a business association, is crucial to sustainable development. The group adopts a precautionary approach to environmental management, striving to anticipate and prevent environmental risk. For more information on the group's initiatives please refer to the sustainability report.

Legal risk

The group's legal obligations arise throughout its global operations.

Legal risk arises where:

- the group's businesses may not be conducted in accordance with applicable laws in the countries in which it operates;
- incorrect application of regulatory requirements takes place;
- the group may be liable for damages to third parties; and
- contractual obligations may be enforced against the group in an adverse way, resulting in legal proceedings being instituted against it.

Although the group has processes and controls in place to manage legal risk, failure to do so effectively could result in legal proceedings that impact both financially and reputationally on the group.

Compliance risk

Compliance risk management is an independent core risk management activity overseen by the group chief risk and compliance officer, who provides independent reports to the GAC and has unrestricted access to the chief executive and the chairman of the board. The group's approach to managing legislative risk exposures is proactive and premised on internationally accepted principles of risk management. The group fosters a culture of compliance which is seen not only as a requirement of law but also as good business practice.

Regulation and supervision

The group operates within a highly regulated industry and across multiple jurisdictions. The group is supervised by various regulatory bodies in South Africa, its primary regulator being the bank supervision department of SARB, as well as by the host country regulators in all the jurisdictions in which the group operates. The bank supervision department of SARB supervises the group on a consolidated basis and the relationship is one of mutual trust built through regular and open communication. The supervisory approach is risk-based rather than one of inspection.

Money laundering control

Legislation pertaining to money laundering and terrorist financing control imposes significant record keeping and customer identification requirements on financial institutions, as well as obligations to detect, prevent and report money laundering and terrorist financing. The group continues to strengthen its commitment to combat money laundering and terrorist financing by improving control measures as the regulatory environment becomes more dynamic. Embedding the group's minimum standards throughout all the group's African entities remains a challenge although significant progress has been made.

Occupational health and safety

The health and safety of employees, customers and other stakeholders continues to be a priority and the group aims to effectively identify and reduce the potential for accidents or injuries. The key focus areas in the group's domestic operations during the year have been on actively promoting compliance with current and pending legislation, and ensuring that occupational health and safety procedures are closely linked to the operational needs of the business. For more information on Standard Bank's initiatives please refer to the sustainability report.

Reputational risk

Reputational risk is the risk caused by damage to an organisation's reputation, name or brand. Such damage may result from a breakdown of trust, confidence or business relationships. Safeguarding the group's reputation is of paramount importance to its continued success and is the responsibility of every member of staff.

Glossary

Definitions

Term	Definition
Basel II	Basel II Capital Adequacy Framework.
Business risk	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 by group specific causes such as a poor choice of strategy, reputational damage or the decision to absorb costs or losses to preserve reputation.
Capital adequacy ratio (%)	Capital divided by risk-weighted assets.
Credit loss ratio (%)	Total impairment charges on loans and advances per the income statement as a percentage of average daily and monthly gross loans and advances.
Capital adequacy requirement (CAR)	The amount of capital held to ensure the ongoing solvency of a bank.
Country risk	Risk of loss arising when political or economic conditions or events in a particular country reduce the ability of counterparties in that country to meet their financial obligations to the group.
Credit risk	Risk of loss to the group as a result of the failure by a customer or counterparty to meet its contractual obligations to the group.
Cross-border risk	Risk that actions taken by a government may restrict the transfer and convertibility of funds (of local currency into non-local currency), thereby impacting the ability to obtain payment from counterparties on their financial obligations to the group.
Exposure at default (EAD)	Counterparty's expected exposure to the group at the time a default occurs.
Impairment of non-performing loans (Rm)	Impairment of specific identified credit losses, net of the present value of estimated recoveries.
Impairment of performing loans/Portfolio impairment (Rm)	Impairment for incurred credit losses inherent in the performing loan book.
International Financial Reporting Standards (IFRS)	International accounting standards issued by the International Accounting Standards Board.
Liquidity risk	Arises when the group is unable to meet its payment obligations when they fall due. This may be caused by the group's inability to liquidate assets or to obtain funding to meet its liquidity needs.
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.
Market risk	Risk of a change in the actual or effective market value or earnings of a portfolio of financial instruments caused by adverse 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 the above.
Operational risk	Risk of loss resulting from inadequate or failed processes, people and systems or from external events. This includes information risk and legal risk.
Probability of default (PD)	Probability of a counterparty not making full and timely repayment of credit obligations over a specific time horizon.
Regulations	Regulations relating to banks issued under the Banks Act, 1990 (Act No. 94 of 1990)

Regulator	South African Reserve Bank.
Reputational risk	Caused by damage to an organisation's reputation, name or brand.
Risk appetite	An expression of the maximum level of residual risk that the group is prepared to accept to deliver its business objectives.
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.
Special Purpose Entity or Vehicle	An entity created to accomplish a narrow and well-defined objective.
Slotting approach	One of the two Basel II approaches allowed for calculation of risk-weighted assets for specialised lending. With this approach the assets are evaluated against a set number of criteria and based on this evaluation an appropriate risk profile and risk weighting are calculated

Acronyms and abbreviations

AIRB	Advanced internal ratings based
ALCO	Asset and liability committee
Basel	Basel Capital Accord
CAR	Capital adequacy requirement
EAD	Exposure at default
EL	Expected loss
FIRB	Foundation internal ratings based
GAC	Group audit committee
GCC	Group credit committee
GRCMC	Group risk and capital management committee
GROC	Group risk oversight committee
Group	Standard Bank Group and its banking operations
IAS	International Accounting Standards
IASB	International Accounting Standards Board
ICAAP	Internal capital adequacy assessment process
IFRS	International Financial Reporting Standards
IRB	Internal ratings-based approach to implementing Basel II
IRRBB	Interest rate risk of the banking book
LGD	Loss given default
ORM	Operational risk management
PD	Probability of default
QRRE	Qualifying retail revolving exposure
SARB	South African Reserve Bank
SBG	Standard Bank Group
SBSA	The Standard Bank South Africa
SME	Small and medium enterprise
SPV	Special purpose vehicle
Tier I	Primary capital
Tier II	Secondary capital
Tier III	Tertiary capital
TSA	The standardised approach
VaR	Value-at-risk