

# Basel Pillar 3 disclosure



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# **BASEL PILLAR 3 DISCLOSURE**

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# **OVERVIEW OF RISK MANAGEMENT**

# INTRODUCTION

This risk and capital management report (Pillar 3 disclosure) covers the operations of FirstRand Limited (FirstRand or the group) and complies with:

- the Basel committee on Banking Supervision's (BCBS) revised Pillar 3 disclosure requirements (Pillar 3 standard);
- South African Reserve Bank (SARB) directives 4, 6 and 11 of 2014, and 3 of 2015; and
- Regulation 43 of the Regulations relating to Banks (Regulations), issued in terms of the Banks Act, 1990 (Act No. 94 of 1990), where not superseded by the revised Pillar 3 disclosure requirements.

The most significant revisions are templates for quantitative disclosure and definitions, some with a fixed format which aims to enhance comparability of banks' disclosures.

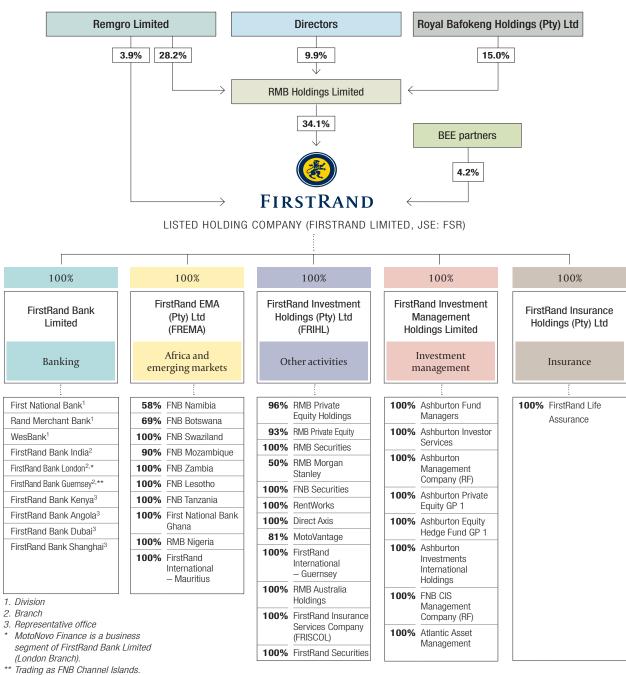
Some differences exist between the practices, approaches, processes and policies of FirstRand Bank Limited (the bank or FRB) and its fellow wholly-owned subsidiaries. These are highlighted by reference to the appropriate entity, where necessary. This report has been internally verified by the group's governance processes in line with the group's public disclosure policy.

The public disclosure policy describes the responsibilities and duties of senior management and the board in the preparation and review of the Pillar 3 disclosure and aims to ensure that:

- minimum disclosure requirements of the Regulations, standards and directives are met;
- disclosed information is consistent with the manner in which the board assesses the group's risk portfolio;
- the disclosure provides a true reflection of the group's financial condition and risk profile; and
- the quantitative and qualitative disclosures are appropriately reviewed.

The group consists of a portfolio of leading financial services franchises; these are First National Bank (FNB), the retail and commercial bank, Rand Merchant Bank (RMB), the corporate and investment bank, WesBank, the instalment finance business and Ashburton Investments, the group's investment management business. The FCC franchise represents group-wide functions.

# SIMPLIFIED GROUP STRUCTURE



# Structure shows effective consolidated shareholding

For segmental analysis purposes, entities included in FRIHL and FREMA, FirstRand Investment Management Holdings Limited and FirstRand Insurance Holdings (Pty) Ltd are reported as part of results of the managing franchise. The group's securitisations and conduits are in FRIHL.



# FIRSTRAND STRATEGY

# FirstRand's statement of intent

# FIRSTRAND'S PORTFOLIO OF LEADING FINANCIAL SERVICES FRANCHISES:

- provides a universal set of transactional, lending, investment and insurance products and services;
- seeks to operate in markets and segments where franchises can deliver competitive and differentiated client-centric value propositions...
- ...by leveraging the relevant distribution channels, product skills, licences and operating platforms of the wider group.

STRATEGY IS EXECUTED ON THE BACK OF DISRUPTIVE AND INNOVATIVE THINKING UNDERPINNED BY:

- owner-manager culture
- disciplined allocation of financial resources

UNDERPINNED BY THE GROUP'S COMMITMENT TO:

Create long-term franchise value

Deliver superior and sustainable economic returns within acceptable levels of volatility

Maintain balance sheet strength

# Executed through...

The group's strategy is executed through its portfolio of operating franchises within the framework set by the group.













Retail and Corporate and Key activities Instalment Investment Group-wide commercial investment functions finance management banking banking ⊕ retail, commercial → retail and ⊕ custodianship → consumer and corporate institutional mandate to → small business → large corporates Market manage → agricultural → public sector relationships with segments → medium corporate key external stakeholders → public sector ownership of key frameworks transactional and advisory asset-based ⊕ traditional and → ensure group deposit taking finance alternative delivers on → funding investment commitments to → full maintenance → mortgage loans → trading solutions stakeholders leasing → personal loans → personal loans banking cards → value-added → principal investing products and Products → investment solutions services (shortproducts → deposit taking term insurance) services → insurance products (funeral, risk, credit life) distribution channels Retail and Corporate and Retail and Interest rate risk in commercial credit counterparty credit commercial credit the banking book risk risk risk Insurance risk Traded market risk Funding and Risks liquidity risk Equity investment risk Foreign exchange risk Operational risk

Reputational

Model

Environmental

and social

Regulatory

Other

risks

Strategic

**Business** 



# RISK MANAGEMENT APPROACH

FirstRand believes that effective risk, performance and financial resource management are of primary importance to its success and is a key component of the delivery of sustainable returns to stakeholders. These disciplines are, therefore, deeply embedded in the group's tactical and strategic decision making.

The group believes a strong balance sheet and resilient earnings streams are key to growth, particularly during periods of uncertainty. FirstRand's franchises have consistently executed on a set of strategies which are aligned to group financial strategies and frameworks designed to ensure earnings resilience and growth, balance sheet strength, an appropriate risk/return profile and an acceptable level of earnings volatility under adverse conditions.

These deliverables are underpinned by the application of critical financial discipline through frameworks set at the centre. These frameworks include:

Risk management framework	Performance management framework	Balance sheet framework
<ul> <li>assesses the impact of the cycle on the group's portfolio;</li> <li>understands and prices appropriately for risk; and</li> <li>originate within cycle-appropriate risk appetite and volatility parameters.</li> </ul>	<ul> <li>allocates capital appropriately;</li> <li>ensures an efficient capital structure with appropriate/conservative gearing; and</li> <li>requires earnings to exceed cost of capital, i.e. positive net income after capital charge (NIACC).</li> </ul>	<ul> <li>executes sustainable funding and liquidity strategies;</li> <li>protects credit ratings;</li> <li>preserve a "fortress" balance sheet that can sustain shocks through the cycle; and</li> <li>ensure group remains appropriately capitalised.</li> </ul>

The group defines risk widely — as any factor that, if not adequately assessed, monitored and managed, may prevent it from achieving its business objectives or result in adverse outcomes, including reputational damage.

Effective risk management is key to the successful execution of strategy and is based on:

- a risk-focused culture with multiple points of control applied consistently throughout the organisation;
- a combined assurance process to integrate, coordinate and align the risk management and assurance processes within the group to optimise the level of risk, governance and control oversight; and
- strong risk governance through the application of financial and risk management disciplines through frameworks set at the centre.

Risk taking is an essential part of the group's business and the group explicitly recognises core competencies as necessary and important differentiators in the competitive environment in which it operates.

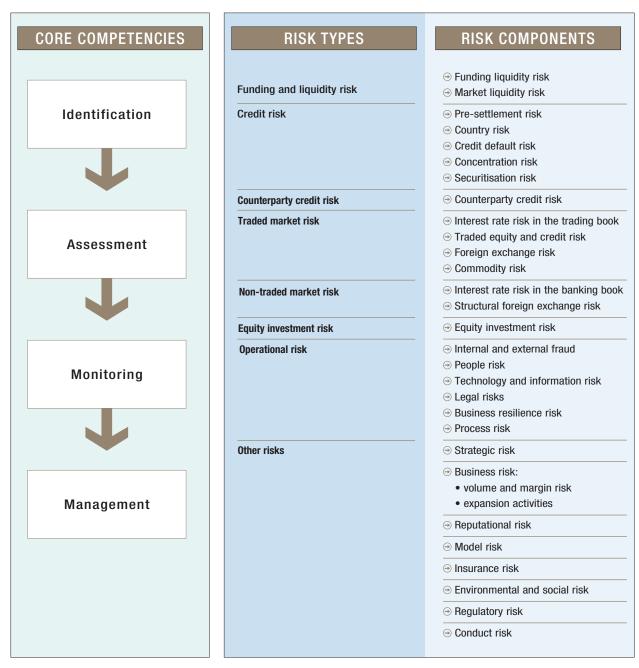
These core risk competencies are integrated in all management functions, business areas and at risk-type level across the group to support business by providing the checks and balances to ensure sustainability, performance, achievement of desired objectives, and avoidance of adverse outcomes and reputational damage.

A business profits from taking risks, but will only generate an acceptable profit commensurate with the risk from its activities if the risks are properly managed and controlled. The group's aim is not to eliminate risk, but to achieve an appropriate balance between risk and reward. This balance is achieved by controlling risk at the level of individual exposures, at portfolio level and in aggregate across all risk types and businesses through the application of its risk appetite framework. The group's risk appetite framework enables organisational decision making and is aligned with FirstRand's strategic objectives.

Refer to the group's annual integrated report for a detailed discussion on the group's strategies to ensure resilience in earnings, growth and returns, and to maintain balance sheet strength. The report is available on www.firstrand.co.za.

The following table illustrates the core competencies that form part of the group's risk management processes across key risk types and risk components.

# CORE RISK COMPETENCIES AND KEY RISKS

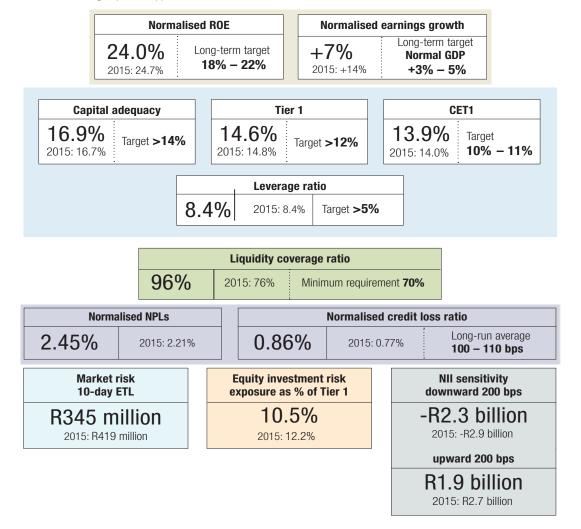


Risk limits established across all risk types are an integral part of managing risk and are instrumental in constraining risk taking within acceptable risk appetite levels. The risks and the roles and the responsibilities of each stakeholder in business, support and the various control functions in the management of these risks are described in the group's business performance and risk management framework (BPRMF).



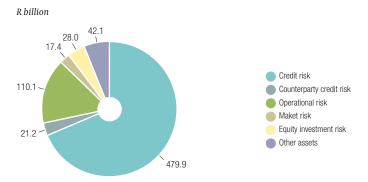
# RISK PROFILE

The following table provides a high-level overview of FirstRand's risk profile in relation to the group's risk appetite\*. Refer to page •• for a detailed discussion of the group's risk appetite.



Note: Capital and leverage ratios include unappropriated profits.

# **RISK WEIGHTED ASSETS**



# RISK PROFILE ANALYSIS

# Return on equity and earnings growth The CFO's report of the annual • The quality of the group's operating franchises' growth strategies and disciplined allocation of integrated report provides an financial resources have over time enabled the group to deliver on its earnings growth and return overview of the group's financial targets. position and performance for the year ended 30 June 2016. Capital adequacy • FirstRand has maintained its strong capital position. The group continues to actively manage capital For a detailed analysis of capital adequacy and leverage refer to composition and, to this end, issued R4.9 billion Basel III-compliant Tier 2 instruments in the page 33 of this report. domestic market during the past 12 months. This results in a more efficient composition which is closely aligned with the group's internal targets. • The Basel III leverage ratio is a supplementary measure to the risk-based capital ratio and greater emphasis has been placed on monitoring leverage. **Funding and liquidity** For a detailed analysis of funding • Liquidity buffers are actively managed via high quality highly liquid assets that are available as and liquidity risk refer to page 43 of protection against unexpected events or market disruptions. The group exceeds the 70% minimum this report. liquidity coverage ratio (LCR) as set out by the BCBS with an LCR measurement of 96%. The group's high-quality liquid asset (HQLA) holdings amounted to R157 billion. Credit risk For a detailed analysis of credit risk • Group credit loss rates increased as expected, impacted by a more challenging macroeconomic environment. refer to page 56 of this report. • Performance is acceptable and is within risk appetite. • Credit origination strategies are aligned to the group's macroeconomic outlook. Market risk in the trading book • The interest rate risk asset class represents the most significant market risk in the trading book For a detailed analysis of market risk in the trading book refer to exposure at June 2016. The group's market risk profile remained within risk appetite. page 122 of this report. Equity investment risk For a detailed analysis of equity • The year was marked with significant realisations with robust realisation profits. The quality of the investment risk refer to page 136 of investment portfolio remains acceptable and within risk appetite. this report.



# TOP AND EMERGING RISKS

Identifying and monitoring potential and emerging risks is an integral part of the group's approach to risk management. These risks are continuously identified, potential impacts determined, reported to and debated by appropriate risk committees and management. Current top and emerging risks are outlined below.

# TOP AND EMERGING RISKS

Risk	Description	Mitigant			
Global macroecono	Global macroeconomic environment				
Global economic outlook	The macroeconomic environment remains challenging and significant downside risk remains. Weak growth, low inflation and persistent macroeconomic shocks continue to necessitate more global monetary policy stimulus.  While there are growing concerns about the negative long-term consequences of these policies, very low global interest rates have provided another boost to high-yielding assets across the globe.  Continued expected increases in dollar funding costs pose a challenge to indebted governments, corporates and consumers.	Continue to monitor economic developments in key markets with appropriate planning, responses, strategy alignment and provisions as required.			
Local macroeconon	nic environment				
Local economic outlook	Although the rand has received a boost from yield-seeking global investors, pressure remains due to the volatile nature of these inflows. Global monetary policy settings may strengthen the rand in the medium term.  Although pressure on economic growth remains due to low oil, commodity and international agricultural prices, low inflation growth and many unresolved structural constraints, the economy is showing signs of rebalancing.  Constructive reaction from politicians to the outcome of the local elections may also have a positive impact on the local economic outlook.	Credit origination and funding strategies are assessed in light of economic conditions and market liquidity.			
Structural constraints	Ongoing structural constraints will further restrict South Africa's ability to grow employment, increase private sector investment and reap the benefits of a weak exchange rate and some global growth. This continues to limit growth in household, corporate and government income.				
Sovereign rating	The risk of a sovereign rating downgrade may impact foreign investment in South Africa and the availability and cost of funding.	The impact of a sovereign downgrade on business continues to be assessed.			
Regulatory and legal risks					
Regulatory developments	The regulatory landscape requires the group to deal with a number of changes and additional legal and regulatory requirements. These include market conduct, financial crime, the implementation of a twin peaks model of financial regulation, the Protection of Personal Information Act, IFRS 9, amendments to the National Credit Act, insurance regulations, foreign account tax compliance and foreign asset control sanctions.	Significant investment in people, systems and processes are made to manage the risks emanating from the large number of new regulatory requirements.			
Legal risk	Legal proceedings arising from business operations could give rise to potential financial loss and reputational damage.				

Risk	Description	Mitigant			
Risks related to bu	Risks related to business operations and internal control systems				
Structural constraints	Operations are reliant on many elements of the national infrastructure, including water supply, electricity and telecommunications. Structural constraints, such as skills shortages, labour market unrest, possible power outages and financial issues of state owned entities, could potentially have direct or indirect impacts on business.	The impact of structural constraints on operations is assessed with contingency plans in place where appropriate.			
Funding costs	Market availability of HQLA could impact the group's funding position and costs.	A number of actions are in place to ensure a resilient funding model.			
Cybercrime and fraud	Cybercrime and potential money laundering threats continue to increase globally and remain a key area of focus.	Threats are continuously assessed and controls adapted to address possible control weaknesses and improve system security.			
Data management	Data management becoming more important from a strategic perspective and new regulatory requirements for more frequent, consistent, accurate and timely data submissions are eminent.	Projects for improved data management, aggregation and reporting are underway.			



# **RISK APPETITE**

The management of financial resources, defined as capital, funding and liquidity, is critical to the achievement of FirstRand's stated growth and return targets and is driven by the group's overall risk appetite. As such, the group sets financial and prudential targets through different business cycles and scenarios. The group is expected, at a defined confidence level, to deliver on its commitments to its stakeholders. The management of the group's financial resources is executed through Group Treasury and is independent of the operating franchises. This ensures the required level of discipline is applied in the allocation of financial resources and pricing of these resources. This also ensures that Group Treasury's mandate is aligned with the operating franchises' growth, return and volatility targets, in order to deliver shareholder value.

The group's risk appetite enables organisational decision making and is integrated with FirstRand's strategic objectives. Business and strategic decisions are aligned to the risk appetite measures to ensure these are met during a normal cyclical downturn. At a business unit level, therefore, strategy and execution are managed through the availability and price of financial resources, earnings volatility limits and required hurdle rates and targets.

### RISK APPETITE STATEMENT

FirstRand's **risk appetite** is the aggregate level and type of risks the group is willing and able to accept within its overall **risk capacity**, and is captured by a number of qualitative principles and quantitative measures.

The aim is to ensure that the group maintains an appropriate balance between risk and reward. Risk appetite limits and targets are set to ensure the group achieves its overall strategic objectives, namely:

- create long-term franchise value;
- deliver superior and sustainable economic returns to shareholders within acceptable levels of volatility; and
- maintain balance sheet strength.

The group's strategic objectives and financial targets frame its risk appetite in the context of risk, reward and growth, and contextualise the level of reward the group expects to deliver to its stakeholders under normal and stressed conditions for the direct and consequential risk it assumes in the normal course of business.

Risk capacity is the absolute maximum level of risk the group can technically assume given its current available financial resources, i.e. earnings and capital. The group views earnings as the primary defence against adverse outcomes. Risk capacity provides a reference for risk appetite and is not intended to be reached under any circumstances.

Risk appetite states what proportion of the group's financial resources should be utilised in the execution of its strategy and is determined through consideration of a number of filters, including:

- overall strategic objectives;
- growth, volatility and return targets, and;
- meeting the group's commitments to all stakeholders including regulators, depositors, debt holders and shareholders.

Risk appetite is captured through both quantitative measures and qualitative principles, which include set objectives for the level of earnings volatility, and minimum levels of capital and liquidity to be maintained over defined time horizons in normal and stressed environments.

**Risk limits** are clearly defined risk boundaries for different measures per risk type. It is also referred to as thresholds, tolerance or triggers. Actual performance/losses are measured against limits/thresholds for management purposes.

# PROCESS FOR DETERMINING RISK APPETITE

Risk capacity

# **EARNINGS**

**CAPITAL** 



Filters

Strategic objectives and growth, return and volatility targets

Constraints based on stakeholder commitments



# **QUANTITATIVE MEASURES**

EARNINGS GROWTH, RETURN AND VOLATILITY TARGETS R0E 18% to 22%

# MINIMUM LIQUIDITY TARGETS AND TARGETED CREDIT RATING

Capital

# Liquidity

Normal business cycles

CET1: 10% - 11%

To exceed minimum regulatory requirements with appropriate buffers

Earnings growth Nominal GDP +3% to 5%

Basel III leverage > 5%

Credit rating\*

Equal to highest in SA banking industry

Risk appetite

QUALITATIVE PRINCIPLES				
Always act with a fiduciary mindset.	Limit concentrations in risky asset classes or sectors.			
Comply with prudential regulatory requirements.	Avoid reputational damage.			
Comply with the spirit and intention of accounting and regulatory requirements.	Manage the business on a through-the-cycle basis to ensure sustainability.			
Build and maintain a strong balance sheet which reflects conservatism and prudence across all disciplines.	Identify, measure, understand and manage the impact of downturn and stress conditions.			
No risk taking without a deep understanding thereof.	Strive for operational excellence and responsible business conduct.			
Comply with internal targets in various defined states to the required confidence interval.	Ensure the group's sources of income remain appropriately diversified across business lines, products, markets and regions.			
No implementation of business models with excessive gearing through either on- or off-balance sheet leverage.				

The risk appetite statement aims to drive the discipline of balancing risk, return and growth across all the portfolios. It is in this process that the group ultimately seeks to achieve an optimal trade-off between its ability to take on risk and the sustainability of the returns delivered to stakeholders.

Refers to a rating agency's measure of a bank's intrinsic creditworthiness before considering external factors and relates to FirstRand Bank Limited.



# Application of the risk/reward framework

Risk appetite, targets and limits are used to monitor the group's risk/ reward profile on an ongoing basis. The risk/reward profile should be measured point-in-time and forward looking. Risk appetite should influence the business plans and inform risk-taking activities and strategies in every business.

The risk/reward framework provides for a structured approach to define risk appetite, targets and limits that apply to each key resource as well as the level of risk that can be assumed in this context. The framework drives the allocation of financial resources, including risk-taking capacity. Although different commitments are made to various stakeholders, these are monitored collectively.

The group cascades overall appetite into targets and limits at risk type, franchise and subsequent activity level, and these represent the constraints the group imposes to ensure its commitments are attainable. Management of risk is the responsibility of everybody across all levels of the organisation, supported through the three lines of control in the business performance and risk management framework.

The franchises are responsible for maximising risk-adjusted returns on a sustainable basis, within the limits of the group's risk appetite. Shifts in the macro environment are also critical to any strategic adjustments. FirstRand manages its business based on the group's houseview which is used for budgeting, forecasting and business origination strategies. The houseview focuses on the key macroeconomic variables that impact the balance sheet and income statement. The macro outlook for South Africa and a number of other jurisdictions where the group operates is reviewed on a monthly basis

and spans a three-year forecast horizon. Other jurisdictions with less data are updated less frequently, but at least on a quarterly basis. The business plan for the next three years is captured in the budget and forecasting process. Scenario planning is then used to assess whether the desired profile can be delivered and whether the business stays within the constraints it has set itself. The scenarios are based on changing macroeconomic variables, plausible event risks and regulatory and competitive changes.

The group employs a comprehensive, consistent and integrated approach to stress testing and scenario planning. The impact of the risk scenarios on the business is evaluated and the need for adjustment to origination is considered and appropriate actions are taken. More severe scenarios are run less frequently but are critical to support or test the capital buffers, capital and liquidity planning, validate existing quantitative risk models and understanding required management action.

The strategy, risk and financial resource management processes inform the capital and funding plans of the group. A thorough analysis and understanding of the value drivers, markets and macro environment also inform the portfolio optimisation decisions and the price and allocation of financial resources.

Through the risk appetite framework and processes, the group continues to refine its processes to align and cascade earnings growth, return and volatility targets of the overall risk appetite statement into limits and thresholds at risk type and franchise level. Through this process, the group aims to align the bottom up aggregation of franchise risk-reward statements to the group statement as well as test the limit structures with reference to the group statement.

# RISK MEASUREMENT APPROACHES

The following approaches are adopted by the group for the calculation of RWA.

Risk type	FRB domestic operations	SARB approval date	Remaining FirstRand subsidiaries and FRB foreign operations	
Credit risk	Advanced internal ratings-based (AIRB) approach and the standardised approach for certain portfolios	January 2008	Standardised approach	
Counterparty credit risk	Standardised method	May 2012	Current exposure method	
Market risk in the trading book	Internal model approach	July 2007	Standardised approach	
Equity investment risk	Market-based approach: Simple risk-weighted method*	June 2011	Market-based approach: Simple risk-weighted method*	
Operational risk**	Advanced measurement approach (AMA)	January 2009	Remaining subsidiaries and FRB foreign operations:  The standardised approach (TSA)	
			FRIHL entities:  Basic indicator approach (BIA), TSA, AMA	
Other assets	Standardised approach	January 2008	Standardised approach	

Subject to the threshold rules as per Regulation 38(5).

<sup>\*\*</sup> All entities on the AMA and TSA for operational risk were included in the approval for use of AMA and TSA from January 2009; some entities were moved to FRIHL with a subsequent legal entity restructure. All other entities in FRIHL remain on the BIA approach.

# Credit risk

The calculation of credit risk weighted assets (RWA) for FRB domestic operations is based on internally developed quantitative models in line with the AIRB approach. The three credit risk measures, namely probability of default (PD), exposure at default (EAD), and loss given default (LGD) used along with prescribed correlations, dependent on the asset class, and estimates of maturity, where applicable to derive credit RWA. The quantitative models also adhere to the AIRB requirements related to annual validation.

For the remaining entities, credit RWA is based on the standardised approach where regulatory risk weights are prescribed per asset class. Even though the remaining entities do not have regulatory approval to use the AIRB approach, internally developed quantitative models are used for internal assessment of credit risk.

# Securitisations

Capital against securitisation exposures is based on the appropriate approach under the Regulations. Where a public rating is available by an eligible external credit assessment institution (ECAI) for the notes in issue, the ratings-based approach is used otherwise the supervisory formula approach or a look-through to the underlying assets is applied. Capital calculated under these approaches is limited to the capital that would have been held had the assets remained on-balance sheet.

The ratings-based approach uses an external rating assigned to the securitisation tranches by an ECAI. Credit risk weightings are based on the rating assigned to the specific tranche as well as its seniority relative to other notes.

Under the supervisory formula approach, the capital requirement for any retained securitisation exposure is determined using the credit parameters for the underlying assets. Capital is determined using a standard formula taking into account the size of the tranche and credit enhancement.

# Counterparty credit risk

Regulatory capital for counterparty credit risk is based on the credit risk approach, i.e. AIRB for domestic entities and standardised approach for the remainder of the FirstRand entities. In addition, capital is held for credit value adjustment (CVA) risk. CVA refers to the fair value adjustment to reflect counterparty credit risk in the valuation of derivative contracts. In essence, it is the mark-to-market adjustment required to account for credit quality deterioration experienced by a derivative counterparty. CVA capital, for all entities, both domestic and foreign, is computed in accordance with the standardised approach. Regulatory capital serves as a proxy for economic capital.

There are three EAD approaches to measure the exposure of derivative transactions:

Current exposure method (CEM)	CEM is the simplest approach, and is based on a replacement cost plus add-on formula (dependent on potential future exposure that accounts for the potential change in the value of the contract until a hypothetical default of the counterparty.) This method is applied to all FirstRand entities with the exception of FRB (SA).
Standardised method	The standardised method is applied for FRB (SA). This method is more sophisticated that the CEM approach as it factors in the non-linearity features of derivatives, risk sensitivity such as PVO1s and is based on the concept of a hedge set. EAD under the standardised method is quantified by scaling either the current credit exposure less collateral or the net potential future exposure by a factor of 1.4.
Internal model method	The internal model method is the third and most complex method and is not applied by the group.

# Market risk in the trading book

Regulatory capital for domestic trading units is based on the internal Value-at-Risk (VaR) model supplemented with a stressed VaR (sVaR). VaR is calculated at the 99% 10-day actual holding period level using data from the past 260 trading days and sVaR is calculated using a pre-defined static stress period (2008/2009). VaR calculations over a holding period of one day are used as an additional tool in the assessment of market risk.

The subsidiaries in the rest of Africa and foreign branches are measured using the regulatory standardised approach for regulatory capital and an internal stress loss methodology for internal measurement of risk. Capital is calculated for general market risk using the duration methodology. In addition to general market risk, specific risk capital is held, based on the Basel III standardised approach duration method.

# Equity investment risk

The simple risk weighted method under the market-based approach (300% (listed) or 400% (unlisted)) is applied with the scalar for the quantification of regulatory capital. In terms of Regulation 38, a specific risk weight is applied to investments in financial, banking and insurance institutions (threshold rules). This is dependent on the size of the shareholding of the investments in relation to the group's qualifying CET1 capital. Economic and regulatory capital calculations are augmented by regular stress tests of market values and underlying drivers of valuations including assessments of stress resulting from portfolio concentrations.

Where price discovery is reliable, the risk of listed equity investments is measured based on a 90-day expected tail loss (ETL) calculated using RMB's internal market risk model for the economic capital quantification. The ETL risk measure is supplemented by a measure of the specific (idiosyncratic) risk of the individual securities per the specific risk measurement methodology.



# Operational risk

FirstRand applies AMA for its domestic operations. Offshore subsidiaries and operations use TSA for operational risk and all previously unregulated entities part of FRIHL use BIA. Under AMA, FirstRand uses a sophisticated statistical model for the calculation of capital requirements, which enables more accurate risk-based measures of capital for business units on AMA. Operational risk scenarios and internal loss data are operational risk measurement tools used as direct inputs into this model while risk and control assessments and key risk indicators are used indirectly through consideration in the operational risk scenario process. TSA and BIA capital calculations are based on a multiplication factor applied to gross income, as specified by Basel and SARB regulations. No risk-based information is used in these capital calculations and allocations.

### Other assets

FirstRand applies the standardised approach to property, plant and equipment, accounts receivable and other assets. Deferred tax assets relating to temporary differences are also included under other assets, and are risk weighted at 250%, subject to meeting the threshold requirements on an aggregate basis.

# **RISK MITIGATION**

The group is exposed to a number of risks inherent in its operations and uses a range of techniques and strategies to actively mitigate these risks.

# Interest rate in the banking book

The internal funds transfer pricing process is used to transfer interest rate risk in the banking book (IRRBB) from the franchises to Group Treasury. This process allows risk to be managed centrally and holistically in line with the group's macroeconomic outlook.

The two key drivers of IRRBB, the endowment effect and the fixed-rate book, are managed by Group Treasury through balance sheet optimisation or the use of derivatives.

Endowment effect	The endowment effect is the most significant driver of IRRBB and is a result of the use of large proportions of the low/non-rate liabilities to fund variable rate assets. Consequently the group's margins expand in a rate-hiking cycle, but contract in a rate-cutting cycle. Group Treasury actively monitors the macroeconomic environment to assess the stage of the cycle and hedges this risk to stabilise earnings.
	Derivative instruments used are mainly interest rate swaps, for which a liquid market exists. Where possible, hedge accounting is used to minimise accounting mismatches, thus ensuring that amounts deferred in equity are released to the income statement at the same time as movements attributable to the underlying hedged asset/liability.
Fixed-rate book	The remaining portion stems from the fixed-rate book. Interest rate risk from the fixed-rate book is managed to low levels with remaining risk stemming from timing mismatches and basis risk.

Group Treasury is mandated by the board to protect and enhance the group's IRRBB and operates within a set of risk limits aligned to the group's risk appetite. The exposures against these limits are monitored daily with oversight by FCC Risk Management and ALCCO. All hedges transacted for IRRBB are subject to the hedge effectiveness test and the vast majority are classified as cash flow hedges.

# Credit risk mitigation

Since taking and managing credit risk is core to its business, the group aims to optimise the amount of credit risk it takes to achieve its return objectives. Mitigation of credit risk is an important component of this, beginning with the structuring and approval of facilities for only those clients and within those parameters that fall within risk appetite.

Although, in principle, credit assessment focuses on the counterparty's ability to repay debt, credit mitigation instruments are used where appropriate to reduce the group's lending risk, resulting in security against the majority of exposures. These include financial or other collateral, netting agreements, guarantees or credit derivatives. The collateral types are driven by portfolio, product or counterparty type.

# Credit risk mitigation instruments

- mortgage and instalment sale finance portfolios in FNB HomeLoans, FNB Wealth and WesBank are secured by the underlying assets financed;
- personal loans, overdrafts and credit card exposures are generally unsecured or secured by guarantees and sureties;
- FNB commercial credit exposures are secured by the assets of the SME counterparties and commercial property finance deals are secured by the underlying property and associated cash flows;
- working capital facilities in RMB corporate banking are unsecured;
- structured facilities in RMB are secured as part of the structure through financial or other collateral, including guarantees, credit derivative instruments and assets; and
- credit risk in RMB is mitigated through the use of netting agreements and financial collateral.

The group employs strict policies governing the valuation and management of collateral across all business areas. Collateral is managed internally to ensure that title is retained over collateral taken over the life of the transaction. Collateral is valued at inception of the credit agreement and subsequently where necessary through physical inspection or index valuation methods. For corporate and commercial counterparties, collateral is reassessed during the annual review of the counterparty's creditworthiness to ensure that proper title is retained over collateral. For mortgage portfolios, collateral is revalued on an ongoing basis using statistical index models and physical inspection is performed in the event of default at the beginning of the recovery process.

Concentrations within credit risk mitigation types, such as property, are monitored and managed in the three credit portfolios. FNB HomeLoans, Housing Finance and Wealth monitor exposure to a number of geographical areas, as well as within loan-to-value bands. Collateral is taken into account for capital calculation purposes through the determination of LGD. Collateral reduces LGD, and LGD levels are determined through statistical modelling techniques based on historical experience of the recovery processes.

# Counterparty credit risk

The group uses various instruments to mitigate the potential exposure to certain counterparties. These include financial or other collateral in line with common credit risk practices, as well as netting agreements, guarantees and credit derivatives. In addition, the group has set up a function to clear OTC derivatives centrally as part of risk mitigation.

The group uses international swaps and derivatives association (ISDA) and international securities market association agreements for the purpose of netting derivative transactions and repurchase transactions, respectively. These master agreements as well as associated credit support annexes (CSA) set out internationally accepted valuation and default covenants, which are evaluated and applied daily, including daily margin calls based on the approved CSA thresholds.

The effectiveness of the hedges and mitigants in place are monitored by a combination of counterparty risk limits and market risk limits. The setting of these limits is defined in accordance with the wholesale credit risk framework and the market risk limit framework. The counterparty credit risk team in RMB Global Markets are the custodians of the policies that set collateral requirements for counterparties and portfolios. The business lines are responsible for executing these policies and the RMB business resource management desk is responsible for the overall management of the funding costs/benefits of the collateral. Client and portfolio exposures, concentrations and effectiveness of collateral and hedges are monitored on an ongoing basis via the relevant derivative risk and Global Market's credit risk committees in RMB.

Collateral, in the form of cash and/or cash equivalents, is the primary credit risk mitigant employed within counterparty credit risk. Collateral arises from margin arrangements which are stipulated within netting agreements and is also a function of providing market access to clients across certain business lines. The liquid nature of the collateral taken makes it effective as a mitigant in that its valuation, where applicable, is easily observable in the market and in that lower regulatory haircuts apply.

# Risk insurance

The group has a structured insurance risk financing programme in place, developed over many years, to protect the group against unexpected material losses arising from non-trading risks. The insurance risk programme is continuously refined through ongoing assessment of changing risk profiles, organisational strategy and growth, and monitoring of international insurance markets. The levels and extent of insurance cover is reviewed and benchmarked annually.

The group's insurance-buying philosophy is to self-insure as much as is economically viable and to only protect itself against catastrophic risks through the use of third-party insurance providers. Accordingly, the majority of cover is placed into the group's wholly-owned first-party dedicated insurance company, FirstRand Insurance Services Company Limited (FRISCOL). All cover on the main programme is placed with reinsurers with a minimum credit rating of A-. The insurance programme includes, *inter alia*, cover for operational risk exposures such as professional indemnity, directors' and officers' liability, crime, public and general liability, assets, etc. The group, however, does not consider insurance as a mitigant in the calculation of capital for operational risk purposes.

# **RISK GOVERNANCE**

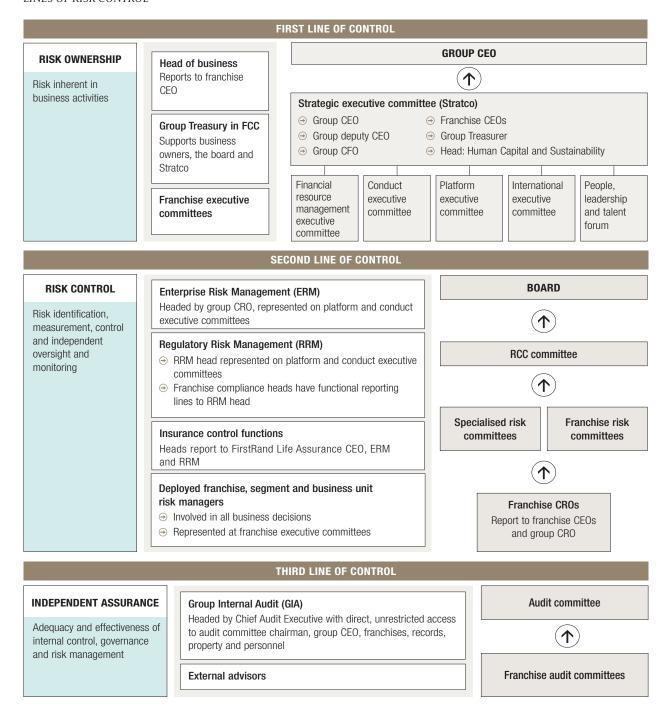
The group believes that effective risk management is supported by effective governance structures, robust policy frameworks and a risk-focused culture. Strong governance structures and policy frameworks foster the embedding of risk considerations in business processes and ensure that consistent standards exist across the group. In line with the group's corporate governance framework, the board retains ultimate responsibility for providing strategic direction, setting risk appetite and ensuring that risks are adequately identified, measured, monitored, managed and reported on.



# Risk governance framework

The group's BPRMF describes the group's approach to risk management. Effective risk management requires multiple points of control or safeguards that should consistently be applied at various levels throughout the organisation. There are three lines of control across the group's operations, which are recognised in the BPRMF. The following diagram illustrates the three lines of risk control.

# LINES OF RISK CONTROL



The responsibilities of the lines of risk control are described below.

Responsibilities in the first line of control

#### **Group Treasury** • act in accordance with mandates approved by the board or its • provides an integrated approach to financial resource management; delegated authority; • optimises the group's portfolio to deliver sustainable returns within • identify, quantify and monitor key risks to business under normal an acceptable level of risk; and stress conditions: performs scenario analyses and stress testing; • implement strategy within approved risk appetite parameters; • manages the group's liquidity, funding, interest rate and market risk design business processes to appropriately manage risk; in the banking book, and foreign exchange mismatch; • ensure that board-approved risk policies, frameworks, standards, performs capital management and planning; and processes, methodologies and risk tools are implemented; advises senior management on potential capital actions, dividend specify and implement early warning measures, associated strategy and other capital management developments. reporting, management and escalation processes through governance structures; implement risk mitigation and response strategies; • implement timeous corrective actions and loss control measures as required; and • ensure staff understand and implement responsibilities for risk management.

# Strategic executive committee

- execution of group strategy;
- assisted by the following subcommittees in the execution of its duties:
  - the financial resource management executive committee ensures the optimal use and allocation of financial resources (capital, funding and liquidity) to business activities of the group and assesses the group's risk and balance sheet capacity as well the usage of that capacity across the portfolio.
  - the international executive committee provides oversight of the group's business operations conducted outside of the borders of South Africa;
  - the platform executive committee ensures rigorous interaction, interrogation and strategy formulation on matters pertaining to the group operating model;
  - the conduct executive committee act as the custodian of conduct in the deployment of the group's operating model and ensure rigorous interaction, interrogation and strategy formulation on matters pertaining to conduct; and
  - the people, leadership and talent forum provides oversight of leadership and talent management practices aimed at delivering a compelling employee value proposition, thus helping attract and retain the best talent available.

#### Franchise evecutive committees

- formulate and approve franchise strategy as it relates to products, markets, clients, people and culture, brand and marketing, reputation and target countries;
- approve the franchise core committee and governance structure and its mandates:
- monitor the economic environment in South Africa as well as other relevant jurisdictions and the associated impact on the bank's strategies and business plans; and
- review and approve policies as it relate to business processes and employees.



Responsibilities in the second line of control

ERM	Deployed risk management functions
<ul> <li>frameworks, policies, standards and risk governance structures;</li> <li>develops and communicates risk management strategy, and challenges risk profiles;</li> <li>monitors adequate and effective implementation of risk management processes;</li> <li>reports risk exposures and performance to management and governance structures;</li> <li>supports management in risk aspects of business decisions;</li> <li>ensures appropriate risk management skills and culture;</li> <li>performs risk measurement validation; and</li> <li>manages risk regulatory relationships.</li> </ul>	<ul> <li>supports management in identifying and quantifying key risks;</li> <li>ensures that board-approved risk policies, frameworks, standards, methodologies and tools are adhered to;</li> <li>approves design of business risk processes to ensure appropriate risk management;</li> <li>identifies process flaws and risk management issues, and initiates and monitors corrective action;</li> <li>ensures timeous risk management and loss containment activities; and</li> <li>compiles, analyses and escalates risk reports on performance, risk exposures and corrective actions, through governance structures in appropriate format and frequency.</li> </ul>
RRM	Insurance control functions
monitors consistency of business practices, policies, frameworks and approaches with applicable laws and regulations.	<ul> <li>actuarial function provides assurance to the board on appropriateness of insurance liability assumptions and capital adequacy; and</li> <li>risk management and compliance functions conduct risk and compliance assessments, and implement improvements.</li> </ul>
Responsibilities in the third line of control	

- monitors risk management infrastructure and practices;
- reviews reliability and integrity of financial and operational information;
- reviews significant systems established by management to ensure compliance with laws and regulations;
- reviews safeguarding and existence of assets;
- assesses whether resources are acquired economically, and used efficiently and effectively;
- reviews operations or programmes for consistency with established goals and objectives;
- evaluates and assesses significant changes in functions, systems, services, processes, operations and controls;
- provides an assessment of the adequacy and effectiveness of internal control system (including financial controls) and risk management to audit committee; and
- conducts work in accordance with international internal audit practices and its activities are considered annually by external auditors.

# Risk governance structure

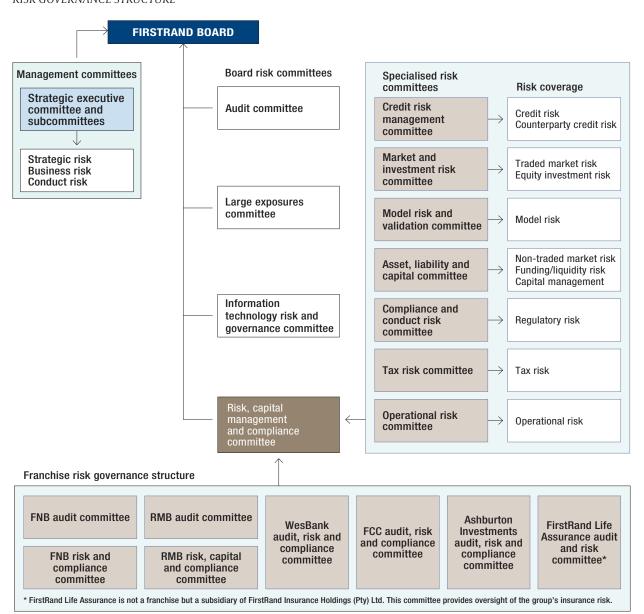
The risk management structure is set out in the group's business performance and risk management framework (BPRMF). As a policy of the board, the BPRMF delineates the roles and responsibilities of key stakeholders in business, support and control functions across the various franchises and the group.

The primary board committee overseeing risk matters across the group is the FirstRand risk, capital management and compliance (RCC) committee. It has delegated responsibility for a number of specialist topics to various subcommittees. Further detail on the roles and responsibilities of the RCC committee and its subcommittees relating to each particular risk type is provided in the major risk sections of this report.

Additional risk, audit and compliance committees exist in each franchise, the governance structures of which align closely with that of the group, as illustrated in the risk governance structure below. The governance structures are in place to ensure a common understanding of the challenges businesses face and how these are addressed across the group. The franchise audit, risk and compliance committees support the board risk committees and RCC subcommittees in the third line of control.

The following diagram illustrates how the risk committees fit into the board committee structure and the risk coverage of each committee. Other board committees also exist, with clearly defined responsibilities. The strategic executive committee ensures alignment of franchise strategies, sets risk appetite and is responsible for optimal deployment of the group's financial and non-financial resources.

# RISK GOVERNANCE STRUCTURE





# RESPONSIBILITIES OF THE BOARD RISK COMMITTEES

Committee	Responsibility			
Audit committee	<ul> <li>assists the board with its duties relating to the safeguarding of assets, operation of adequate systems and controls, assessment of going concern status and ensuring that relevant compliance and risk management processes are in place;</li> <li>oversees and reviews work performed by the external auditors and internal audit function; and</li> <li>oversees financial risks and internal financial controls including the integrity, accuracy and completeness of the annual integrated report, which is provided to shareholders and other stakeholders.</li> </ul>			
Risk, capital management and compliance committee	<ul> <li>approves risk management policies, frameworks, strategies and processes;</li> <li>monitors containment of risk exposures within the risk appetite framework;</li> <li>reports on assessment of the adequacy and effectiveness of risk appetite, risk management, internal capital adequacy assessment process (ICAAP) and compliance processes to the board;</li> <li>monitors the implementation of the risk management strategy, risk appetite limits and the effectiveness of risk management;</li> <li>initiates and monitors corrective action, where appropriate;</li> <li>monitors that the group takes appropriate action to manage its regulatory and supervisory risks, and complies with applicable laws, rules, codes and standards;</li> <li>approves regulatory capital models, risk and capital targets, limits and thresholds; and</li> <li>monitors capital adequacy and ensures that a sound capital management process exists.</li> </ul>			
Large exposures committee (LEC)	<ul> <li>approves credit applications or renewals in excess of 10% of the group's qualifying capital and reserves;</li> <li>approves credit applications or renewals in excess of 25% of FirstRand Limited's capital and reserves prior to submission to the SARB for approval;</li> <li>delegates the mandate for approval of group and individual facilities to the LEC subcommittees as appropriate. These include the FirstRand wholesale credit approval committee, commercial credit approval committee and the FirstRand retail credit policy, risk appetite committee and mandate approval as appropriate; and</li> <li>approval of specific related-party exposures/transactions.</li> </ul>			
Information technology risk and governance committee	<ul> <li>approves and monitors the implementation of IT risk and governance principles, policies, standards, frameworks and plans;</li> <li>monitors the availability, security and continuity of IT services, as well as the remediation of identified key IT risks, and initiates corrective action where required; and</li> <li>ensures that IT has appropriately skilled risk and management resources to deliver on the business mandate.</li> </ul>			

# RESPONSIBILITIES OF THE SUBCOMMITTEES OF THE RCC COMMITTEE

RCC subcommittee	Responsibility
Credit risk management committee	<ul> <li>approves credit risk management and risk appetite policies as well as forward-looking credit risk indicators developed by retail, commercial and corporate portfolio management;</li> <li>monitors the credit risk profile including performance relative to credit risk appetite thresholds, quality of the in-force business and business origination in terms of the group's view of credit economic outlook;</li> <li>monitors scenario and sensitivity analysis, stress tests, credit economic capital utilisation, credit pricing and credit concentrations;</li> <li>ensures uniform interpretation of credit regulatory requirements and credit reporting; and</li> <li>monitors corrective actions where appropriate.</li> </ul>
Market and investment risk committee	<ul> <li>approves market and investment risk management policies, standards and processes;</li> <li>monitors the market and investment risk profile and the effectiveness of market and investment risk management processes; and</li> <li>approves market and investment risk-related limits.</li> </ul>
Model risk and validation committee	approves or recommends for approval by the RCC committee, all material aspects of model validation work including credit ratings and estimations, internal models for market risk and advanced measurement operational risk models for regulatory capital calculations.
Asset, liability and capital committee (ALCCO)	<ul> <li>approves and monitors effectiveness of management policies, assumptions, limits and processes for liquidity and funding risk, capital and non-traded market risk;</li> <li>monitors the group's funding management;</li> <li>monitors capital management including level, composition, supply and demand of capital, and capital adequacy ratios; and</li> <li>approves frameworks and policies relating to internal funds transfer pricing for the group.</li> </ul>
Compliance and conduct risk committee	<ul> <li>approves regulatory risk, and anti-money laundering and combating the financing of terrorism management principles, frameworks, plans, policies and standards;</li> <li>monitors the effectiveness of regulatory risk management across the group and initiates corrective action where required; and</li> <li>monitors AML risk assessments, risk profile and compliance with relevant laws and regulations, and the adequacy of remedial actions.</li> </ul>
Tax risk committee	<ul> <li>sets tax strategy and tax risk appetite;</li> <li>approves the tax management frameworks and policies; and</li> <li>monitors tax risk assessments and profiles, compliance tax risks, corrective actions and escalation to the RCC committee, where required.</li> </ul>
Operational risk committee	<ul> <li>provides governance, oversight and coordination of relevant operational risk management practices and initiates corrective action, where required;</li> <li>recommends the group's operational risk appetite for approval by RCC committee;</li> <li>monitors the group and franchise operational risk profiles against operational risk appetite; and</li> <li>approves the operational risk management framework and all its subpolicies/frameworks, including fraud risk, legal risk, business resilience, information governance, information technology and physical security.</li> </ul>



# Combined assurance

The audit committee oversees formal enterprise-wide governance structures for enhancing the practice of combined assurance at group and franchise levels. The primary objective is for the assurance providers to work together with management to deliver the appropriate assurance cost effectively. Assurance providers in this model include GIA, senior management, ERM, RRM and external auditors. The combined outcome of independent oversight, validation and audit tasks performed by the assurance providers ensure a high standard across methodological, operational and process components of the group's risk and financial resource management.

Combined assurance results in a more efficient assurance process through the elimination of duplication, more focused risk-based assurance against key control areas and heightened awareness of emerging issues, resulting in the implementation of appropriate preventative and corrective action plans.

# Risk information reporting

# Process of risk reporting

The group's robust and transparent risk reporting process enables key stakeholders (including the board and strategic executive committee) to get an accurate, complete and reliable view of the group's financial, non-financial and risk profile and to make appropriate strategic and business decisions.

Reporting of risk information follows the governance structure as illustrated on page ••. Specialised risk committees and franchise audit, risk and compliance committees report to the RCC committee and its subcommittees, as well as to relevant executive committees on risk profile, material risk exposures, risk-adjusted business performance and key risk issues. The RCC committee submits its reports and findings to the board and highlights control issues to the audit committee.

Regular risk reporting enables the board, senior management, RCC committee and relevant subcommittees to evaluate and understand the level and trend of material risk exposures and its impact on the group's capital adequacy, and to make timely adjustments to the group's future capital requirements and strategic plan.

The RCC committee, in turn, submits reports to the board on:

- the group's risk profile, significant issues, key risk exposures, risk rating trends, board risk appetite principles and board risk limits;
- effectiveness of processes relating to corporate governance, risk management, capital management and capital adequacy;
- level of compliance or non-compliance with laws and regulations and supervisory requirements;
- internal control and regulatory material malfunction;
- contravention of codes of conduct or ethics, personal trading, or unethical behaviour by any of the directors; and
- limits, authorities and delegations granted to the RCC committee.

GIA provides a written assessment regarding the adequacy and effectiveness of the system of internal controls (including financial controls) and risk management to the audit committee. This enables the board to report on the effectiveness of the system of internal controls in the annual integrated report.

# Scope and main content of risk reporting

Risk reports to the board, board risk committees, franchise risk and audit committees, and senior management include the following:

- risk exposure and risk-adjusted business performance;
- feedback on the implementation and monitoring of risk management processes;
- comparison of risk management performance against risk appetite, limits and indicators;
- periodical review of process against and deviation from the risk management plan;
- changes in the external and internal environment and its possible impact on the risk profile;
- impact of environmental changes on the strategic risk profile of the company;
- assessment that risk responses are effective and efficient in both design and operation;
- tracking the implementation of risk responses;
- analysing and learning lessons from changes, trends, successes, failures and events; and
- identifying emerging risks.

# Challenge of current practice

As part of the reporting, interrogation and control process, ERM drives the implementation of more sophisticated risk assessment methodologies through the design of appropriate policies and processes, including the deployment of skilled risk management personnel in each of the franchises.

ERM and GIA ensure that all pertinent risk information is accurately captured, evaluated and escalated appropriately and timeously. This enables the board and its designated committees to retain effective control over the group's risk position.

# Risk culture

The group recognises that effective risk management requires the maintenance of an appropriate risk culture. The group distinguishes between corporate culture – how values are lived in the group; and risk culture – support for and attitudes towards risk management. Significant determinants are ethical leadership, flow of information, reporting integrity and customer focus.

The group's risk culture is intended to ensure effective risk management and controls. It places the primary responsibility for risk management on the first line of control (risk ownership), while designating specific risk management related duties and responsibilities to the second (risk control) and third line (independent assurance) of risk control.

The group believes its risk culture is underpinned by the following:

- competent and ethical leadership in setting strategy, risk appetite and a positive attitude towards applying appropriate risk practices;
- robust risk governance structures to ensure risk policy frameworks are visible and implemented, and that appropriate committee memberships and structures exist;
- best practice risk identification, measurement, monitoring, management and reporting; and

⊕ Accurate and timely flow of information with appropriate disclosure

• a broader organisational culture which drives appropriate business ethics practices and supports risk goals and which provides a balance between skills and ethical values and ensures accountability for performance.

In support of a sound risk culture, the group manages three conduct risk programmes, with appropriate levels of staff training and communication to ensure responsible banking conduct. The programmes are further described in the *conduct risk* section.

**THEMES** 

The group has established clear parameters to assess its culture risk rating. This is outlined in the following diagram.

# RISK CULTURE ASSESSMENT FRAMEWORK

⊕ Ethical and competent leadership

Ethical treatment of clients and ethical clients				
	PARAN	IETERS		
Tone from the top	Setting risk goals	Providing resources and sound platforms	Aligning measurement and rewards	
	ACTIV	/ITIES		
<ul> <li>ensuring an ethical and competent leadership pipeline – recruitment, promotion and dismissal;</li> <li>develop management structures and forums that encourage openness; and</li> <li>zero tolerance for unethical conduct or whistle-blower victimisation.</li> </ul>	<ul> <li>ensure risk management goals, policies and standards are set and communicated throughout the group; and</li> <li>ensure that ethics and accountability to risk management parameters are acknowledged to be as important as efficiency, innovation and profit.</li> </ul>	<ul> <li>ensure risk management goals are attainable by adequately staffing risk management functions;</li> <li>apply fit-and-proper tests for key risk roles; and</li> <li>embed risk controls in business platforms.</li> </ul>	<ul> <li>ensure accurate and relevant performance metrics; and</li> <li>ensure risk metrics are incorporated in the performance management framework.</li> </ul>	



# STRESS TESTING AND SCENARIO PLANNING

Stress testing and scenario planning serves a number of regulatory and internal business purposes, and are conducted for the group and the bank across different risk types, factors and indicators. Stress tests are also conducted for other group legal entities. The various stress test processes are supported by a robust and holistic framework and underpinned by principles and sound governance, which are aligned to regulatory requirements and best practice.

Stress testing and scenario analysis provide the board and management with useful insight on the group's financial position, level of earnings volatility, risk profile, and future capital position. Results are used to challenge and review certain of the group's risk appetite measures, which will, over time, influence the allocation of financial resources across franchises and business units and impact performance measurement.

From a regulatory perspective, the stress tests and scenario planning process feeds into the group's annual internal capital adequacy assessment process (ICAAP) and recovery plan. The ICAAP stress test is an enterprise-wide macroeconomic stress test covering material risks that the group is exposed to. It typically covers a three year horizon, with separate ICAAP submissions completed for the group's regulated banking entities which are subject to Basel II requirements. The severity of the macroeconomic scenarios ranges from a mild downturn to severe stress scenarios. In addition to macroeconomic scenarios, the group incorporates event risk and reverse stress test scenarios that highlight contagion between risk types. Techniques and methodologies range from multi-factor and regression analyses for macroeconomic stress tests to single-factor sensitivities and qualitative impact analysis for event risk and reverse stress tests.

The group's recovery plan builds on its ICAAP. The scenarios defined for ICAAP are extended and incorporate the following scenarios:

- systemic;
- idiosyncratic;
- fast moving; and
- slow moving.

The results of the ICAAP and recovery plan process are submitted to the SARB annually and are key inputs into:

- the determination of capital buffer requirements and capital targets;
- dividend proposals;
- the group's earnings volatility measures; and
- performance management requirements.

The group regularly runs additional ad hoc stress tests for both internal and regulatory purposes. Internally, the risk-specific stress tests may utilise various techniques depending on the purpose (e.g. limit setting or risk identification). From a regulatory perspective, the group expects to be subject to more frequent supervisory stress tests covering a range of objectives. During the year, FirstRand participated in the a number of supervisory stress tests, most notably:

- the assessment of a potential sovereign downgrade on the South African banking industry; and
- a common scenario stress test with prescribed assumptions and macro-variables.

# Recovery and resolution regime

FSB member countries are required to have recovery and resolution plans in place for all systemically significant financial institutions as per *Key Attributes of Effective Resolution Regimes*. The SARB has adopted this requirement and has, as part of the first phase, required South African domestically significant banking institutions to develop their own recovery plans. Improving the stability of the banking system by strengthening banks' ability to manage themselves through a potentially severe stress situation is of national importance. Guidance issued by the FSB and SARB has been incorporated into the group's comprehensive recovery plan.

# Recovery planning

The purpose of the recovery plan is to document how FirstRand's board and management, including its franchises and key subsidiary, FirstRand Bank, will recover from a severe stress event/scenario that threatens the group's commercial viability. The recovery plan:

- analyses the potential for severe stress in the group that could cause material disruption to the South African financial system;
- considers the type of stress event/s that would be necessary to trigger its activation;
- analyses how the group might potentially be affected by the event/s;
- lists a menu of potential recovery actions available to the board and management to counteract the event/s; and
- assesses how the group might recover from the event/s as a result of those actions.

The recovery plan forces the group to perform an extensive self-assessment exercise to determine if there are any potential idiosyncratic vulnerabilities that it may be exposed to, and then reconcile these exposures to its own risk appetite and strategy. Strategies to optimise the balance sheet structure and preserve the group's critical functions to support the recovery from a severe stress event with the least negative impact are considered. This process enables banks to better understand what functions are critical for its customers and for the financial system, as well as which assets are most marketable to facilitate recovery. Where inefficiencies are identified, these can be amended to make the group more streamlined, adaptable and resilient to stress.

To date FirstRand has submitted three annually-revised versions of its recovery plan to the SARB, the most recent in December 2015. For further detail on the resolution framework, refer to the *funding* and *liquidity* section.

# LINK BETWEEN FINANCIAL STATEMENTS AND REGULATORY EXPOSURES

# BASIS OF CONSOLIDATION

Consolidation of all group entities for accounting purposes is in accordance with IFRS and for regulatory purposes in accordance with the requirements of the Regulations. There are some differences in the manner in which entities are consolidated for accounting and regulatory purposes. The following table provides the basis on which the different types of entities are treated for regulatory purposes.

# REGULATORY CONSOLIDATION TREATMENT

	Regulatory			
Shareholding	Banking, security firm, financial	Insurance	Commercial	IFRS
Less than 10%	Aggregate of investments (CET and Tier 2):  amount exceeding 10% CE against corresponding com  up to 10% — risk weight ba and measurement approace	● minimum risk weight of 100%. Internal rating-based approach: ● maximum risk weight of 100%. Internal rating-based approach: ● maximum risk weight of 1250%.  **ET1 capital – deduction nonponent of capital; and to 10% apply threshold rules.		Financial assets at fair value (held for trading, designated at fair value through profit or loss or available-for-sale). Where the substance of the transaction indicates that the group is able to exercise significant influence or joint control over the entity, equity accounting is applied.
Between 10% and 20%	CET1 capital:  individual investments in ex— deduction against CET1 of individual investments up to AT1 and Tier 2:  deduct against correspondi			
Between 20% and 50%	Legal or de facto support (other significant shareholder):  proportionately consolidate.  No other significant shareholder:  apply threshold rules.	<ul> <li>Apply deduction methodology, with 100% derecognition of IFRS NAV.</li> <li>Cost of investment subject to threshold rules.</li> </ul>	Standardised and internal rating based approach:  individual investment greater than 15% of CET1, AT1 and Tier 2: risk weight at 1250%.  individual investment up to 15% of CET1, AT1 and Tier 2: risk weight at no less than 100%.	Equity accounting where the substance of the transaction indicates that the group has the ability to exercise significant influence or joint control, but does not control the entity.
Greater than 50%	Entity conducting trading activities/other bank, security firm or financial entity:  • consolidate.		<ul> <li>aggregate of investments exceeding 60% of CET1, AT1 and Tier 2: excess risk weighted at 1250% (standardised only).</li> </ul>	Consolidate, unless the substance of the transaction indicates that group does not control the entity, in which case equity accounting will apply.

# Threshold rules

As per Regulation 38(5), investments are aggregated as part of threshold deductions (significant investments, mortgage servicing rights and deferred tax asset relating to temporary differences). Aggregate investments up to 15% are risk weighted at 250% and amounts exceeding 15% are deducted against CET1 capital. For entities conducting trading activities or other bank, security firms or financial entities in which the group has a greater that 50% shareholding, threshold rules would apply to financial entities acquired through realisation of security in respect of previously contracted debt (held temporarily), subject to materially different rules and regulations and non-consolidation required by law.

# Insurance entities

Under the insurance category, material wholly-owned insurance subsidiaries incorporated in South Africa include FirstRand Life Assurance Limited (2016: R251 million net asset value) and FirstRand Insurance Services Company Limited (FRISCOL) (2016: R336 million net asset value).



# MAPPING OF FINANCIAL STATEMENT CATEGORIES WITH REGULATORY RISK CATEGORIES

Pillar 3 disclosure is prepared in accordance with the regulatory frameworks applicable to the group while the annual financial statements are prepared in accordance with IFRS.

# Explanation of difference between accounting and regulatory exposure amounts

The amount included under regulatory scope excludes balances related to insurance entities. The amounts from difference balance sheet line items included in the risk frameworks are described in the following table.

Risk framework	Description
Credit risk	Money at call and short notice, derivative financial assets and liabilities in the banking book, commodity related loans and advances and debt investment securities. Advances net of impairments are included in the balance sheet while impairments are not used to reduce advances when determining the regulatory exposure at default (EAD).  EAD also includes off-balance sheet items, such as guarantees, irrevocable commitments, letters of credit and credit derivatives. Credit risk mitigation is included in the calculation of EAD.
Counterparty credit risk	Collateral cash and deposits as part of netting agreements, derivative financial assets and liabilities and reverse repurchase advances. Exposures included in counterparty credit risk relate to trading and banking book activities.
Securitisations	Cash, advances and investment security note exposures. Capital is determined on the investment security note exposure retained by the group.
Market risk	Derivative financial instruments, commodities, held for trading and elected fair value investment securities, and fair value advances.
Equity investment risk	Listed and non-listed equity investment securities, non-current assets held for sale, and investments in subsidiaries, associates and joint ventures.
Other assets	Coins and balances with central banks, accounts receivable, current tax assets, property and equipment, investment properties and deferred tax assets related to temporary differences.
No capital or deducted from capital	Intangible assets and goodwill are deducted from capital. The remainder of liability items do not attract capital.

The risk measurement approaches to calculate regulatory capital, applicable to each of the risk frameworks, are described on page 13.

The following table provides the differences between the amounts included in the balance sheet and the amounts included in the regulatory frameworks.

# LI1: MAPPING OF FINANCIAL STATEMENT CATEGORIES WITH REGULATORY FRAMEWORKS - ASSETS

				Asa	at 30 June 20	116			
				C	Carrying values	;			
					Items unde	r regulatory fr	ameworks		
R million	Statement of financial position	Regulatory scope	Credit risk	Counter- party credit risk	Securiti- sation	Market risk	Equity invest- ment risk	Other assets	No capital/ deducted from capital
Assets									
Cash and cash equivalents	64 303	64 199	31 768	1 725	971	-	-	32 431	-
Derivative financial									
instruments	40 551	40 551	_	40 551	7	37 491	-	_	-
Commodities	12 514	12 514	7 017	_	-	11 073	-	<b></b>	_
Accounts receivable	10 152	10 130	_	_	-		_	10 130	_
Current tax asset	428	419	<b>.</b>					419	_
Advances	808 699	808 699	808 699	42 798	21 499	<b>–</b>		<b></b>	-
Investment in subsidiary companies	_	349	-	-	-	-	349	_	_
Investment securities	185 354	183 339	150 519	-	14 641	70 908	3 194	-	-
Investments in associates	4 964	4 964	_	-	-	-	4 964	_	-
Investments in joint ventures	1 344	1 344	_	_	_	_	1 344	_	_
Property and equipment	16 909	16 908	-	-	-	-	-	16 908	-
Intangible assets	1 569	1 464	_	-	-	-	-	-	1 464
Reinsurance assets	36	_	_	-	-	-	-	_	_
Post-employment benefit asset	9	9	_	_	_	_	_	_	9
Investment properties	386	386	<b>–</b>	_	-	-	_	386	_
Deferred income tax asset	1 866	1 843	_	-	_	_	-	1 532	311
Non-current assets and disposal groups held for									
sale	193	193	-	-	-	-	193	-	_
Total assets	1 149 277	1 147 311	998 003	85 074	37 118	119 472	10 044	61 806	1 784

The amounts shown in the regulatory scope column in the previous table do not equal the sum of the amounts shown in the remaining columns due to:

- cash included under the credit risk, counterparty credit risk, securitisation framework and other assets;
- derivative financial instrument subject to regulatory capital for both counterparty credit risk and market risk;
- commodities subject to regulatory capital for both credit risk and market risk;
- advances subject to regulatory capital under both the credit and market risk framework, reverse repurchase agreement advances under the counterparty credit risk framework and advances under the securitisation framework; and
- investment securities subject to regulatory capital under credit and market risk, notes under the securitisation framework, and listed and unlisted equities under the equity investment risk framework.



# LI1: MAPPING OF FINANCIAL STATEMENT CATEGORIES WITH REGULATORY FRAMEWORKS - LIABILITIES

				As	at 30 June 20	)16			
				(	Carrying values	3			
					Items unde	er regulatory fi	rameworks		
R million	Statement of financial position	Regulatory scope	Credit risk	Counter- party credit risk	Securiti- sation	Market risk	Equity invest- ment risk	Other assets	No capital/ deducted from capital
Liabilities									
Short trading positions	14 263	14 263	_	_	_	14 263	_	_	-
Derivative financial instruments	50 782	50 781	_	50 781	7	48 648	_	_	_
Creditors, accruals and provisions	17 285	17 082	_	_	_	_	_	_	17 082
Current tax liability	270	270	-	_	_	_	_	_	270
Deposits	919 930	919 884	-	27 812	4 560	-	_	_	887 512
Employee liabilities	9 771	9 739	_	_	_	_	_	_	9 739
Other liabilities	8 311	8 311	-	-	-	-	_	_	8 311
Amounts due to subsidiary companies	_	132	_	_	_	_	_	_	132
Policyholder liabilities	1 402	_	-	_	_	-	_	_	_
Deferred income tax liability	1 053	1 023	_	_	_	_	_	_	1 023
Tier 2 liabilities	18 004	14 852	_	_	_	_	_	_	14 852
Liabilities directly associated with disposal groups held for sale	141	141	-	_	_	-	-	-	141
Total liabilities	1 041 212	1 036 478	_	78 593	4 567	62 911	_	_	939 062

The amounts shown in the regulatory scope column in this table do not equal the sum of the amounts shown in the remaining columns due to derivative financial instrument liabilities subject to regulatory capital for both counterparty credit risk and market risk. Short trading positions are included under the market risk framework, a portion of deposits are included under the counterparty credit risk and securitisation framework. The remainder of liabilities items do not attract capital.

# LI2: SOURCES OF DIFFERENCE BETWEEN REGULATORY EXPOSURE AMOUNTS AND CARRYING VALUE IN FINANCIAL STATEMENTS

			As at 30 Ju	une 2016		
		Iten	ns subject to regu	ılatory framewoı	ks	
R million	Credit risk	Counter- party credit risk	Securiti- sation	Market risk	Equity investment risk	Other assets
Assets carrying value per regulatory scope of consolidation	998 003	85 074	37 118	119 472	10 044	61 806
Liabilities carrying value per regulatory scope of consolidation	-	(78 593)	(4 567)	(62 911)	_	_
Total net amount under regulatory scope of consolidation	998 003	6 481	32 551	56 561	10 044	61 806
Off-balance sheet amounts	149 744	-	-	-	-	_
Differences in valuations	846 209	-	-	-	-	-
Differences due to netting rules and credit risk mitigation	(922 871)	8 122	-	_	_	_
Differences due to prudential filters	_	-	(9 156)	-	-	-
Differences in valuation method	_	-	-	2 698	-	_
Exposure amounts considered for regulatory purposes	1 071 085	14 603	23 395	59 259	10 044	61 806

The exposure amounts considered for regulatory purposes under the different risk frameworks in this table correspond to the exposures reported in the different risk sections of this report as follows:

- the credit risk exposure corresponds to the exposure reported in the table on page 92 in the credit risk section;
- the counterparty credit risk exposure corresponds to the exposure reported in the table on page 111 in the *counterparty credit risk* section;
- the securitisation exposure corresponds to the traditional securitisation exposure in the banking book reported in the *securitisation* section, refer to the table on page 117;
- the market risk exposure represents the local trading book mark-to-market value of market risk positions, and general and specific risk exposure for foreign branches and subsidiaries in the rest of Africa; and
- the equity risk exposure corresponds to the carrying value of investments reported in the *equity investment risk* section, refer to the table on page 139.



# PRUDENT VALUATIONS

# Valuation methodology

The group measures certain assets and liabilities at fair value.

Fair value is the price that would be received when selling an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date, i.e. an exit price. Fair value is, therefore, a market-based measurement and, when measuring fair value, the group uses the assumptions that market participants would use when pricing an asset or liability under current market conditions, including assumptions about risk. When determining fair value it is presumed that the entity is a going concern and the fair value is, therefore, not an amount that represents a forced transaction, involuntary liquidation or a distressed sale.

Fair value measurements are determined by the group on both a recurring and non-recurring basis.

# Recurring financial instruments

Recurring fair value measurements include assets and liabilities that IFRS requires or permits to be measured at fair value. This includes financial assets and financial liabilities and non-financial assets, including investment properties and commodities that the group measures at fair value at the end of each reporting period.

# Non-recurring fair value measurements

Non-recurring fair value measurements are those triggered by particular circumstances and include:

- the classification of assets and liabilities as non-current assets or disposal groups held for sale where fair value less costs to sell is the recoverable amount;
- business combinations where assets and liabilities are measured at fair value at acquisition date; and
- impairments of assets where fair value less costs to sell is the recoverable amount. The fair value measurements are determined on a case by case basis as these occur in each reporting period.

# Valuation process

The group classifies assets and liabilities measured at fair value using a fair value hierarchy that reflects whether observable or unobservable inputs are used in determining the fair value of the item. If this information is not available, fair value is measured using another valuation technique that maximises the use of relevant observable inputs and minimises the use of unobservable inputs. The valuation techniques employed by the group include, *inter alia*,

quoted prices for similar assets or liabilities in an active market, quoted prices for the same asset or liability in an inactive market, adjusted prices from recent arm's length transactions, option-pricing models and discounted cash flow techniques.

Where a valuation model is applied and the group cannot mark-to-market, it applies a mark-to-model approach, subject to valuation adjustments. Mark-to-model is defined as any valuation which has to be benchmarked, extrapolated or otherwise calculated from a market input. The group will consider the following in assessing whether mark-to-model valuation is appropriate:

- as far as possible, market inputs are sourced in line with market prices;
- generally accepted valuation methodologies are used for particular products unless deemed inappropriate by the relevant governance forums;
- where a model has been developed in-house, it is based on appropriate assumptions, which have been assessed and challenged by suitably qualified parties independent of the development process;
- formal change control procedures are in place;
- awareness of the weaknesses of the models used and appropriate reflection in the valuation output;
- the model is subject to periodic review to determine the accuracy of its performance; and
- valuation adjustments are only made when appropriate, e.g. to cover uncertainty of the model valuation. The group considers factors such as counterparty and own credit risk when making valuation adjustments and adequate levels of reserves are held against potential valuation adjustments.

Financial instruments	
Fair value hierarchy	Valuation methodology
Instruments where fair value is determined using unadjusted quoted prices in an active market  The fair value of these instruments is determined using unadjusted quoted prices in an active market for identical assets. An active market is one in which transactions occur with sufficient volume and frequency to provide pricing information on an ongoing basis.	This category includes listed bonds and equity, exchange-traded derivatives and short-trading positions.  The price within the bid/ask spread that is most representative of fair value in the circumstances. The group uses the bid price for financial assets or the ask/offer price for financial liabilities where this best represents fair value.
Instruments where fair value is determined using inputs from observable market data or an inactive market  Valuation uses quoted prices in an active market of similar instruments or valuation models using observable inputs from observable market data.	This category includes loans and advances to customers, equities listed in an inactive market, certain debt instruments, over the counter derivatives or exchange-traded derivatives where a market price is not available, deposits, other liabilities and Tier 2 liabilities.  Valuation techniques include:  discounted cash flows; option pricing models; industry standard models; price/earnings models; and BESA bond pricing.
Instruments where fair value is determined using inputs from unobservable data  The group applies its own assumptions about what market participants assume in pricing assets and liabilities.	This category includes certain loans and advances to customers, certain over the counter derivatives such as equity options, investments in debt instruments, certain deposits such as credit-linked notes and certain other liabilities.  Valuation techniques include:  discounted cash flows; option pricing models; industry standard models; price/earnings models; and adjusted market prices.

# Non-financial assets

- A market participant's ability to generate economic benefits by using the assets in its highest and best use or by selling it to another market participant that will use the asset in its highest and best use is taken into account.
- Includes the use of the asset that is physically possible, legally permissible and financially feasible.
- In determining the fair value of the group's investment properties and commodities, the highest and best use of the assets is their current use.

# Validation process

The group has established control frameworks and processes at a franchise level to independently validate its valuation techniques and inputs used to determine its fair value measurements. Valuation inputs are independently sourced but where independent source not available, inputs are subject to the independent valuation process. At a franchise level, technical teams are responsible for the selection, implementation and any changes to the valuation techniques used to determine fair value measurements. Valuation committees comprising representatives from key management have been established in each franchise and at an overall group level, and are responsible for overseeing the valuation control process and considering the appropriateness of the valuation techniques applied in fair value measurement. The valuation models and methodologies are subject to independent review and approval at a franchise level by the technical teams, valuation committees, relevant risk committees and external auditors annually or more frequently, if considered appropriate.



# **CAPITAL MANAGEMENT**

# INTRODUCTION AND OBJECTIVES

The overall capital management objective is to maintain sound capital ratios and a strong credit rating to ensure confidence in the group's solvency and quality of capital during calm and turbulent periods in the economy and financial markets. The group, therefore, maintains capitalisation ratios aligned to its risk appetite and appropriate to safeguard operations and stakeholder interests.

The group focuses on the following areas to safeguard operations and stakeholder interests.

# KEY FOCUS AREAS AND CONSIDERATIONS

<ul> <li>business units' organic growth plans;</li> <li>rating agencies' considerations;</li> <li>investor expectations (including debtholders);</li> <li>targeted leverage levels;</li> <li>future business plans; and</li> <li>stress testing scenarios.</li> </ul>	<ul> <li>economic and regulatory capital requirements;</li> <li>issuance of additional capital instruments;</li> <li>regulatory and accounting changes; and</li> <li>the board's risk appetite.</li> </ul>
---	--

- sustainable dividend cover based on normalised earnings; and
- dividend policy caters for the following factors:
  - volatile earnings brought on by fair value accounting;
  - anticipated earnings yield on capital employed;
  - organic growth requirements;
  - safety margin for unexpected fluctuations in business plans; and
  - current target range (1.8x to 2.2x) to protect shareholders from any unnecessary volatility in dividends.
- annual assessment of appropriate level of payout considers the following inputs:
  - actual performance;
  - forward-looking macros;
  - demand for capital; and
  - potential regulatory and accounting changes.

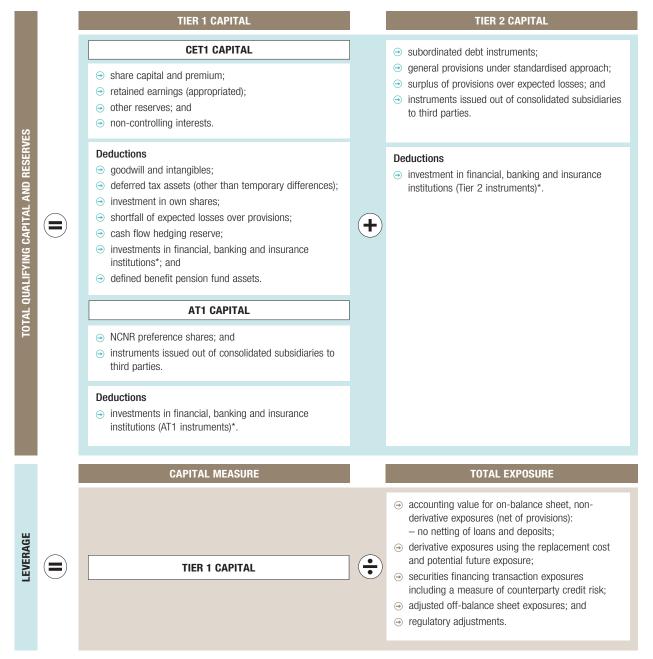
# Effective allocation of resources (including capital and risk capacity)

• aligned to risk appetite to maximise value for shareholders.

# **CAPITAL ADEQUACY AND PLANNING**

The following diagram defines the main components of capital and leverage as per the Regulations.

# QUALIFYING CAPITAL AND LEVERAGE COMPONENTS



<sup>\*</sup> As per regulation 38(5) threshold rules. The full deduction method is applied to insurance entities, i.e. NAV for insurance entities is derecognised from consolidated IFRS NAV.



# Year under review

The capital planning process ensures that the total capital adequacy and CET1 ratios remain within or above targets across economic and business cycles. Capital is managed on a forward-looking basis, and the group remains appropriately capitalised under a range of normal and severe stress scenarios, which includes ongoing regulatory developments, expansion initiatives and corporate transactions. The group aims to back all economic risk with loss absorbing capital and remains well capitalised in the current environment.

The Basel III leverage ratio is a supplementary measure to the risk-based capital ratio and greater emphasis has been placed on monitoring this ratio.

FirstRand comfortably operated above its capital and leverage targets during the year. The following table summarises the group's capital and leverage ratios.

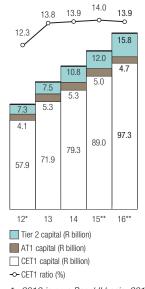
### CAPITAL ADEQUACY AND LEVERAGE POSITION

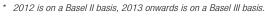
	As at 30 June 2016					
		Leverage				
%	CET1	Tier 1	Total	Total		
Regulatory minimum*	6.9	8.1	10.4	4.0		
Target	10.0 – 11.0	>12.0	>14.0	>5.0		
Actual						
<ul> <li>Including unappropriated profits</li> </ul>	13.9	14.6	16.9	8.4		
<ul> <li>Excluding unappropriated profits</li> </ul>	12.4	13.1	15.4	7.5		

<sup>\*</sup> Excludes the bank-specific individual capital requirement and add-on for domestic systemically important banks.

The graphs below show the historical overview of capital adequacy, RWA and leverage for FirstRand.

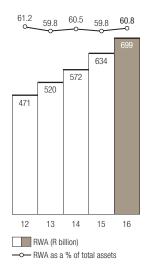
### CAPITAL ADEQUACY

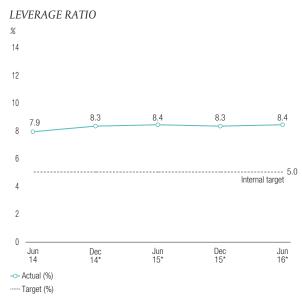




<sup>\*\*</sup> Includes unappropriated profits.

### RWA HISTORY





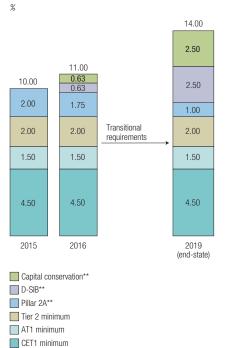
### \* Includes unappropriated profits.

# Regulatory update

### South Africa

Effective 1 January 2016, the SARB minimum capital requirement was adjusted for the capital conservation buffer, add-on for domestic systemically important banks (D-SIB) and the countercyclical buffer. Currently the SARB has not implemented any countercyclical buffer requirement for South African exposures. The capital conservation buffer and add-on for D-SIB will be phased in over the next four years, as illustrated below.

# $TRANSITIONAL\ MINIMUM\ REQUIREMENTS^*$



\* Assuming a maximum add-on for D-SIB.

The group's internal targets have been aligned to the end-state minimum requirements and are subject to ongoing review and consideration of various stakeholder requirements. No changes have been made to the current targets during the year.

National Treasury, the SARB and FSB published for public comment in September 2015, a discussion document, *Strengthening South Africa's Resolution Framework for Financial institutions*. The paper sets out the motivation, principles and policy proposals for a strengthened framework for the resolution of financial institutions in South Africa. Although various comments were received and a number of workshops held to discuss the framework, the timing for finalisation remains unclear. National Treasury and the SARB provided feedback on comments received from market participants during June 2016. The group continues to monitor developments to assess the impact of a resolution framework.

<sup>\*\*</sup> Pillar 2A and D-SIB met with CET1, Tier 1 and total capital. Capital conservation buffer met solely with CET1 capital.



### **BCBS**

The BCBS issued various consultative documents, including revisions to the RWA framework and capital floors. These papers are at different stages of testing, finalisation and implementation, and the actual impact on banks remains unclear. The group continues to participate in the BCBS quantitative impact studies to assess and incorporate, where relevant, the effect of these standards.

The current consultative documents issued by the BCBS are summarised in the following table.

### SUMMARY OF CONSULTATIVE DOCUMENTS

	Objectives	Impact assessment
Revisions to the standardised approach for credit risk	<ul> <li>To balance simplicity and risk sensitivity.</li> <li>Enhanced comparability across jurisdictions.</li> </ul>	<ul> <li>High level impact assessments performed.</li> <li>Finalisation is expected at the end of 2016.</li> </ul>
Standardised measurement approach for operational risk	Estimation of operational risk capital using a single method, with financial statement items and historical losses as input into the calculation.	<ul> <li>Finalisation is expected at the end of 2016.</li> <li>Incorporated in existing quantitative impact studies.</li> </ul>
Constraints on the use of internal model approaches	<ul> <li>Reduce the complexity of the regulatory framework.</li> <li>Enhanced comparability across jurisdictions.</li> <li>Address variability in capital requirements for credit risk for banks using internal ratings based approaches.</li> </ul>	<ul> <li>High level impact assessments performed.</li> <li>Proposed calibration and implementation timeline expected to be finalised at the end of 2016.</li> </ul>
Revisions to the leverage ratio framework	Areas subject to the proposed revision include:  measurement of derivative exposures;  treatment of regular-way purchases and sales of financial assets;  treatment of provisions;  credit conversion factors for off-balance sheet items; and  additional requirements for globally systemic important banks.	<ul> <li>Final designs and calibrations will be informed by a comprehensive quantitative impact study.</li> <li>Ad hoc QIS performed in April 2016.</li> </ul>

### **ICAAP**

ICAAP is key to the group's risk and capital management processes as it is an integral tool in meeting the capital management objectives of the group. ICAAP allows and facilitates:

- the link between business strategy, risk introduced and capital required to support strategy;
- embedding a responsible risk culture at all levels in the organisation;
- the development of recognised stress tests to provide useful information, which serve as early warnings/triggers, so that contingency plans can be implemented;
- the determination of capital management strategy and how the group will manage its capital during business-as-usual and periods of stress from both a regulatory and economic perspective;
- effective allocation and management of capital in the group in proportion to risks inherent in the various businesses; and
- a board-approved capital plan.

These processes are under ongoing review and refinement, and continue to determine the targeted buffer over the minimum capital requirement. The group continues to refine its approach to economic capital, which includes strategic capital planning, risk measurement and portfolio management.

# COMPOSITION OF CAPITAL

# Supply of capital

The following tables summarise FirstRand's qualifying capital components and related year-on-year movements.

# COMPOSITION OF CAPITAL ANALYSIS

R million	CET1 capital	Tier 1 capital	Total qualifying capital
2016 – including unappropriated profits	97 283	101 970	117 811
2016 – excluding unappropriated profits	86 954	91 641	107 482
2015 – including unappropriated profits	88 961	94 008	106 008

	Movement	
CET1	AT1	Tier 2
1	<b>↓</b>	1
<ul> <li>Internal capital generation through earnings.</li> </ul>	Additional haircut on NCNR preference shares that are not compliant with Basel III, partly offset by movement in third party capital.	<ul> <li>Issuance of Basel III compliant subordinated debt instruments totalling R4.9 billion:         <ul> <li>FRB16 and FRB17 in July 2015:</li> <li>R2.3 billion; and</li> <li>FRB18, FRB19 and FRB20 in April 2016: R2.6 billion.</li> </ul> </li> <li>Redemption of FRB08 (R100 million) in June 2016.</li> <li>Additional haircut on instruments that are not compliant with Basel III.</li> </ul>



# **RISK WEIGHTED ASSETS**

The following table provides the risk weighted assets (RWA) per risk type and associated minimum capital requirements.

# OV1: OVERVIEW OF RWA

		As at 30 June			
		RWA		Minimum capital requirements*	
R m	nillion	2016	2015	2016	
1.	Credit risk (excluding counterparty credit risk)	462 435	415 736	47 978	
2.	- Standardised approach	95 006	77 339	9 857	
3.	– AIRB	367 429	338 397	38 121	
4.	Counterparty credit risk**	21 178	16 205	2 197	
5.	- Standardised approach	21 178	16 205	2 197	
6.	– Internal model method	-	-	_	
12.	Securitisation exposures in banking book	17 496	20 090	1 815	
13.	- IRB ratings-based approach	57	90	6	
14.	– IRB supervisory formula approach	2 333	1 064	242	
15.	Standardised approach/simplified supervisory formula approach	15 106	18 936	1 567	
	Total credit and counterparty credit risk	501 109	452 031	51 990	
	Other assets	29 402	26 309	3 050	
11.	Settlement risk	_	_	_	
7.	Equity positions in banking book under market-based approach#	27 993	31 951	2 904	
16.	Market risk	17 402	12 371	1 806	
17.	- Standardised approach	4 269	3 051	443	
18.	- Internal model approach	13 133	9 320	1 363	
19.	Operational risk	110 143	97 003	11 427	
20.	Basic indicator approach	8 754	8 867	908	
21.	- Standardised approach	19 611	16 413	2 035	
22.	- Advanced measurement approach	81 778	71 723	8 484	
23.	Amounts below the thresholds for deduction (subject to 250% risk weight)	12 683	10 839	1 316	
24.	Floor adjustment	_	3 326	_	
25.	Total	698 732	633 830	72 493	

<sup>\*</sup> Capital requirement calculated at 10.375% of RWA (excluding the bank specific individual capital requirement and D-SIB add-on).

<sup>\*\*</sup> The current exposure method and standardised method is applied to counterparty credit risk. The standardised approach for counterparty credit risk is effective from 1 January 2017.

<sup>\*\*</sup> The simple risk weighted method is applied to equity investment risk. The BCBS standard on equity investment in funds is only effective from 1 January 2017, rows 8 – 10 have therefore been excluded from this table.

Further detailed analysis on credit and counterparty credit risk RWA is provided in the following table.

# OVERVIEW OF CREDIT AND COUNTERPARTY CREDIT RISK RWA

		20	16		2015
		RWA			
	Advanced approach	Other approaches	Total*	Capital requirement**	RWA
Default risk	369 819	122 953	492 772	51 125	444 484
- Corporate, banks and sovereigns	161 285	29 071	190 356	19 749	174 157
- Small and medium enterprises (SMEs)	53 629	27 186	80 815	8 385	72 246
- Residential mortgages	56 238	7 099	63 337	6 571	58 718
Qualifying revolving retail	24 709	5 959	30 668	3 182	26 630
- Other retail	71 568	28 786	100 354	10 412	87 848
- Securitisation exposure	2 390	15 106	17 496	1 815	20 089
- Other	-	9 746	9 746	1 011	4 796
CVA	-	8 337	8 337	865	7 547
Total credit and counterparty credit risk	369 819	131 290	501 109	51 990	452 031

<sup>\*</sup> Includes credit risk, counterparty credit risk and securitisation exposures in the banking book.

The following table analyses year-on-year RWA movements.

# RWA ANALYSIS

Risk type	Year-on-year movement	Key drivers
Credit risk	1	Organic growth, model recalibrations and regulatory refinement.
Counterparty credit risk	1	Volume and mark-to-market movements.
Operational risk	1	<ul> <li>Higher risk scenario values for certain AMA portfolios.</li> <li>Increase in gross income for entities on basic approaches.</li> </ul>
Market risk	1	O Volume and mark-to-market movements.
Equity investment risk	V	Disposals of investments and fair value adjustments.
Other assets	1	<ul> <li>Increase in deferred tax assets relating to temporary differences.</li> <li>Increase in property and equipment.</li> </ul>

<sup>\*\*</sup> Capital requirement calculated at 10.375% of RWA (excluding the bank specific individual capital requirement and D-SIB add-on).



# RWA AND CAPITAL ADEQUACY POSITIONS FOR THE GROUP, ITS REGULATED SUBSIDIARIES AND THE BANK'S FOREIGN BRANCHES

The group's registered banking subsidiaries must comply with SARB regulations and those of the respective in-country regulators, with primary focus placed on Tier 1 capital and total capital adequacy ratios. Based on the outcome of detailed stress testing, each entity targets a capital level in excess of the regulatory minimum. Adequate controls and processes are in place to ensure that each entity is adequately capitalised to meet local and SARB regulatory requirements. Capital generated by subsidiaries/branches in excess of targeted levels is returned to FirstRand, usually in the form of dividends/return of profits. During the year, no restrictions were experienced on the repayment of such dividends or profits to the group.

The RWA and capital adequacy positions of FirstRand, its regulated subsidiaries and the bank's foreign branches are set out below.

# RWA AND CAPITAL ADEQUACY POSITIONS OF FIRSTRAND, ITS REGULATED SUBSIDIARIES AND THE BANK'S FOREIGN BRANCHES

		Year ended 30 June				
		2016		2015		
	RWA R million	Tier 1 %	Total capital adequacy %	Total capital adequacy %		
Basel III						
FirstRand*	698 732	14.6	16.9	16.7		
FirstRand Bank South Africa*	522 211	14.4	16.9	16.7		
FirstRand Bank London	36 776	10.3	17.4	16.1		
FirstRand Bank India	2 971	23.9	24.3	39.5		
FirstRand Bank Guernsey**	58	43.9	43.9	_		
Basel II (local regulations)						
FNB Namibia	24 259	15.1	17.8	17.0		
FNB Mozambique	2 779	14.0	14.6	10.3		
FNB Botswana#	20 921	13.3	16.4	19.0		
Basel I (local regulations)						
FNB Swaziland	2 926	23.7	25.0	22.6		
FNB Lesotho	941	13.5	16.9	18.7		
FNB Zambia	4 977	14.7	19.2	24.1		
FNB Tanzania	1 139	66.1	66.1	31.3		
RMB Nigeria	1 176	91.7	91.7	86.1		
FNB Ghana	206	>100	>100	-		

<sup>\*</sup> Includes unappropriated profits.

<sup>\*\*</sup> Trading as FNB Channel Islands.

<sup>#</sup> Implemented Basel II on 1 January 2016.

# **COMMON DISCLOSURES**

Refer to www.firstrand.co.za/investorcentre/pages/commondisclosures.aspx for further detail on the capital, leverage and LCR common disclosures.



Scan with your smart device's QR code reader to access the common disclosure templates on the group's website.



# **FUNDING AND LIQUIDITY RISK**

### INTRODUCTION AND OBJECTIVES

The group strives to fund its activities in a sustainable, diversified, efficient and flexible manner, underpinned by strong counterparty relationships within prudential limits and minimum requirements. The objective is to maintain natural market share, but also to outperform at the margin, which will provide the group with a natural liquidity buffer.

Given the liquidity risk introduced by its business activities, the group's objective is to optimise its funding profile within structural and regulatory constraints to enable its franchises to operate in an efficient and sustainable manner.

Compliance with the Basel III LCR influences the group's funding strategy, in particular as it seeks to restore the correct risk-adjusted pricing of liquidity. The group is actively building its deposit franchise through innovative and competitive products and pricing, while also

improving the risk profile of its institutional funding. This continues to improve the funding and liquidity profile of the group.

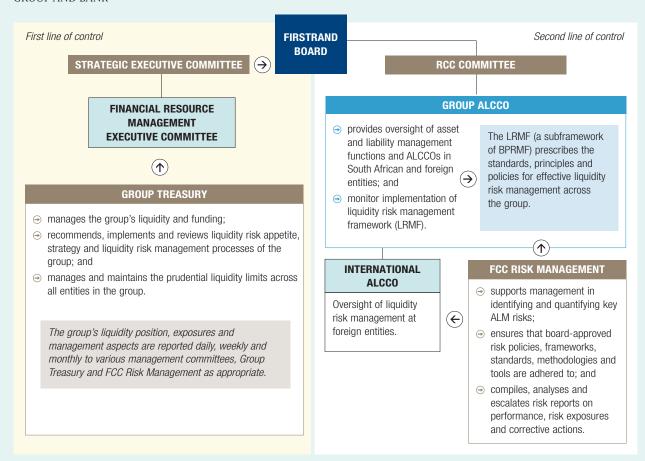
Given market conditions and the regulatory environment, the group increased its holdings of available liquidity in line with risk appetite for the year. The group utilised new market structures, platforms and the SARB committed liquidity facility to efficiently increase the available liquidity holdings.

At 30 June 2016, the group exceeded the 70% minimum LCR requirement with a LCR measurement of 96% (2015: 76%). The bank's LCR was 102% (2015: 84%).

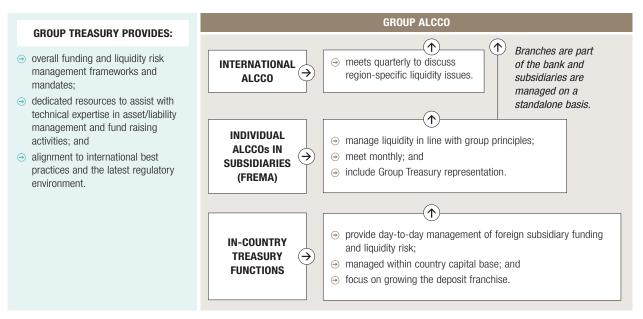
At 30 June 2016, the group's available HQLA sources of liquidity per the LCR amounted to R157 billion, with an additional R17 billion of management liquidity available.

### ORGANISATIONAL STRUCTURE AND GOVERNANCE

### GROUP AND BANK



### FOREIGN OPERATIONS

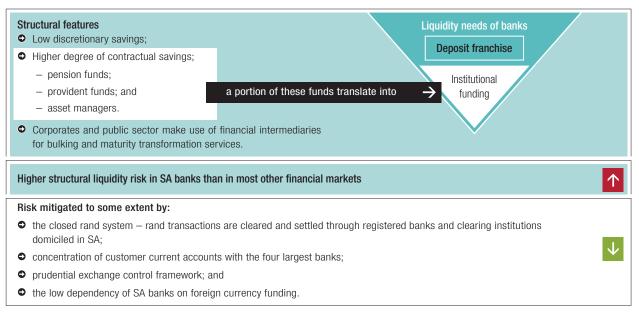


FirstRand has dispensation from the Prudential Regulation Authority (PRA) for a waiver on a whole-firm liquidity modification (WFLM) application basis where the PRA considers local risk reporting and compliance of the parent bank sufficient to waive PRA requirements for the London branch. The PRA has instituted a new regulatory regime under *Capital Requirements Directive IV policy statement PS11/15*. The policy statement outlines the phasing out of the prudential sourcebook for banks, building societies and investment firms (BIPRU 12), and the introduction of the European Banking Authority liquidity standards.

The PRA has advised that for branches that operated under the WFLM, the final requirements are still being developed, and as such, reporting in relation to group liquidity measures will continue on a semi-annual basis based on current PRA reporting processes.

### **FUNDING MANAGEMENT**

The following diagram illustrates the structural features of the banking sector in South Africa and its impact on liquidity risk.





During the year, liquidity demanded by banks as a consequence of the money supply constraints introduced by the LCR and the central bank's open market operations without a commensurate increase in savings flows resulted in continued increased liquidity costs. In light of the structural features discussed above, focus remains on achieving a better risk-adjusted diversified funding profile which also supports the Basel III requirements.

The group's aim is to fund the balance sheet in the most efficient manner, taking into account the liquidity risk management framework, as well as regulatory and rating agency requirements.

To ensure maximum efficiency and flexibility in accessing funding opportunities, a range of debt programmes has been established. The bank's strategy for domestic vanilla public issuance is to create actively-traded benchmarks, which facilitate secondary market liquidity in both domestic and offshore markets. The value of this strategy is that it assists in identifying cost-effective funding opportunities whilst ensuring a good understanding of market liquidity.

The following graph is a representation of the market cost of liquidity, which is measured as the spread paid on NCDs relative to the prevailing swap curve for that tenor. The liquidity spread graph is based on the most actively traded money market instrument by banks, namely 12-month NCDs.

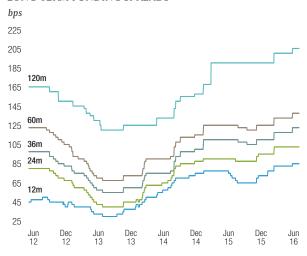
### 12-MONTH FLOATING RATE NOTE MID-MARKET SPREAD



Source: Bloomberg (RMBP screen) and Reuters.

The following graph shows that long-term funding spreads remain elevated from a historical perspective and still appear to be reflecting a high liquidity premium. The liquidity spreads for instruments with maturities less than 12 months in particular are extremely high, at levels last seen during the 2008 financial crisis.

### LONG-TERM FUNDING SPREADS



Source: Bloomberg (RMBP screen) and Reuters.

### Funding measurement and activity

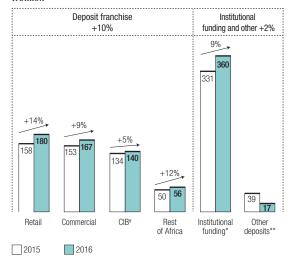
FirstRand Bank, FirstRand's wholly-owned subsidiary and debt issuer, generates a larger proportion of its funding from deposits compared to the South African aggregate, however, its funding profile also reflects the structural features described previously.

The group manages its funding structure by source, counterparty type, product, currency and market. The deposit franchise represents the most efficient source of funding and comprised 63% of total bank funding liabilities as at 30 June 2016 (2015: 64%). The bank continued to focus on growing its deposit franchise across all segments with increasing emphasis on savings and investment products. Progress continues to be made in developing suitable products to attract a greater proportion of clients' available liquidity with improved risk-adjusted pricing by source and behaviour. To fund operations, the group accesses the domestic money markets daily and from time to time, capital markets. The group has frequently issued various capital and funding instruments in the capital markets on an auction and reverse-enquiry basis with strong support from investors, both domestically and internationally. Given elevated domestic funding spreads, the group has not actively sought to issue senior securities in benchmark size.

The following graph provides a segmental analysis of the group's funding base and illustrates the success of its deposits franchise focus.

### GROUP FUNDING BY SEGMENT

R billion



- \* Excludes operational deposits from financial institutions, but includes London branch and Turbo securitisations.
- \*\* Includes deposits in FRIHL and group adjustments.
- # Includes an adjustment for operational deposits from institutional clients in line with treatment for LCR purposes.

As a result of the group's focus on growing its deposit and transactional banking franchise, a significant proportion of funds are contractually short-dated. As these deposits are anchored to clients' service requirements and given the balance granularity created by individual clients' independent activity, the resultant liquidity risk profile is improved.

The following table provides an analysis of the bank's funding sources.

# FUNDING SOURCES OF THE BANK (EXCLUDING FOREIGN BRANCHES)

			As at 30 June		
		201	6		2015*
% of funding liabilities	Total	Short term	Medium term	Long term	Total
Institutional funding	37.0	13.6	3.6	19.8	35.9
Deposit franchise	63.0	47.3	8.3	7.4	64.1
Corporate	20.1	17.4	2.1	0.6	22.4
Retail	19.2	14.5	3.2	1.5	17.6
SME	5.5	4.6	0.6	0.3	5.4
Governments and parastatals	10.2	7.6	1.7	0.9	10.3
Foreign	6.9	3.1	0.7	3.1	6.8
Other	1.1	0.1	-	1.0	1.6
Total	100.0	60.9	11.9	27.2	100.0

Source: BA 900 for FirstRand Bank South Africa.

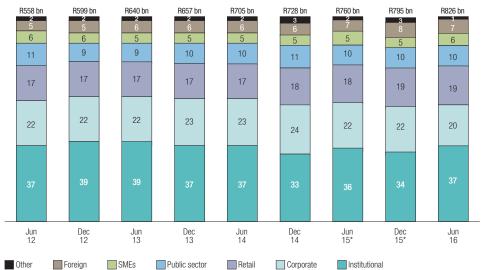
<sup>\*</sup> Restated to account for adjustments made to BA 900 reporting in the current year.



The following graph provides an analysis of the bank's funding analysis by source.

# FUNDING ANALYSIS BY SOURCE OF THE BANK EXCLUDING FOREIGN BRANCHES

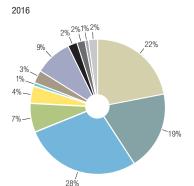
%



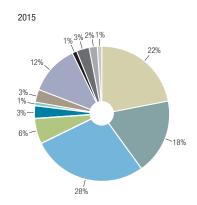
Source: SARB BA 900 returns, June 2016.

The following chart illustrates the group's funding instruments by instrument type, including senior debt and securitisation.

# GROUP'S FUNDING ANALYSIS BY INSTRUMENT TYPE



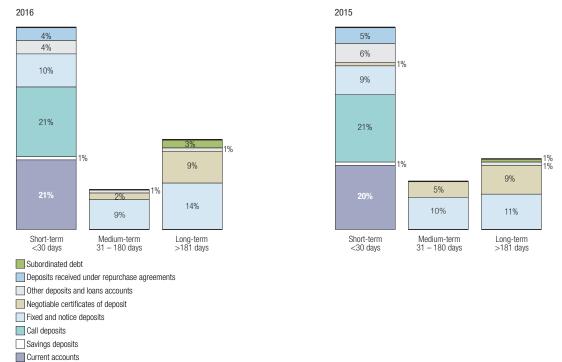




<sup>\*</sup> Restated to account for adjustments made to BA 900 reporting in the current year.

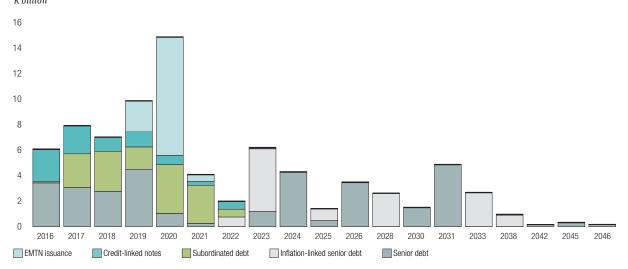
The following chart illustrates a breakdown of the group's funding liabilities by instrument and term.

### GROUP'S FUNDING LIABILITIES BY INSTRUMENT TYPE AND TERM



The maturity profile of all issued capital markets instruments is shown in the following chart. The group does not have concentration risk in any one year and seeks to efficiently issue across the curve considering investor demand.

# MATURITY PROFILE OF CAPITAL MARKET INSTRUMENTS OF THE BANK EXCLUDING FOREIGN BRANCHES R billion





# Funding structure of foreign operations

In line with the group's strategy to build strong deposit franchises in all its operations, foreign operations are categorised in terms of their stage of development from greenfields start-ups to mature subsidiaries and can be characterised from a funding perspective as follows:

- Mature deposit franchises all assets are largely funded incountry. The pricing of funding is determined via in-country funds transfer pricing, which is already in place.
- Growing deposit franchises assets are first funded in-country at attendant funds transfer pricing rates. Any excess over and above in-country capacity would be funded by the group's USD funding platforms. This is a temporary arrangement, which allows these entities to develop adequate in-country deposit bases.
- No deposit franchises all activities would be funded by the group's USD funding platforms.

In all categories, the pricing of funding is determined from established in-country funds transfer pricing.

# **Group funding support**

Any funding provided by the group is constrained by the appetite set independently by the credit risk management committee or the board. In arriving at limits, the credit risk management committee considers the operating jurisdiction and any sovereign risk limits that should apply. Group Treasury, therefore, must ensure that any resources availed to the foreign entities are priced appropriately.

### Funds transfer pricing

The group operates a funds transfer pricing framework which incorporates liquidity costs and benefits as well as regulatory friction costs into product pricing and performance measurement for all on- and off-balance sheet activities. Franchises are incentivised to:

- preserve and enhance funding stability;
- ensure that asset pricing is aligned to liquidity risk;
- reward liabilities in accordance with behavioural characteristics and maturity; and
- manage contingencies with respect to potential funding drawdowns.

# FOREIGN CURRENCY BALANCE SHEET

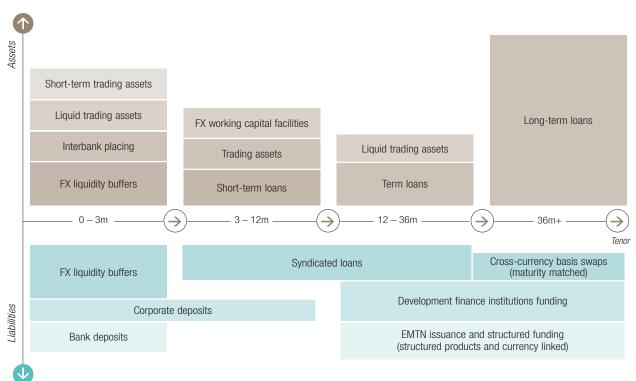
Given that the group continues to grow its businesses in the rest of Africa and India, and given the size of MotoNovo in the UK, the active management of foreign currency liquidity risk continues to be a strategic focus. The group seeks to avoid exposing itself to undue liquidity risk and to maintain liquidity risk within the risk appetite approved by the board and risk committee. The SARB via Exchange Control Circular 6/2010 introduced macro-prudential limits applicable to authorised dealers. The group utilises its own foreign currency balance sheet measures based on economic risk and has set internal limits below those allowed by the macro-prudential limits framework.

FirstRand's foreign currency activities, specifically lending and trade finance, have steadily increased over the past five years. It is, therefore, important to have a sound framework for the assessment and management of foreign currency external debt, given the inherent vulnerabilities and liquidity risks associated with cross-border financing. This limit includes the bank's exposure to branches, foreign currency assets and guarantees.

# Philosophy on foreign currency external debt

A key determinant in an institution's ability to fund and refinance in currencies other than its domestic currency is the sovereign risk and associated external financing requirement. The group's framework for the management of external debt takes into account sources of sovereign risk and foreign currency funding capacity and the macroeconomic vulnerabilities of South Africa. To determine South Africa's foreign currency funding capacity, the group considers the external debt of all South African entities (private and public sector, financial institutions) as all these entities utilise the South African system's capacity, namely, confidence and export receipts. The group employs a self-imposed structural borrowing limit and a liquidity risk limit more onerous than required in terms of regulations.

### GRAPHICAL REPRESENTATION OF THE FOREIGN CURRENCY BALANCE SHEET





# LIQUIDITY RISK MANAGEMENT

### **Overview**

The group acknowledges liquidity risk as a consequential risk that may be caused by other risks as demonstrated by the reduction in liquidity in many international markets as a consequence of the 2008/9 global credit crisis. The group is, therefore, focused on continuously monitoring and analysing the potential impact of other risks and events on the funding and liquidity position of the group to ensure business activities preserve and improve funding stability. This ensures the group is able to operate through periods of stress when access to funding is constrained.

The group recognises two types of liquidity risk:

**Funding liquidity risk** – the risk that a bank will not be able to effectively meet current and future cash flow and collateral requirements without negatively affecting its normal course of business, financial position or reputation.

Market liquidity risk – the risk that market disruptions or lack of market liquidity will cause a bank to be unable (or able, but with difficulty) to trade in specific markets without affecting market prices significantly.

Mitigation of market and funding liquidity risks is achieved via contingent liquidity risk management. Buffer stocks of high quality highly liquid assets are held either to be sold into the market or provide collateral for loans to cover any unforeseen cash shortfall that may arise.

The group's approach to liquidity risk management distinguishes between structural, daily and contingency liquidity risk management across all currencies, and various approaches are employed in the assessment and management of these on a daily, weekly and monthly basis as illustrated in the following table.

### LIQUIDITY RISK MANAGEMENT APPROACHES

Structural liquidity risk	Daily liquidity risk	Contingency liquidity risk
Managing the risk that structural, long-term, on- and off-balance sheet exposures cannot be funded timeously or at reasonable cost.	Ensuring that intraday and day-to-day anticipated and unforeseen payment obligations can be met by maintaining a sustainable balance between liquidity inflows and outflows.	Maintaining a number of contingency funding sources to draw upon in times of economic stress.
<ul> <li>liquidity risk tolerance;</li> <li>liquidity strategy;</li> <li>ensuring substantial diversification over different funding sources;</li> <li>assessing the impact of future funding and liquidity needs taking into account expected liquidity shortfalls or excesses;</li> <li>setting the approach to managing liquidity in different currencies and from country to country;</li> <li>ensuring adequate liquidity ratios;</li> <li>ensuring an appropriate structural liquidity gap; and</li> <li>maintaining a funds transfer pricing methodology and process.</li> </ul>	<ul> <li>managing intraday liquidity positions;</li> <li>managing daily payment queue;</li> <li>monitoring net funding requirements;</li> <li>forecasting cash flows;</li> <li>performing short-term cash flow analysis for all currencies (individually and in aggregate);</li> <li>management of intragroup liquidity;</li> <li>managing central bank clearing;</li> <li>managing net daily cash positions;</li> <li>managing and maintaining market access; and</li> <li>managing and maintaining collateral.</li> </ul>	<ul> <li>managing early warning and key risk indicators;</li> <li>performing stress testing including sensitivity analysis and scenario testing;</li> <li>maintaining product behaviour and optionality assumptions;</li> <li>ensuring that an adequate and diversified portfolio of liquid assets and buffers are in place; and</li> <li>maintaining the contingency funding plan.</li> </ul>

### Stress testing and scenario analysis

Regular and rigorous stress tests are conducted on the funding profile and liquidity position as part of the overall stress testing framework with a focus on:

- quantifying the potential exposure to future liquidity stresses;
- analysing the possible impact of economic and event risks on cash flows, liquidity, profitability and solvency position; and
- proactively evaluating the potential secondary and tertiary effects of other risks on the group.

# Liquidity contingency planning

Frequent volatility in funding markets and the fact that financial institutions can, and have, experienced liquidity problems even during benign economic conditions highlight the importance of quality liquidity risk and contingency management processes.

The group's ability to meet all of its daily funding obligations and emergency liquidity needs is of paramount importance and, in order to ensure that this is always adequately managed, the group maintains a liquidity contingency plan.

The objective of liquidity contingency planning is to achieve and maintain funding levels in a manner that allows the group to emerge from a potential funding crisis with its reputation intact and to maintain its financial condition for continuing operations. The plan is expected to:

- support effective management of liquidity and funding risk under stressed conditions;
- establish clear roles and responsibilities in the event of a liquidity crisis; and
- establish clear invocation and escalation procedures.

The liquidity contingency plan provides a pre-planned response mechanism to facilitate swift and effective responses to contingency funding events. These events may be triggered by financial distress in the market (systemic) or bank-specific events (idiosyncratic) which may result in the loss of funding sources.

The plan is reviewed annually and tested regularly via a group-wide liquidity stress simulation exercise to ensure the document remains up to date, relevant and familiar to all key personnel within the group that have a role to play should it ever experience an extreme liquidity stress event.



### REGULATORY UPDATE



BASEL III





LIQUIDITY COVERAGE RATIO



NET STABLE FUNDING RATIO



LCR DISCLOSURE



RECOVERY FRAMEWORK The BCBS framework for sound liquidity risk management seeks to address two aspects:

- ◆ LCR addresses short-term liquidity risk; and
- NSFR addresses the structural liquidity risk of the balance sheet within the SA market.

The LCR has been fully adopted by the SARB with the inclusion of a committed liquidity facility (CLF). Phasing in of the LCR commenced in 2015 and banks are required to be fully compliant by 2019. The minimum LCR requirement is currently 70%, with 10% incremental step-ups each calendar year to 100% on 1 January 2019.

The SARB issued *Guidance Note 6/2016* significantly increasing the cost for contracting a CLF. There is a continued focus on building a diversified pool of available HQLA. This is, however, limited given availability within the SA market

The NSFR is considered a structural balance sheet ratio with the focus being to promote a more resilient banking sector. The ratio calculates the amount of available stable funding relative to the amount of required stable funding.

The provisional directive on the NSFR in November 2015 has subsequently been issued as *directive 4 of 2016* in August. Banks will be required to submit a monthly monitoring template from August 2016 to enable the SARB to assess the readiness of banks to comply with the 100% NSFR requirements from 1 January 2018.

The SARB has applied its discretion on the treatment of deposits with maturities of up to six months received from financial institutions. The NSFR framework assigns a 0% ASF factor to these funds whereas the SARB elected to apply a 35% factor.

It is anticipated that this change will significantly assist the South African banking sector in meeting NSFR requirements. On a *pro forma* basis FirstRand expects that it would exceed the minimum requirements.

The BCBS published the *liquidity coverage ratio disclosure standards* in March 2014, with the objective to reduce market uncertainty around liquidity positions. Key points are:

- effective from 1 January 2015;
- will follow the capital quarterly disclosures; and
- standardised template currently completed semi-annually.

These disclosures reveal industry reporting inconsistencies which have been addressed via the Banking Association of South Africa, together with SARB and SAICA.

The SARB and FSB published for public comment a discussion document, *Strengthening South Africa's Resolution Framework for Financial Institutions*. The paper sets out the motivation, principles and policy proposals for such a strengthened framework and is intended to solicit public comment and serve as a basis for further industry discussions in preparation for the drafting of a special resolution bill.

The paper introduces the concept of total loss-absorbing capacity (TLAC) to explicitly subordinate specified instruments in order to make these loss absorbing at resolution phase. TLAC, in the context of the paper, does not necessarily have the same characteristics as the proposed TLAC requirements applicable to G-SIB and have been identified as:

- ordinary shares;
- preference shares; and
- pre-identified, loss-bearing instruments.

# LIQUIDITY RISK POSITION

The following table provides details on the available sources of liquidity by Basel LCR definition and management's assessment of the required buffer.

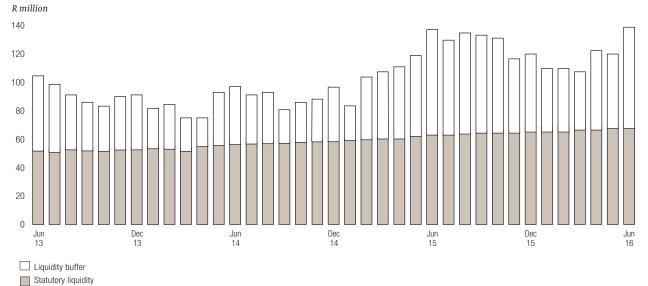
# GROUP'S COMPOSITION OF LIQUID ASSETS

			As	at 30 June 20	016		
	Marketable assets	нс	)LA Basel III vi	ew after hairc	ut*		nent view aircuts
R billion	Total June 2016*	Level 1	Level 2	Total June 2016	Total June 2015**	Total June 2016	Total June 2015
Cash and deposits with central banks	32	32	_	32	31	32	31
Government bonds and bills	89	83	_	83	88	89	88
Other liquid assets	64	_	42	42	13	53	24
Total	185	115	42	157	132	174	143

<sup>\*</sup> The surplus high quality liquid assets holdings by subsidiaries and foreign branches in excess of the minimum required LCR of 70% (2015: 60%) have been excluded in the calculation of the consolidated group LCR.

Liquidity buffers are actively managed via high quality highly liquid assets that are available as protection against unexpected events or market disruptions. The quantum and composition of the available sources of liquidity are defined by the behavioural funding liquidity-at-risk and the market liquidity depth of available liquidity resources. In addition, adaptive overlays to liquidity requirements are derived from stress testing and scenario analysis of the cash inflows and outflows related to business activity.

# $LIQUIDITY\ BUFFER\ AND\ STATUTORY\ LIQUIDITY\ REQUIREMENTS\ OF\ THE\ BANK\ EXCLUDING\ FOREIGN\ BRANCHES$



<sup>\*\*</sup> June 2015 has been restated to align to LCR view.

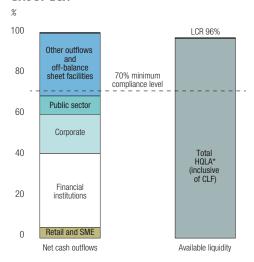


Funding from institutional clients is a significant contributor to the group's net cash outflows as measured under the LCR at nearly 30% of the South African market structure. Other significant contributors to cash outflows are corporate funding and off-balance sheet facilities granted to clients. The group has strategies in place to increase funding sourced through its deposit franchise and to reduce reliance on the less efficient institutional funding sources, as well as to offer facilities more efficiently.

The group's LCR increased due to an increase in HQLA holdings of R25 billion and a reduction in net cash outflows of R14 billion. This is as a result of targeted strategies to raise more funding from stable sources and to increase liquid asset holdings. In addition, certain components of the LCR have now been clarified by the SARB and industry working groups, which has allowed FirstRand to align its methodology with other sector players, resulting in a structural uplift in its LCR.

The following graph gives an indication of the group's LCR position of 96% as at 30 June 2016 (2015: 76%) and demonstrates the group's compliance with the 70% minimum requirement. FirstRand Bank's LCR was 102% at 30 June 2016 (2015: 84%).

### GROUP LCR



<sup>\*</sup> HQLA held by subsidiaries and foreign branches in excess of the required minimum LCR of 70% have been excluded on consolidation as per directive 11 of 2014.

# **CREDIT RISK**

### INTRODUCTION AND OBJECTIVES

Credit risk is the risk of loss due to the non-performance of a counterparty in respect of any financial or other obligation. For fair value portfolios, the definition of credit risk is expanded to include the risk of losses through fair value changes arising from changes in credit spreads. Credit risk also includes credit default risk, pre-settlement risk, country risk, concentration risk and securitisation risk.

Credit risk management across the group is split into three distinct portfolios, which are aligned to customer profiles. These portfolios are retail, commercial and corporate:

- retail credit is offered by FNB and WesBank to individuals and SMEs with a turnover of up to R7.5 million;
- o commercial credit focuses on relationship banking offered by FNB and WesBank to companies that are mainly single-banked; and
- corporate credit is offered by RMB to large corporate multi-banked customers.

As advances are split across the operating franchises, default risk is allocated to the income-receiving portfolio.

The goal of credit risk management is to maximise the group's measure of economic profit, NIACC, within acceptable levels of earnings volatility by maintaining credit risk exposure within acceptable parameters.

Credit risk is one of the core risks assumed as part of achieving the group's business objectives. It is the most significant risk type in terms of regulatory and economic capital requirements. Credit risk management objectives are two-fold:

**Risk control:** Appropriate limits are placed on the assumption of credit risk and steps taken to ensure the accuracy of credit risk assessments and reports. Deployed and central credit risk management teams fulfil this task.

**Management:** Credit risk is taken within the constraints of the risk appetite framework. The credit portfolio is managed at an aggregate level to optimise the exposure to this risk. Business units and deployed risk functions, overseen by the group credit risk management function in ERM and relevant board committees, fulfil this role.

Based on the group's credit risk appetite, as measured on a ROE, NIACC and volatility-of-earnings basis, credit risk management principles include holding the appropriate level of capital and pricing for risk on an individual and portfolio basis. The scope of credit risk identification and management practices across the group, therefore, spans the credit value chain, including risk appetite, credit origination strategy, risk quantification and measurement as well as collection and recovery of delinquent accounts.

Credit risk is managed through the implementation of comprehensive policies, processes and controls to ensure a sound credit risk management environment with appropriate credit granting, administration, measurement, monitoring and reporting of credit risk exposure.

**Credit risk appetite** measures are set in line with overall risk appetite. The aim of the credit risk appetite is to deliver an earnings profile that will perform within acceptable levels of earnings volatility determined by the group's overall risk appetite. In setting credit risk appetite measures:

- the group's credit risk appetite is aligned to the overall group risk appetite;
- credit risk appetite is determined using both a top-down group credit risk appetite and an aggregated bottom-up assessment of the business unit level credit risk appetites; and

stress testing is used to enable the measurement of the financial performance and the credit volatility profile of the different credit business units at a portfolio, segment, franchise and ultimately on a diversified group-wide basis.

Formulated business unit-level credit risk appetite statements are annually reviewed and approved, and risk limits are quarterly reported to and monitored by business unit credit or executive committees and the relevant portfolio credit policy and risk appetite approval committees (subcommittee of the group credit risk management committee). In the credit risk appetite process ERM group credit risk management is responsible to:

- set the requirements in the credit risk appetite framework;
- articulate a top-down group credit risk appetite statement;
- assess alignment between the top-down statement with aggregation of the individual business unit credit risk appetite statements;
- jointly with credit portfolio heads, report risk appetite breaches to the FirstRand credit risk management committee; and
- jointly with the franchise CRO report risk appetite breaches to the RCC committee.



Credit risk limits include the following:

Business unit limits	
Counterparty limits	Borrower's risk grades are mapped to the FirstRand rating scale.
Collateral limits	For secured loans, limits are based on collateral profiles, e.g. loan-to-value bands.
Capacity limits	Measures of customer affordability.
Concentration limits	Limits for concentrations to, e.g. customer segments or high collateral risk.

#### Portfolio level limits

Additional limits for subportfolios subject to excessive loss volatility.

### Year under review and focus areas

Yea	r under review	Ris	k management focus areas
0	Aligned credit origination strategies to the group's macroeconomic outlook with particular reference to consumer indebtedness, the rising interest rate cycle, low economic growth, a depressed commodity price cycle and regulatory amendments to interest rate	0	Continue to monitor the effect of economic conditions on consumer indebtedness, interest rates, growth and commodity prices and adjust credit origination strategies as well as credit portfolio management activities accordingly.
0	pricing.  Assessed credit portfolio performance considering stressed	0	Ongoing reviews to ensure alignment of bottom-up and top-down credit risk appetite assessments.
	scenarios to the group's outlook to confirm resilience of credit portfolios within risk appetite under stressed conditions.	0	Continue to refine credit risk appetite approaches to assess credit loss volatility.
0	Assessed adequacy of impairments given current economic conditions.	0	Focus on debt counselling trends as the South African consumer continues to experience strain due to low economic growth.
0	Continued rollout of the group IFRS 9 programme, established a group IFRS 9 framework, and developed IFRS 9 credit models on	0	Continue rollout of the group IFRS 9 programme and related model development.
	pilot products to inform impact analysis and refine approaches prior to implementation.	0	Continue to invest in people, systems and processes related to
0	Implemented amendments for revised affordability assessment criteria of the NCA.		credit model risk management to ensure appropriate governance with increasing model complexity.
0	Continued implementation of Directive 7/2015 requirements on restructured credit exposures.	0	Continue to rollout data architecture refinements related to BCBS 239.
0	Removed impact of implicit support assumptions on regulatory borrower risk ratings.		
0	Completed the wholesale rest of Africa credit review.		

# Credit risk reporting

Reporting of credit risk information follows the credit governance structure illustrated on the next page. The credit portfolio committees (retail, commercial and corporate) report to the FirstRand credit risk management committee on the risk profile of the advances in each portfolio on a biannual basis. These reports include a review of portfolio trends and quality of new business originated to enable an aggregated credit portfolio view for the group.

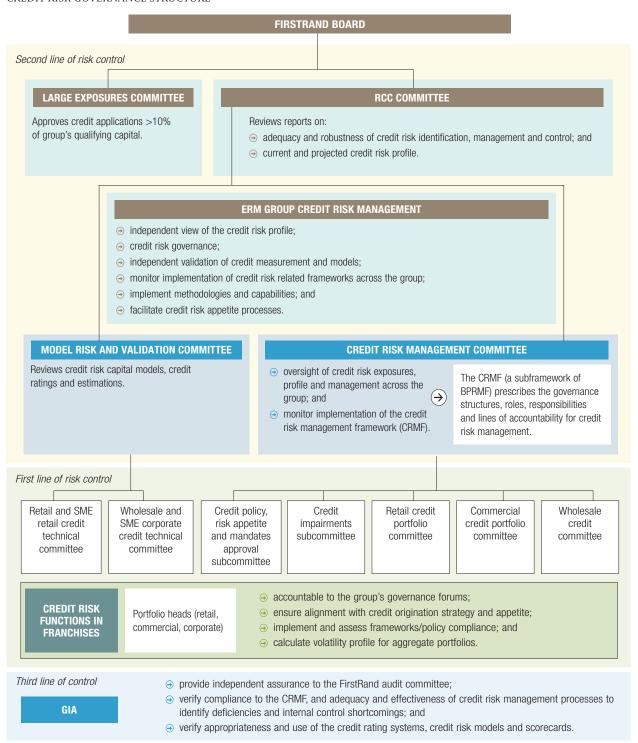
ERM quarterly provides an aggregated credit risk profile report of each portfolio to the RCC committee with inputs from credit portfolio reports and franchise CRO reports and includes:

- overview of key credit financial indicators;
- significant credit observations from the respective credit portfolios, such as risk appetite breaches; and
- significant regulatory and credit model related issues.

Franchise CROs report quarterly on the credit risk profile including a high level overview of advances split by portfolio to franchise risk and executive committees.

### ORGANISATIONAL STRUCTURE AND GOVERNANCE

### CREDIT RISK GOVERNANCE STRUCTURE





# CREDIT ASSETS

# CREDIT ASSETS BY TYPE, SEGMENT AND SARB APPROACH

		As at 30 June					
		2015					
		AIRB approach	Standardised appro	ach subsidiaries			
R million	Total	FirstRand Bank (SA)	Regulated bank entities within Africa	Other subsidiaries	Total		
On-balance sheet exposures	1 015 004	859 597	78 196	77 211	933 153		
Cash and short-term funds	55 785	43 094	9 567	3 124	56 831		
- Money at call and short notice	31 768	24 047	4 736	2 985	34 279		
- Balances with central banks	24 017	19 047	4 831	139	22 552		
Gross advances*	821 717	692 169	57 650	71 898	762 596		
Less: impairments	(13 018)	(11 112)	(1 072)	(834)	(11 230)		
Net advances	808 699	681 057	56 578	71 064	751 366		
Debt investment securities (excluding non-recourse investments)	150 520	135 446	12 051	3 023	124 956		
Off-balance sheet exposures	149 718	135 471	11 510	2 737	133 825		
Total contingencies	42 072	36 845	4 394	833	41 005		
- Guarantees	34 733	30 559	3 439	735	34 995		
- Letters of credit**	7 339	6 286	955	98	6 010		
Irrevocable commitments	101 392	92 372	7 116	1 904	87 464		
Credit derivatives	6 254	6 254	-	_	5 356		
Total	1 164 722	995 068	89 706	79 948	1 066 978		

<sup>\*</sup> The franchise split of gross advances is provided in the following table.

<sup>\*\*</sup> Includes acceptances.

### **CREDIT QUALITY OF ASSETS**

The following tables provide the credit quality of advances in the in-force portfolio.

### CR1: ANALYSIS OF GROSS ADVANCES, DEBT INVESTMENT SECURITIES AND OFF-BALANCE SHEET EXPOSURES

		As at 30 June 2016*						
			Gross exp	osures*				
			Non-defaulted exposures**					
R million		Net defaulted exposures (NPLs)	Neither past due nor impaired	One instalment past due	Two instalment past due	Total	Allowances/ impairments	Net value
1.	Gross advances	21 282	783 534	11 472	5 429	821 717	16 577	805 140
	FNB	10 954	341 063	5 912	3 127	361 056	6 983	354 073
	– Retail	7 269	226 658	3 988	2 293	240 208	4 575	235 633
	– Commercial	1 922	75 127	90	100	77 239	1 419	75 820
	– Rest of Africa	1 763	39 278	1 834	734	43 609	989	42 620
	WesBank	6 758	185 573	5 522	2 162	200 015	3 864	196 151
	RMB investment banking#	3 440	214 287	38	140	217 905	4 127	213 778
	RMB corporate banking	130	36 040	-	-	36 170	848	35 322
	FCC (including Group Treasury)	_	6 571	-	_	6 571	755	5 816
2.	Debt investment securities	_	150 548	_	_	150 548	28	150 520
3.	Off-balance sheet exposures	84	149 660	_	<b>–</b>	149 744	26	149 718
4.	Total	21 366	1 083 742	11 472	5 429	1 122 009	16 631	1 105 378

<sup>\*</sup> The analysis of gross advances, debt investment securities and off-balance sheet exposures is new disclosure from June 2016.

### CR2: CHANGES IN STOCK OF DEFAULTED ADVANCES, DEBT SECURITIES AND OFF-BALANCE SHEET EXPOSURE

		As at 30 June 2016
R n	nillion	Total
1.	Defaulted advances and debt securities at 30 June 2015	17 578
2.	Advances defaulted since 30 June 2015	21 748
3.	Return to not defaulted status	(9 769)
4.	Amounts written off	(6 963)
5.	Other changes	(1 228)
6.	Defaulted advances and debt securities at 30 June 2016	21 366

### Past due exposures

Advances are considered past due in the following circumstances:

• loans with a specific expiry date (e.g. term loans and vehicle and asset finance (VAF)) and consumer loans repayable by regular instalments (e.g. mortgage loans and personal loans) are treated as overdue where one full instalment is in arrears for one day or more and remains unpaid as at the reporting date; or

- loans payable on demand (e.g. credit cards) are treated as overdue where a demand for repayment was served on the borrower, but repayment has not been made in accordance with the stipulated requirements; or
- revolving facilities are treated as past due when the actual exposure is in excess of approved limits.

In these instances, the full outstanding amount is disclosed as overdue even if part is not yet due.

# Past due but not specifically impaired

Advances past due but not specifically impaired include accounts in arrears by one or two full repayments. For the year ended 30 June 2016 exposures to technical and partial arrears of R8.2 billion (2015: R7.4 billion) were classified as neither past due nor impaired in accordance with FirstRand's impairment methodology, primarily driven by retail exposures. There are no past due exposures (more than 90 days) that are not considered to be impaired.

# Age analysis of credit exposures

A past due analysis is performed for advances with specific expiry or instalment repayment dates. The analysis is not applicable to overdraft products or products where no specific due date is determined. The level of risk on these types of products is assessed and reported with reference to the counterparty ratings of the exposures. The following tables provide the age analysis of loans and advances, debt securities and off-balance items for the group.

<sup>\*\*</sup> Gross exposures excludes recoverable loan commitments.

<sup>#</sup> Impaired advances for RMB investment banking include cumulative credit fair value adjustments on the non-performing book.



# AGE ANALYSIS OF CREDIT EXPOSURES

		As at 30 June 2016						
		Past due l specifically						
R million/%	Neither past due nor impaired	One full instalment past due	Two full instalments past due	Impaired (NPLs)	Total			
FNB	341 063	5 912	3 127	10 954	361 056			
– Retail	226 658	3 988	2 293	7 269	240 208			
- Commercial*	75 127	90	100	1 922	77 239			
- Rest of Africa**	39 278	1 834	734	1 763	43 609			
WesBank	185 573	5 522	2 162	6 758	200 015			
RMB investment banking#	214 287	38	140	3 440	217 905			
RMB corporate banking	36 040	-	-	130	36 170			
FCC (including Group Treasury)	6 571	-	-	-	6 571			
Total	783 354	11 472	5 429	21 282	821 717			
Percentage of total book	95.4%	1.4%	0.7%	2.6%	100.0%			

<sup>#</sup> Impaired advances for RMB investment banking are gross of cumulative credit fair value adjustments on the non-performing book.

	As at 30 June 2015						
		Past due specifically					
R million/%	Neither past due nor impaired	One full instalment past due	Two full instalments past due	Impaired (NPLs)	Total		
FNB	313 944	4 492	2 298	8 662	329 396		
– Retail	215 473	2 601	1 615	6 177	225 866		
- Commercial*	65 412	124	165	1 466	67 167		
- Rest of Africa**	33 059	1 767	518	1 019	36 363		
WesBank	168 831	4 905	1 867	5 862	181 465		
RMB investment banking#	202 966	127	3	2 625	205 721		
RMB corporate banking	35 033	23	_	352	35 408		
FCC (including Group Treasury)	10 606	_	_	_	10 606		
Total	731 380	9 547	4 168	17 501	762 596		
Percentage of total book	95.9%	1.3%	0.5%	2.1%	100.0%		

<sup>\*</sup> Includes public sector.

<sup>\*</sup> Includes public sector.
\*\* Includes FNB's activities in India.

<sup>\*\*</sup> Includes FNB's activities in India.

<sup>#</sup> Impaired advances for RMB investment banking are gross of cumulative credit fair value adjustments on the non-performing book.

# Impairment of financial assets

Adequacy of impairments is assessed through the ongoing review of the quality of credit exposures in line with the requirements of the related accounting standard (IAS 39). Individual advances are classified on at least a monthly basis into one of the following three categories:

- past due;
- defaulted (also referred to as NPLs); or
- neither past due nor impaired with associated criteria and impairment assessments as illustrated in the following table.

### IMPAIRMENT CLASSIFICATION

Type of advance	Past due	Defaulted
Loans repayable by regular instalments (e.g. mortgage loans and personal loans)	More than one instalment in arrears as at reporting date.	Three or more instalments in arrears as at reporting date.
Loans payable on demand (e.g. credit cards)	Repayment has not been made in accordance with the stipulated requirements for more than 30 days.	Repayment has not been made in accordance with the stipulated requirements for more than 90 days.
Revolving facilities	Exposure is in excess of approved limits for more than 30 days.	Exposure is in excess of approved limits for more than 90 days.

Advances are also categorised as defaulted where there are material indicators of unlikeliness to pay, e.g. the counterparty is under judicial management or declared insolvent. This classification is consistently used for both accounting and regulatory purposes. All defaulted exposures are considered impaired.

# IMPAIRMENT ASSESSMENT

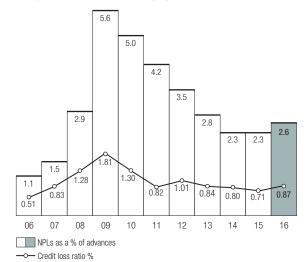
Impairment classification	Description
Defaulted	Exposure is in default, hence an account-level specific impairment is raised. This is based on the difference between the exposure and the net present value of expected recoveries.
Past due	Exposures reflect objective evidence of the occurrence of an impairment event, hence a portfolio specific impairment is raised. This is based on a pooled level assessment (by grouping homogeneous pools), considering the proportion of exposure that is expected to subsequently default and the associated net present value of expected recoveries.
Neither defaulted nor past due	Exposures do not reflect objective evidence of the occurrence of an impairment event, however, historical analysis indicates that an impairment event has incurred on some exposures, with an associated loss expected. An associated pooled level incurred-but-not-reported (IBNR) impairment is, therefore, calculated. This considers the proportion of exposures expected to migrate to either a past due or defaulted state over an emergence period with subsequent allowance for required impairments once in a past due or defaulted state.



# Income statement impairment charge

Impairments are recognised through the creation of an impairment reserve and an impairment charge in the income statement. Exposures considered uncollectable are written off against the reserve for loan impairments. Subsequent recoveries against these facilities decrease the credit impairment charge in the income statement in the year of recovery. The following chart shows the history of the NPL ratio and the income statement impairment charge.

### NPLs AND IMPAIRMENT HISTORY



<sup>\*</sup> Impairment charges are reflected before insurance proceeds where applicable. The impairment charge is calculated on an IFRS basis and excludes fair value adjustments on advances.

# Sector and geographical analysis of defaulted advances

The sector and geographical analysis of defaulted exposures are based on where the credit risk originates, i.e. the geography and sector of operation.

### SECTOR DEFAULTED ADVANCES

		As at 30 J	une 2016	
R million	Total defaulted advances before write-offs	Write-offs excluding interest in suspense	Defaulted advances net of write-offs	Specific impairments
Agriculture	591	17	574	115
Banks	45	-	45	10
Financial institutions	127	35	92	43
Building and property development	1 767	313	1 454	235
Government, Land Bank and public authorities	14	2	13	7
Individuals	19 638	5 968	13 670	4 927
Manufacturing and commerce	1 739	185	1 554	827
Mining	2 064	40	2 024	155
Transport and communication	353	64	288	167
Other services	1 814	246	1 568	666
Total	28 152	6 870	21 282	7 152

# GEOGRAPHIC DEFAULTED ADVANCES

	As at 30 June 2016				
R million	Defaulted advances before write-offs	Write-offs excluding interest in suspense	Defaulted advances net of write-offs	Specific impairments	
South Africa	23 492	6 381	17 111	6 173	
Rest of Africa	3 650	81	3 569	622	
UK	625	378	247	150	
Other Europe	113	_	113	58	
North America	129	30	99	52	
South America	_	_	_	_	
Australasia	1	_	1	1	
Asia	142	_	142	96	
Total	28 152	6 870	21 282	7 152	

### SECTOR AND GEOGRAPHIC DEFAULTED DEBT INVESTMENT SECURITIES AND OFF-BALANCE SHEET EXPOSURES

		As at 30 June 2016			
R million	Defaulted advances before write-offs	Write-offs excluding interest in suspense	Defaulted exposures net of write-offs		
Debt investment securities					
Sector – Other services	50	50	-		
Geography - South Africa	50	50	-		
Off-balance sheet items					
Sector	84	-	84		
Manufacturing and commerce	36	-	36		
- Mining	48	-	48		
Geography – South Africa	84	-	84		

### **Restructured exposures**

A restructure is defined as any formal agreement between the customer and the group to amend contractual amounts due (or the timing thereof). This can be initiated by the customer, the group or a third party (e.g. debt management companies). A restructure is defined as a distressed restructure where it is entered into:

- from a position of arrears;
- $\ensuremath{ \bullet}$  where an account was in arrears at any point during the past six months; or
- from an up-to-date position, in order to prevent the customer from going into arrears.

Distressed restructuring is regarded as objective evidence of impairment. Classification of distressed restructures adheres to the relevant and regulatory requirements. Restructured exposures shown below are applicable to South African operations. Retail restructured exposures include loans under debt review of R5.6 billion. Unimpaired restructures include those that are considered performing and not distressed.

### RESTRUCTURED EXPOSURE SPLIT BETWEEN IMPAIRED AND NOT IMPAIRED

	As at 30 June 2016		
R million	Impaired	Not impaired	Total
Advances	5 991	4 879	10 870
Total	5 991	4 879	10 870



### Monitoring of weak exposures

Credit exposures are actively monitored throughout the life of transactions. Portfolios are formally reviewed by portfolio committees either monthly or quarterly to assess levels of individual counterparty risk, portfolio risks and to act on any early warning indicators. The performance and financial condition of borrowers are monitored based on information from internal sources, credit bureaux, borrowers and publicly-available information. The frequency of monitoring and contact with the borrower is determined from the borrower's risk profile. Reports on the overall quality of the portfolio are monitored at business unit level, portfolio level and in aggregate for the group.

### Management of concentration risk

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

Concentration risk is managed based on the nature of the credit concentration within each portfolio. The group's credit portfolio is well diversified, achieved through setting maximum exposure guidelines to individual counterparties. The group constantly reviews its concentration levels and sets maximum exposure guidelines for these. Excesses are reported to the RCC committee.

### Geographic, industry and residual maturity concentration risk

Geographically, most of the group's exposures are in South Africa. The following tables provide the geographical, industry and residual maturity split of gross advances after deduction of interest in suspense, debt investment securities (excluding non-recourse investments and off-balance sheet exposures).

### BREAKDOWN OF EXPOSURES ACROSS GEOGRAPHICAL AREAS

		As at 30 June					
		2016			2015		
R million	Gross advances	Debt investment securities*	Off-balance sheet exposures**	Gross advances	Debt investment securities*	Off-balance sheet exposures**	
South Africa	671 543	121 312	120 023	629 063	103 943	109 110	
Rest of Africa	82 862	12 209	16 567	78 979	10 697	14 647	
United Kingdom	53 616	612	7 451	43 279	472	627	
Other Europe	6 189	1 080	2 789	5 194	107	1 800	
North America	533	9 424	452	1 030	2 427	97	
South America	952	_	-	739	-	27	
Australasia	2 407	4	140	998	_	138	
Asia	3 615	5 879	2 296	3 314	7 310	2 023	
Total	821 717	150 520	149 718	762 596	124 956	128 469	

<sup>\*</sup> Excludes non-recourse investments.

<sup>\*\*</sup> Significant off-balance sheet exposures. Off-balance sheet exposures for June 2015 exclude credit derivatives.

# BREAKDOWN OF EXPOSURES ACROSS INDUSTRIES

	As at 30 June				
		2016		2015#	
R million	Gross advances	Debt investment securities*	Off-balance sheet exposures**	Gross advances	
Agriculture	31 351	-	858	28 617	
Banks and financial services	109 063	13 675	25 303	97 989	
Building and property development	33 468	14 288	2 861	30 018	
Government, Land Bank and public authorities	18 990	101 689	8 104	17 684	
Individuals	417 638	_	50 000	378 529	
Manufacturing and commerce	96 920	3 397	17 381	99 862	
Mining	18 101	1 041	17 483	25 504	
Transport and communication	20 143	1 304	4 658	17 781	
Other services	76 043	15 126	23 070	66 612	
Total	821 717	150 520	149 718	762 596	

<sup>\*</sup> Excludes non-recourse investments.

# BREAKDOWN OF EXPOSURES PER RESIDUAL MATURITY

		As at 30 June		
	2016			
R million	Gross advances	Debt investment securities*	Off-balance sheet exposures**	Gross advances
Less than one year (including call)	280 926	81 085	144 613	255 564
Between 1 year and 5 years	313 975	32 485	1 766	295 370
Over 5 years	206 590	35 992	3 339	194 790
Non-contractual amounts	20 226	958	-	16 872
Total	821 717	150 520	149 718	762 596

<sup>\*</sup> Excludes non-recourse investments.

<sup>\*\*</sup> Significant off-balance sheet exposures.

<sup>#</sup> The breakdown of exposures for debt investment securities and off-balance sheet items is new disclosure from June 2016.

<sup>\*\*</sup> Significant off-balance sheet exposures.

# The breakdown of exposures per residual maturity of debt investment securities and off-balance sheet items is new disclosure from June 2016.



### **CREDIT RISK MITIGATION**

The group's credit risk mitigation approach is described on page ••.

Furthermore, it is the group's policy that all items of collateral are valued at the inception of a transaction and at various points throughout the life of a transaction, either through physical inspection or indexation methods, as appropriate. For corporate and commercial portfolios, the value of collateral is reviewed as part of the annual facility review. For mortgage portfolios, collateral valuations are updated on an ongoing basis through statistical indexation models. In the event of default, however, more detailed reviews and valuations of collateral are performed, which yields a more accurate financial effect.

Limited on- and off-balance sheet netting is used within the group in the process of determining exposure to credit risk. RMB and FNB apply netting for corporate, SME corporate, banks, securities firms, public sector and sovereign exposures based on facility type, natural set off, net exposure determination rules and ceding rules. The policies followed are documented and strictly governed by the applicable regulatory clauses.

### CR3: CREDIT RISK MITIGATION TECHNIQUES

	As at 30 June 2016				
	Exposures*				
	Unsecured	Secured by collateral		Of which secured by financial guarantees	
R million	carrying value	Carrying value	Secured amount	Carrying value	Secured amount
Total advances and debt securities	178 141	781 078	781 078	5 532	5 532
Of which defaulted:	2 417	11 713	11 713	-	_

<sup>\*</sup> No exposures were secured by credit derivatives during the year.

# CREDIT RISK UNDER THE ADVANCED INTERNAL RATINGS-BASED (AIRB) APPROACH

Credit risk is one of the core risks assumed in pursuit of the group's business objectives, and is the most significant risk type in terms of regulatory and economic capital requirements. The use of quantitative models is crucial to the successful management of credit risk, with models being applied across the credit value chain to drive business decisions and to measure and report on credit risk.

Technical requirements for the development of credit risk models are captured in model-type specific model development frameworks, while model governance, validation and implementation requirements are articulated in the group's model risk management framework for credit risk. Where applicable, independent validation of credit risk models is performed according to requirements articulated in model-type specific independent validation frameworks.

Credit risk models are widely employed in the assessment of capital requirements, origination, pricing, impairment calculations and stress testing of the credit portfolio. All of these models are built on a number of client and facility rating models, in line with the SARB AIRB approach requirements and the group's model building frameworks. Credit risk approaches employed across the group are shown in the following table.

Basel approach	FirstRand Bank SA	Remaining FirstRand entities
AIRB	✓	
Standardised approach		✓

The credit risk approaches shown translate into the following composition per major portfolio within the group, based on total credit extended.

EAD% per portfolio	AIRB	Standardised approach
Retail	85%	15%
Commercial	79%	21%
Corporate	88%	12%

Even though the remaining subsidiaries do not have regulatory approval to use the AIRB approach, the same or similar models are applied for the internal assessment of credit risk on the standardised approach. The models are used for the internal assessment of the three primary credit risk components:

- probability of default (PD);
- exposure at default (EAD); and
- loss given default (LGD).

Management of the credit portfolio is reliant on these three credit risk measures. PD, EAD and LGD are inputs into the portfolio and group-level credit risk assessment where the measures are combined with estimates of correlations between individual counterparties, industries and portfolios to reflect diversification benefits across the portfolio.

Probability of defa	ult
Definition	The probability of a counterparty defaulting on any of its obligations over the next 12 months.  A measure of the counterparty's ability and willingness to repay facilities granted.
Dimensions	Time-driven: counterparty is in arrears for more than 90 days or three instalments.  Event-driven: there is reason to believe that the exposure will not be recovered in full and has been classified as such.
Application	All credit portfolios.     Recognition of NPLs for accounting.
PD measures	Through-the-cycle (TTC) PD measures reflect long-term, average default expectations over the course of the economic cycle. TTC PDs are inputs in economic and regulatory capital calculations.
	Point-in-time (PIT) PD measures reflect default expectations in the current economic environment and thus tend to be more volatile than TTC PDs. PIT PDs are used in credit portfolio management, including risk appetite and portfolio monitoring.
Measure application	Management of exposure to credit risk.

The group employs a granular, 100-point master rating scale, which has been mapped to the continuum of default probabilities, as illustrated in the following table. These mappings are reviewed and updated on a regular basis. The group currently only uses mapping to S&P Global Ratings (S&P) rating scales.

# MAPPING OF FIRSTRAND (FR) GRADES TO RATING AGENCY SCALES

FR rating	Midpoint PD	International scale mapping	
1 – 14	0.06%	AAA, AA, A	FR 1 is the lowest PD and FR 100 the highest.
15 – 25	0.29%	BBB	<ul> <li>External ratings have also been mapped to the master rating scale</li> </ul>
26 – 32	0.77%	BB+, BB	for reporting purposes.
33 – 39	1.44%	BB-	
40 – 53	2.52%	B+	
54 – 83	6.18%	В	
84 – 90	13.68%	B-	
91 – 99	59.11%	Below B-	
100	100%	D (defaulted)	



Exposure at default				
Definition	The expected exposure to a counterparty through a facility should the counterparty default over the next 12 months. It reflects commitments made and facilities granted that have not been paid out and that may be drawn over the period under consideration (i.e. off-balance sheet exposures). It's also a measure of potential future exposure on derivative positions.			
Application	A number of EAD models, which are tailored to the respective portfolios and products employed, are in use across the group. These have been developed internally and are calibrated to historical default experience.			

Loss given default	
Definition	The economic loss on a particular facility upon default of the counterparty is expressed as a percentage of exposure outstanding at the time of default.
Dependent on	<ul> <li>Type, quality and level of subordination.</li> <li>Value of collateral held compared to the size of overall exposure.</li> <li>Effectiveness of the recovery process and timing of cash flows received during the workout or restructuring process.</li> </ul>
Application	<ul> <li>All credit portfolios.</li> <li>Recognition of NPLs for accounting.</li> </ul>
Distinctions	Long-run expected LGDs (long-run LGDs).  LGDs reflective of downturn conditions:  more conservative assessment of risk, incorporating a degree of interdependence between PD and LGD that can be found in a number of portfolios, i.e. instances where deteriorating collateral values are also indicative of higher default risk; and  used in the calculation of regulatory capital estimates.

# Expected loss (EL)

EL, the product of the primary risk measures PD, EAD and LGD, is a forward-looking measure of portfolio or transaction risk. It is used for a variety of purposes along with other risk measures. EL is not directly comparable to impairment levels, as EL calculations are based on the regulatory parameters, TTC PD and downturn LGD, whilst impairment calculations are driven by IFRS requirements.

### Credit risk model development and approval

Requirements for the model development and validation process, including governance requirements, implementation requirements and associated roles and responsibilities, are articulated in the group's model risk management framework for credit risk and apply to all credit risk models used across the group.

Roles and responsibilities related to the model risk management process, as well as model governance and validation requirements, are defined in this framework with reference to the stages of the credit risk model life cycle. Governance and validation requirements for new model developments also apply to significant model changes which are defined as changes to the structure of a model or model rating factors.

The following roles are defined to ensure that model risk is adequately managed across the credit value chain and throughout the credit risk model life cycle.

◆ Model owner — responsible for the overall performance of the model, including ensuring that the model is implemented correctly and used appropriately. The model owner should be the head of credit for the portfolio within which the model will be applied, unless model ownership has been delegated to an appropriate central function.

- Model developer responsible for the development of the model, using appropriate methodologies that align with the intended model use and for producing appropriate model documentation. The model developer should be a senior analyst in the business unit in which the model will be used, unless model development has been outsourced to an appropriate central function.
- ◆ Model validator set the framework against which the model will be validated and perform the independent validation of the model in accordance with the relevant approved model validation framework. The model validator should be in ERM, unless independent validation has been delegated to another function or area that is independent from the model owner and model developer.
- Model approver responsible for the final approval of the model for its intended use. Model approval is the responsibility of the RCC committee or its designated subcommittee and the final model approver is dependent on model type and model risk classification.
- GIA responsible for monitoring adherence to the requirements of the model risk management framework for credit risk and other related policies and frameworks.

The model governance and validation process for each stage of the credit risk model life cycle is described in the following table. This is applicable to new model developments and significant model changes.

### MODEL GOVERNANCE AND VALIDATION IN THE CREDIT MODEL LIFE CYCLE

LIFE CYCLE STAGE	DESCRIPTION	MODEL GOVERNANCE AND VALIDATION
Model development	New models, updates and calibrations.	Model and documentation sign off by model owner. Approval by retail/wholesale technical committee.
Independent validation	Independent review of model, underlying methodology and results.	In line with requirements of regulatory capital model validation frameworks.
Model approval	Final approval indicating model may be implemented and used as intended.	Approval by:  MRVC;  RCC committee (for material models); and  SARB (if required by SARB communication policy).
Model implementation	Into production environment.	Model owner sign off.
Post-implementation review	Confirmation of successful model implementation.	Model owner sign off. Noted at MRVC. Material models noted at RCC committee.
Ongoing monitoring and validation	Confirmation of continued model relevance and accuracy.	Model owner, technical committee sign off results.  Annual independent validation noted at:  MRVC;  RCC committee (material models); and  SARB (if required by SARB communication policy).



#### AIRB models

AIRB models are developed to align with regulatory requirements for development of regulatory capital models. Retail portfolios' models are developed using methodologies described in the retail AIRB model development and validation framework. Corporate models are developed using statistical, expert judgement, hybrid and simulation approaches, with the approach selected according to the characteristics of the exposures modelled.

Regulatory required parameter floors are applied to the models as follows:

- **○** PDs 0.3%;
- residential mortgage LGDs 10%; and
- EADs 100% of drawn exposure.

The table below gives an overview of the key AIRB models used for regulatory capital calculation within each portfolio, including a breakdown of the individual models applied and a description of the modelling methodologies.

Portfolio	Number of models	Model type	Model descriptions		
Large corporate portfolios (RMB and WesBank) Private sector counterparties including corporates and securities firms, and public sector counterparties. Products include loan facilities,	12	PD	<ul> <li>Internally developed statistical rating models using internal and external data covering full economic cycles is used and results supplemented with qualitative assessments based on international rating agency methodologies.</li> <li>All ratings (and associated PDs) are reviewed by the wholesale credit committee and, if necessary, final adjustments are made to ratings to reflect information not captured by the model.</li> </ul>		
structured finance facilities, contingent products and derivative instruments.	LGD   LGD estimates are and suitably adjust committee responsite exposure.  EAD   EAD estimates are and suitably adjust committee responsite exposure.  EAD estimates are The credit conversithe EAD estimation responsible for rev		ties, LGD		and suitably adjusted international data with the wholesale credit committee responsible for reviewing and approving LGDs. The LGD models consider the type of collateral underlying the
			● EAD estimates are based on suitably adjusted international data.  The credit conversion factor approach is typically used to inform the EAD estimation process. The same committee process responsible for reviewing and approving PDs is applied to the review and approval of EADs.		
Low default portfolios: sovereign and bank exposures  South African and non-South African banks, local and foreign currency sovereign and sub-sovereign exposures.	10	PD	<ul> <li>PDs are based on internally-developed statistical and expert judgement models, which are used in conjunction with external rating agency ratings and structured peer group analysis to determine final ratings. PD models are calibrated using external default data and credit spread market data.</li> <li>All ratings (and associated PDs) are reviewed by the wholesale credit committee and, if necessary, final adjustments are made to ratings to reflect information not captured by the model.</li> </ul>		
		LGD	● LGD estimates are based on modelling a combination of internal and suitably adjusted international data with the same committee process responsible for reviewing and approving LGDs are for PDs. The LGD models consider the type of collateral underlying the exposure.		
		EAD	Estimation is based on regulatory guidelines with credit conversion factors being used as appropriate. External data and expert judgement are used due to the low default nature of the exposures.		

Portfolio	Number of models	Model type	Model descriptions
Specialised lending portfolios (RMB, FNB Commercial)  Exposures to private-sector counterparties for the financing of	4	PD	<ul> <li>The rating systems are based on hybrid models using a combination of statistical cash flow simulation models and qualitative scorecards calibrated to a combination of internal data and external benchmarks;</li> <li>All ratings (and associated PDs) are reviewed by the wholesale</li> </ul>
project finance, high volatility commercial real estate, and income-producing real estate.			credit committee and, if necessary, final adjustments are made to ratings to reflect information not captured by the models.
		LGD	The LGD estimation process is similar to that followed for PD with simulation and expert judgement used as appropriate.
		EAD	EAD estimates are based on internal as well as suitably adjusted external data. The credit conversion factor approach is typically used to inform the EAD estimation process.
Commercial portfolios (FNB Commercial)	12	PD	• SME corporate – counterparties are scored using financial statement information in addition to other internal risk drivers, the output of which is calibrated to internal historical default data.
Exposures to SME corporate and retail clients.  Products include loan facilities, contingent products and term lending products.			• SME retail – the SME retail portfolio is segmented into homogeneous pools and subpools through an automated scoring process using statistical models that incorporate product type, customer behaviour and delinquency status. PDs are estimated for each subpool based on internal product level history associated with the respective homogeneous pools and subpools.
		LGD	● SME corporate — recovery rates are largely determined by collateral type and these have been set with reference to internal historical loss data, external data and Basel guidelines.
			SME retail – LGD estimates are applied on a portfolio level, estimated from internal historical default and recovery experience.
		EAD	• SME corporate – portfolio-level credit conversion factors are estimated on the basis of the group's internal historical experience and benchmarked against international studies.
			• SME retail — EAD estimates are applied on a portfolio level, estimated from internal historical default and recovery experience.
Residential mortgages (FNB HomeLoans, One Account, FNB Housing Finance and Wealth (RMB Private Bank and FNB Private	15	PD	Portfolios/products are segmented into homogeneous pools and subpools through an automated scoring process using statistical models that incorporate product type, loan characteristics, customer behaviour, application data and delinquency status.
Clients)) Exposures to individuals for financing of residential properties.			PDs are estimated for each subpool based on internal product level history associated with the respective homogeneous pools and subpools.
		LGD	● LGD estimates are based on subsegmentation with reference to collateral or product type, time in default and post-default payment behaviour. Final estimates are based on associated analyses and modelling of historical internal loss data.
		EAD	EAD estimates are based on subsegmentation with reference to product-level analyses and modelling of historical internal exposure data.



Portfolio	Number of models	Model type	Model descriptions
Qualifying revolving retail exposures (FNB Card, FNB Value Banking Solutions and Wealth) Exposures to individuals providing a revolving limit through credit card or overdraft facility.	9	PD	Portfolios/products are segmented into homogeneous pools and subpools through an automated scoring process using statistical models that incorporate product type, loan characteristics, customer behaviour, application data and delinquency status.  PDs are estimated for each subpool based on internal product-level history associated with the respective homogeneous pools and subpools.
		LGD	LGD estimates are based on subsegmentation with reference to product type. Final estimates are based on associated analyses and modelling of historical internal loss data.
		EAD	● EAD measurement plays a significant role in the assessment of risk due to the typically high level of undrawn facilities characteristic of these product types. EAD estimates are based on actual historic EAD, segmented appropriately, e.g. straight <i>versus</i> budget in the case of credit cards.
Other exposures (FNB personal loans, WesBank loans and VAF)	15	PD	Portfolios/products are segmented into homogeneous pools and subpools through an automated scoring process using statistical models that incorporate product type, loan characteristics, customer behaviour, application data and delinquency status.
			PDs are estimated for each subpool based on internal product- level history associated with the respective homogeneous pools and subpools.
		LGD	● LGD estimates are based on subsegmentation with reference to collateral (in the case of WesBank VAF) or product type and time in default. Final estimates are based on associated analyses and modelling of historical internal loss data.
		EAD	EAD estimates are based on subsegmentation with reference to product-level analyses and modelling of historical internal exposure data.

# Use of credit risk measures

The following credit risk management actions and measures are used extensively in the group's credit risk processes:

- credit approval;
- pricing;
- limit setting/risk appetite;
- reporting;
- provisioning;
- capital calculations and allocation;
- profitability analysis;
- stress testing;
- risk management and credit monitoring; and
- performance measurement.

The following table describes the use of credit risk actions and measures across a number of key areas and business processes related to the management of the credit portfolio.

## ${\it USE~OF~CREDIT~RISK~MANAGEMENT~ACTIONS~AND~MEASURES~IN~THE~CREDIT~LIFECYCLE}$

	Corporate	Retail
Determination of portfolio and client acquisition strategy	<ul> <li>Assessment of overall portfolio credit risk determined by PD, EAD and LGD.</li> <li>Acquisition and overall strategy set in terms of appropriate limits and group risk appetite.</li> </ul>	<ul> <li>Same measures as for corporate.</li> <li>Credit models determine loss thresholds used in setting of credit risk appetite.</li> </ul>
Determination of individual and portfolio limits	<ul> <li>Industry and geographical concentrations.</li> <li>Ratings.</li> <li>Risk-related limits on the composition of portfolio.</li> <li>Group credit risk appetite.</li> </ul>	<ul> <li>Same measures as for corporate.</li> <li>Modelled versus actual experience is evaluated in setting of risk appetite.</li> </ul>
Profitability analysis and pricing decisions	<ul><li>PD, EAD and LGD used to determine pricing.</li><li>Economic profit used for profitability.</li></ul>	Same measures as for corporate.
Credit approval	<ul> <li>Consideration of application's ratings.</li> <li>Credit risk appetite limits.</li> <li>Projected risk-adjusted return on economic capital (PD, EAD and LGD are key inputs in these measures).</li> </ul>	<ul> <li>Automated based on application scorecards (scorecards are reflective of PD, EAD and LGD).</li> <li>Assessment of client's affordability.</li> </ul>
Credit monitoring and risk management	<ul> <li>Risk assessment based on PD, EAD and LGD.</li> <li>Counterparty FR grades updated based on risk assessment.</li> <li>Additional capital for large transactions that will increase concentration risk.</li> </ul>	<ul> <li>Same measures as for corporate.</li> <li>Monthly analysis of portfolio and risk movements used in portfolio management and credit strategy decisions.</li> </ul>
Impairments	<ul> <li>PD and LGD used in assessment of impairments and provisioning.</li> <li>Judgemental assessment to determine adequacy of provisions.</li> </ul>	Loss identification period PD, LGD and roll rates used for specific, portfolio and incurred but not reported provisions.
Regulatory and economic capital calculation	Primary credit risk measures, PD, EAD and LGD are the most important inputs.	Primary credit risk measures, PD, EAD and LGD are the most important inputs.
Reporting to senior management and board	<ul> <li>Portfolio reports discussed at franchise and business unit risk committee meetings.</li> <li>Quarterly portfolio reports submitted to credit risk management and RCC committees.</li> </ul>	<ul> <li>Portfolio reports discussed at franchise and business unit risk committee meetings.</li> <li>Quarterly portfolio reports submitted to credit risk management and RCC committees.</li> </ul>



## Credit risk exposures by portfolio and PD range

The following tables provide the main parameters used for the calculation of capital requirements for the exposures in the AIRB models split by asset class and shown within fixed regulatory PD ranges. These exposures are for FirstRand Bank (SA), where the AIRB models are applied. The information provided in the different columns are explained as follows:

- in these tables regulatory supplied credit conversion factors (CCF) are used;
- the credit risk mitigation (CRM) measures applied are described on page 15;
- the number of obligators corresponds to the number of counterparties in the PD band;
- the average PD and LGD are weighted by EAD;
- the average maturity is the obligor maturity in years weighted by EAD;
- RWA density is the total RWA to EAD post CRM; and
- provisions are only included on a total basis.

	Total FirstRand Bank (SA)					
			As at 30 c	June 2016		
PD scale	Original on-balance sheet gross exposure R million	Off-balance sheet exposures pre-CCF R million	Average CCF %	EAD post- CRM and post-CCF R million	Average PD %	Number of obligors
0.00 to < 0.15	202 581	31 089	57.59	157 192	0.07	140 981
0.15 to < 0.25	46 826	35 929	55.70	80 116	0.21	102 951
0.25 to < 0.50	88 503	54 821	51.59	110 293	0.37	265 777
0.50 to < 0.75	52 241	20 910	56.10	63 088	0.61	519 395
0.75 to < 2.50	271 490	63 381	57.73	293 256	1.46	2 570 708
2.50 to < 10.00	158 973	21 085	56.08	144 513	4.34	1 919 358
10.00 to < 100.00	32 786	4 214	31.86	34 168	28.76	1 204 366
100.00 (default)	16 133	86	79.20	16 123	100.0	1 073 723
Total	869 533	231 515	55.18	898 749	4.18	7 797 259

		Total FirstRand Bank (SA)								
		As at 30 June 2016								
PD scale	Average LGD %	Average maturity Years	RWA R million	RWA density %	Expected loss R million	Provisions R million				
0.00 to < 0.15	28.35	1.55	15 489	9.85	53					
0.15 to < 0.25	34.96	1.80	23 127	28.87	43					
0.25 to < 0.50	26.09	1.31	30 452	27.61	98					
0.50 to < 0.75	31.40	0.96	21 326	33.80	111					
0.75 to < 2.50	26.32	0.99	109 919	37.48	1 033					
2.50 to < 10.00	37.19	1.37	100 210	69.34	2 211					
10.00 to < 100.00	38.73	0.85	37 560	109.93	3 788					
100.00 (default)	41.08	1.46	12 204	75.69	6 047					
Total	30.26	1.26	350 287	38.97	13 384	13 157				

	Corporate							
			As at 30 c	June 2016				
PD scale	Original on-balance sheet gross exposure R million	Off-balance sheet exposures pre-CCF R million	Average CCF %	EAD post- CRM and post-CCF R million	Average PD %	Number of obligors		
0.00 to < 0.15	37 527	11 639	61.02	11 079	0.16	49		
0.15 to < 0.25	31 942	28 755	59.24	63 157	0.20	63		
0.25 to < 0.50	27 910	20 258	57.79	39 808	0.34	66		
0.50 to < 0.75	15 941	7 294	59.48	18 533	0.55	68		
0.75 to < 2.50	33 481	15 946	59.34	40 917	0.96	198		
2.50 to < 10.00	18 061	6 043	62.57	19 735	3.01	166		
10.00 to < 100.00	926	261	53.99	1 166	19.29	52		
100.00 (default)	1 364	84	81.00	1 379	100.00	9		
Total	167 152	90 280	59.41	195 774	1.52	671		

	Corporate							
			As at 30 Ju	ne 2016				
PD scale	Average LGD %	Average maturity Years	RWA R million	RWA density %	Expected loss R million	Provisions R million		
0.00 to < 0.15	31.99	2.18	1 768	15.96	17			
0.15 to < 0.25	35.34	1.75	19 404	30.72	34			
0.25 to < 0.50	31.93	1.73	16 582	41.65	39			
0.50 to < 0.75	32.49	1.50	8 982	48.46	34			
0.75 to < 2.50	32.75	1.91	26 294	64.26	129			
2.50 to < 10.00	34.52	1.96	20 027	101.48	225			
10.00 to < 100.00	24.55	0.94	2 305	197.68	102			
100.00 (default)	23.68	2.20	-	-	326			
Total	33,42	1.80	95 362	48.71	906	3 000		



			Specialise	ed lending		
			As at 30 J	lune 2016		
PD scale	Original on-balance sheet gross exposure R million	Off-balance sheet exposures pre-CCF R million	Average CCF %	EAD post- CRM and post-CCF R million	Average PD %	Number of obligors
0.00 to < 0.15	10 068	966	62.27	10 582	0.06	711
0.15 to < 0.25	7 226	1 184	_	7 291	0.21	7
0.25 to < 0.50	18 913	4 358	60.00	19 371	0.34	26
0.50 to < 0.75	2 035	175	_	2 042	0.70	10
0.75 to < 2.50	7 782	659	60.05	8 156	0.90	43
2.50 to < 10.00	4 247	2 084	60.00	5 403	3.37	46
10.00 to < 100.00	156	_	_	156	10.24	5
100.00 (default)	1 195	_	100.00	1 195	100.00	37
Total	51 622	9 426	51.59	54 196	2.89	885

	Specialised lending								
			As at 30 Ju	ne 2016					
PD scale	Average LGD %	Average maturity Years	RWA R million	RWA density %	Expected loss R million	Provisions R million			
0.00 to < 0.15	20.13	3.37	4 635	43.80	21				
0.15 to < 0.25	18.00	2.72	1 562	21.42	3				
0.25 to < 0.50	15.99	2.51	4 300	22.20	13				
0.50 to < 0.75	23.06	2.70	885	43.34	4				
0.75 to < 2.50	23.99	2.08	3 906	47.89	18				
2.50 to < 10.00	32.99	2.38	5 413	100.19	62				
10.00 to < 100.00	32.00	2.20	227	145.51	5				
100.00 (default)	41.39	4.77	-	-	460				
Total	20.84	2.68	20 928	38.62	586	503			

			Sove	reign		
			As at 30 c	June 2016		
PD scale	Original on-balance sheet gross exposure R million	Off-balance sheet exposures pre-CCF R million	Average CCF %	EAD post- CRM and post-CCF R million	Average PD %	Number of obligors
0.00 to < 0.15	82 696	_	_	68 676	0.01	4
0.15 to < 0.25	626	60	91.78	767	0.18	491
0.25 to < 0.50	189	_	71.43	196	0.34	8
0.50 to < 0.75	68	59	78.32	109	0.56	226
0.75 to < 2.50	338	129	30.51	413	0.99	119
2.50 to < 10.00	217	37	88.29	245	5.79	334
10.00 to < 100.00	_	_	_	_	_	_
100.00 (default)	_	_	_	_	_	-
Total	84 134	285	60.81	70 406	0.04	1 189

	Sovereign								
			As at 30 J	une 2016					
PD scale	Average LGD %	Average maturity Years	RWA R million	RWA density %	Expected loss R million	Provisions R million			
0.00 to < 0.15	29.00	1.67	2 651	3.86	2				
0.15 to < 0.25	21.22	0.22	238	31.03	-				
0.25 to < 0.50	25.06	4.70	97	49.49	-				
0.50 to < 0.75	22.21	1.72	53	48.62	-				
0.75 to < 2.50	22.74	2.19	259	62.71	1				
2.50 to < 10.00	40.06	1.10	319	130.20	5				
10.00 to < 100.00	-	-	-	-	-				
100.00 (default)	-	-	-	-	-				
Total	28.90	1.66	3 617	5.14	8	_			



	Banks and securities firms							
			As at 30 J	une 2016				
PD scale	Original on-balance sheet gross exposure R million	Off-balance sheet exposures pre-CCF R million	Average CCF %	EAD post- CRM and post-CCF R million	Average PD %	Number of obligors		
0.00 to < 0.15	63 998	10 815	62.97	54 706	0.12	103		
0.15 to < 0.25	3 723	1 497	99.05	3 269	0.19	32		
0.25 to < 0.50	11 583	2 343	52.00	7 603	0.34	35		
0.50 to < 0.75	5 073	229	41.00	5 353	0.56	23		
0.75 to < 2.50	15 430	144	47.00	708	0.94	50		
2.50 to < 10.00	28 390	2 130	43.15	5 697	3.12	85		
10.00 to < 100.00	27	244	40.00	105	27.74	29		
100.00 (default)	41	-	-	41	100.00	1		
Total	128 265	17 402	61.43	77 482	0.49	358		

	Banks and securities firms								
	As at 30 June 2016								
PD scale	Average LGD %	Average maturity Years	RWA R million	RWA density %	Expected loss R million	Provisions R million			
0.00 to < 0.15	26.59	1.14	5 300	9.69	10				
0.15 to < 0.25	37.62	1.77	787	24.07	2				
0.25 to < 0.50	36.84	0.59	2 826	37.17	10				
0.50 to < 0.75	42.67	1.09	2 818	52.64	8				
0.75 to < 2.50	44.64	1.40	705	99.58	3				
2.50 to < 10.00	41.45	1.24	3 982	69.90	43				
10.00 to < 100.00	45.00	1.21	201	191.43	11				
100.00 (default)	50.00	1.00	-	-	20				
Total	30.47	1.12	16 619	21.45	107	10			

			SME corpo	orate					
	As at 30 June 2016								
PD scale	Original on-balance sheet gross exposure R million	Off-balance sheet exposures pre-CCF R million	Average CCF %	EAD post- CRM and post-CCF R million	Average PD %	Number of obligors			
0.00 to < 0.15	6 354	164	61.29	6 442	0.08	52			
0.15 to < 0.25	1 963	377	6.07	2 151	0.41	794			
0.25 to < 0.50	7 349	3 405	61.17	8 809	0.51	8 632			
0.50 to < 0.75	7 986	4 016	58.16	9 779	0.66	6 176			
0.75 to < 2.50	31 007	10 512	65.85	36 386	1.53	21 816			
2.50 to < 10.00	11 452	2 598	67.09	12 634	5.21	11 962			
10.00 to < 100.00	1 880	570	59.90	2 175	25.59	1 276			
100.00 (default)	762	1	-	762	100.00	2 478			
Total	68 753	21 643	62.60	79 138	3.36	53 186			

	SME corporate  As at 30 June 2016								
PD scale	Average LGD %	Average maturity Years	RWA R million	RWA density %	Expected loss R million	Provisions R million			
0.00 to < 0.15	26.86	1.10	897	13.92	1				
0.15 to < 0.25	53.25	3.61	690	32.08	1				
0.25 to < 0.50	34.13	2.09	3 179	36.09	11				
0.50 to < 0.75	30.90	1.73	3 646	37.28	16				
0.75 to < 2.50	29.74	1.99	17 158	47.16	103				
2.50 to < 10.00	38.80	2.00	8 843	69.99	137				
10.00 to < 100.00	33.36	1.61	2 517	115.72	142				
100.00 (default)	46.92	2.17	212	27.82	543				
Total	32.49	1.93	37 142	46.93	954	1 058			



			SME I	retail					
		As at 30 June 2016							
PD scale	Original on-balance sheet gross exposure R million	Off-balance sheet exposures pre-CCF R million	Average CCF %	EAD post- CRM and post-CCF R million	Average PD %	Number of obligors			
0.00 to < 0.15	488	979	34.30	1 302	0.08	7 206			
0.15 to < 0.25	537	1 133	20.98	1 493	0.25	17 023			
0.25 to < 0.50	1 980	3 153	24.25	4 031	0.31	36 923			
0.50 to < 0.75	1 590	1 737	18.49	3 128	0.63	88 361			
0.75 to < 2.50	19 969	4 330	7.54	23 815	1.59	882 035			
2.50 to < 10.00	14 253	662	45.40	14 649	3.66	77 819			
10.00 to < 100.00	2 586	64	53.00	2 618	25.99	16 554			
100.00 (default)	1 688	1	7.50	1 663	100.00	10 779			
Total	43 091	12 059	19.24	52 699	6.25	1 136 700			

	SME retail As at 30 June 2016								
PD scale	Average LGD %	Average maturity Years	RWA R million	RWA density %	Expected loss R million	Provisions R million			
0.00 to < 0.15	38.81	0.01	116	8.91	-				
0.15 to < 0.25	40.91	-	300	20.09	1				
0.25 to < 0.50	33.62	0.05	775	19.23	4				
0.50 to < 0.75	47.40	0.03	1 283	41.02	9				
0.75 to < 2.50	42.93	0.96	10 649	44.72	139				
2.50 to < 10.00	42.32	1.84	7 049	48.12	177				
10.00 to < 100.00	42.62	1.55	2 090	79.83	266				
100.00 (default)	58.76	0.90	1 769	106.37	666				
Total	42.64	1.06	24 031	45.60	1 262	757			

			Retail me	ortgages					
		As at 30 June 2016							
PD scale	Original on-balance sheet gross exposure R million	Off-balance sheet exposures pre-CCF R million	Average CCF %	EAD post- CRM and post-CCF R million	Average PD %	Number of obligors			
0.00 to < 0.15	666	570	103.98	1 259	0.04	1 751			
0.15 to < 0.25	95	78	45.55	130	0.22	274			
0.25 to < 0.50	16 655	16 040	48.64	24 457	0.39	34 328			
0.50 to < 0.75	15 291	1 270	72.13	16 207	0.64	32 415			
0.75 to < 2.50	105 227	20 490	62.26	117 986	1.55	187 594			
2.50 to < 10.00	29 806	3 106	17.62	30 353	4.69	52 959			
10.00 to < 100.00	9 432	2 643	6.16	9 595	28.86	39 010			
100.00 (default)	3 913	-	_	3 913	100.00	11 068			
Total	181 085	44 197	51.62	203 900	4.97	359 399			

	Retail mortgages  As at 30 June 2016								
PD scale	Average LGD %	Average maturity Years	RWA R million	RWA density %	Expected loss R million	Provisions R million			
0.00 to < 0.15	11.59	-	16	1.27	-				
0.15 to < 0.25	10.18	-	6	4.62	-				
0.25 to < 0.50	10.83	-	1 828	7.47	10				
0.50 to < 0.75	12.62	-	2 007	12.38	13				
0.75 to < 2.50	13.72	-	28 422	24.09	254				
2.50 to < 10.00	15.69	-	15 784	52.00	224				
10.00 to < 100.00	15.11	-	7 770	80.98	425				
100.00 (default)	20.56	-	478	12.22	1 002				
Total	13.76	-	56 311	27.62	1 928	1 452			



			Retail re	volving		
			As at 30 J	une 2016		
PD scale	Original on-balance sheet gross exposure R million	Off-balance sheet exposures pre-CCF R million	Average CCF %	EAD post- CRM and post-CCF R million	Average PD %	Number of obligors
0.00 to < 0.15	755	5 954	39.68	3 117	0.08	130 888
0.15 to < 0.25	688	2 844	40.20	1 832	0.20	83 633
0.25 to < 0.50	1 825	5 112	39.38	3 839	0.36	164 308
0.50 to < 0.75	2 216	5 666	60.04	5 618	0.62	373 832
0.75 to < 2.50	10 936	10 863	58.76	17 320	1.50	1 047 722
2.50 to < 10.00	10 274	4 003	70.67	13 103	4.64	1 174 487
10.00 to < 100.00	3 365	422	85.35	3 725	28.26	780 646
100.00 (default)	967	-	_	967	100.00	935 100
Total	31 026	34 864	53.04	49 521	5.94	4 690 616

	Retail revolving*  As at 30 June 2016								
PD scale	Average LGD %	Average maturity Years	RWA R million	RWA density %	Expected loss R million	Provisions R million			
0.00 to < 0.15	65.61	-	105	3.37	2				
0.15 to < 0.25	65.69	-	137	7.48	2				
0.25 to < 0.50	65.80	-	460	11.98	9				
0.50 to < 0.75	66.59	-	1 047	18.64	23				
0.75 to < 2.50	66.30	-	6 250	36.09	172				
2.50 to < 10.00	66.18	-	10 341	78.92	402				
10.00 to < 100.00	66.63	-	6 349	170.44	703				
100.00 (default)	66.63	_	20	2.07	705				
Total	66.23	-	24 709	49.90	2 018	1 565			

<sup>\*</sup> Average maturity is not applied for the retail revolving RWA calculation.

		Other retail							
		As at 30 June 2016							
PD scale	Original on-balance sheet gross exposure R million	Off-balance sheet exposures pre-CCF R million	Average CCF %	EAD post- CRM and post-CCF R million	Average PD %	Number of obligors			
0.00 to < 0.15	29	2	0.09	29	0.05	217			
0.15 to < 0.25	26	1	50.35	26	0.17	634			
0.25 to < 0.50	2 099	152	53.25	2 179	0.43	21 451			
0.50 to < 0.75	2 041	464	59.77	2 319	0.59	18 284			
0.75 to < 2.50	47 320	308	76.26	47 555	1.66	431 131			
2.50 to < 10.00	42 273	422	99.67	42 694	4.87	601 500			
10.00 to < 100.00	14 414	10	2 057.02	14 628	30.75	366 794			
100.00 (default)	6 203	-	_	6 203	100.00	114 251			
Total	114 405	1 359	89.77	115 633	11.76	1 554 262			

	Other retail  As at 30 June 2016								
PD scale	Average LGD %	Average maturity Years	RWA R million	RWA density %	Expected loss R million	Provisions R million			
0.00 to < 0.15	21.13	0.62	1	3.45	-				
0.15 to < 0.25	28.32	3.69	3	11.54	-				
0.25 to < 0.50	26.50	1.60	405	18.59	2				
0.50 to < 0.75	31.10	1.91	605	26.09	4				
0.75 to < 2.50	26.70	2.06	16 276	34.23	214				
2.50 to < 10.00	42.51	2.05	28 452	66.64	936				
10.00 to < 100.00	48.37	1.36	16 101	110.07	2 134				
100.00 (default)	48.34	1.88	9 725	156.78	2 325				
Total	36.52	1.95	71 568	61.89	5 615	4 812			



## Effect on RWA of credit derivatives used as credit risk mitigation techniques

The following table illustrates the effect of credit derivatives on the capital requirement calculation done under the AIRB approach. The group does not apply the Foundation internal rate-based (FIRB) approach, the rows related to this approach have been excluded from CR7. Pre-credit derivatives RWA (before taking credit derivatives' mitigation effect into account) has been selected to assess the impact of credit derivatives on RWA, irrespective of how the credit risk mitigation technique feeds into the RWA calculation.

#### CR7: AIRB - EFFECT ON RWA OF CREDIT DERIVATIVES USED AS CREDIT RISK MITIGATION TECHNIQUES\*

		As at 30 June 2016
R m	nillion	Pre-credit derivatives RWA
2.	Sovereign	3 617
4.	Banks and securities firms	16 619
6.	Corporate	95 362
8.	Specialised lending	20 928
	SME corporate	37 142
9.	Retail revolving	24 709
10.	. Retail mortgages	56 311
11.	. SME retail	24 031
12.	. Other retail	71 568
14.	. Equity	_
16.	. Purchased receivables	_
17.	. Total	350 287

<sup>\*</sup> No credit derivatives were applied as credit risk mitigation during the year. Foundation internal ratings based approach is not applied by the group.

## Back testing of PD per portfolio

The following table provides back testing data to validate the reliability of PD calculations. Comparison of the PD used in AIRB capital calculations with the effective default rates of bank obligors is done with a minimum five-year average annual default rate being used to allow for stable quantities to be compared.

CR9: AIRB - BACKTESTING OF PD PER PORTFOLIO

					Corporate			
				А	s at 30 June 20	16		
			Arithmetic	Number o	of obligors	Defaulte	d obligors	Average historical
PD scale	External rating equivalent	Weighted average PD %	average PD by obligors %	End of prior year	End of current year	During current year	New during current year	annual default rate %
0.00 to < 0.12	AAA, AA, A	0.11	0.50	20	15	_	-	-
0.12 to < 0.45	BBB	0.25	0.24	170	163	_	_	_
0.45 to < 1.08	BB+, BB	0.70	0.70	184	179	_	_	_
1.08 to < 1.80	BB-	1.29	1.54	85	87	_	_	_
1.80 to < 3.23	B+	2.37	2.42	97	103	_	_	_
3.23 to < 9.12	В	5.00	5.78	61	63	_	_	0.01
9.12 to < 18.23	B-	10.24	10.24	43	45	_	_	0.01
18.23 to < 99.99	Below B-	32.18	27.24	9	7	_	_	0.02
100 (default)	Defaulted	100.00	100.00	6	9	9	3	100.00
Total		2.79	2.86	675	671	9	3	_

				S	Specialised lendin	g	-	
				А	s at 30 June 20	16		
				Number o	of obligors	Defaulted obligors		Average
PD scale	External rating equivalent	Weighted average PD %	Arithmetic average PD by obligors %	End of prior year	End of current year	During current year	New during current year	historical annual default rate %
0.00 to < 0.12	AAA, AA, A	0.03	0.03	11	14	_	-	-
0.12 to < 0.45	BBB	0.30	0.32	1 021	1 036	-	_	-
0.45 to < 1.08	BB+, BB	0.78	0.90	40	32	_	_	-
1.08 to < 1.80	BB-	1.11	1.41	23	21	_	_	_
1.80 to < 3.23	B+	2.92	2.69	31	24	_	_	-
3.23 to < 9.12	В	4.72	5.64	19	22	_	_	0.01
9.12 to < 18.23	B-	10.24	10.24	4	5	_	_	_
18.23 to < 99.99	Below B-	_	-	1	_	_	_	-
100 (default)	Defaulted	100.00	100.00	41	36	74	33	100.00
Total		2.22	2.25	1 191	1 190	74	33	0.26



					Sovereign						
			As at 30 June 2016								
				Number o	of obligors	Defaulte	Average				
PD scale	External rating equivalent	Weighted average PD %	Arithmetic average PD by obligors %	End of prior year	End of current year	During current year	New during current year	historical annual default rate %			
0.00 to < 0.12	AAA, AA, A	0.01	0.15	7	4	_	-	-			
0.12 to < 0.45	BBB	0.23	0.18	27	28	_	_	_			
0.45 to < 1.08	BB+, BB	0.73	0.63	10	12	_	_	_			
1.08 to < 1.80	BB-	1.23	1.23	1	9	_	_	_			
1.80 to < 3.23	B+	2.57	2.53	5	12	_	_	_			
3.23 to < 9.12	В	5.64	6.59	25	21	_	_	_			
9.12 to < 18.23	B-	10.24	10.24	2	_	_	_	_			
18.23 to < 99.99	Below B-	_	_	1	_	_	_	-			
100 (default)	Defaulted	_	_	_	_	_	_	-			
Total		0.04	0.18	78	86	_	_	_			

				Banl	ks and securities	firms						
			As at 30 June 2016									
				Number	of obligors	Defaulted obligors		Average				
PD scale	External rating equivalent	Weighted average PD %	Arithmetic average PD by obligors %	End of prior	End of current year	During current year	New during current year	historical annual default rate %				
0.00 to < 0.12	AAA, AA, A	0.04	0.06	75	74	-	-	-				
0.12 to < 0.45	BBB	0.18	0.23	95	96	_	-	-				
0.45 to < 1.08	BB+, BB	0.58	0.68	32	43	_	_	_				
1.08 to < 1.80	BB-	1.23	1.23	29	30	_	_	_				
1.80 to < 3.23	B+	2.57	2.57	50	48	_	_	_				
3.23 to < 9.12	В	4.31	2.86	41	37	_	_	_				
9.12 to < 18.23	B-	10.24	10.24	21	18	_	_	-				
18.23 to < 99.99	Below B-	32.18	32.18	6	11	_	_	_				
100 (default)	Defaulted	100.00	100.00	_	1	1	1	100.00				
Total		0.80	0.81	349	358	1	1	0.1				

					SME corporate			
				А	s at 30 June 20	16		
			Arithmetic average PD by obligors %	Number (	of obligors	Defaulte	d obligors	Average
PD scale	External rating equivalent	Weighted average PD %		End of prior year	End of current year	During current year	New during current year	historical annual default rate %
0.00 to < 0.12	AAA, AA, A	0.08	0.06	37	34	_	_	-
0.12 to < 0.45	BBB	0.38	0.36	1 948	3 988	10	1	1.06
0.45 to < 1.08	BB+, BB	0.78	0.75	13 064	5 455	1	1	0.31
1.08 to < 1.80	BB-	1.38	1.35	9 918	3 735	55	17	0.74
1.80 to < 3.23	B+	2.35	2.31	6 501	5 483	17	10	0.64
3.23 to < 9.12	В	4.85	4.87	6 553	5 997	53	10	1.57
9.12 to < 18.23	B-	12.82	12.37	540	330	11	2	1.15
18.23 to < 99.99	Below B-	31.24	33.54	596	339	48	11	1.88
100 (default)	Defaulted	100.00	100.00	2 491	2 328	301	106	100.00
Total		3.11	3.12	41 648	27 689	496	158	1.55

					SME retail			
				А	s at 30 June 20	16		
			Arithmetic average PD by obligors %	Number (	of obligors	Defaulted obligors		Average
PD scale	External rating equivalent	Weighted average PD %		End of prior year	End of current year	During current year	New during current year	historical annual default rate %
0.00 to < 0.12	AAA, AA, A	0.08	0.08	6 416	7 027	1	1	0.13
0.12 to < 0.45	BBB	0.29	0.32	56 483	52 166	606	197	0.27
0.45 to < 1.08	BB+, BB	0.75	0.81	283 538	318 294	929	895	0.44
1.08 to < 1.80	BB-	1.36	1.32	236 201	239 569	2 048	2 005	1.56
1.80 to < 3.23	B+	2.44	2.28	346 103	450 222	4 575	4 321	2.63
3.23 to < 9.12	В	4.66	4.95	32 002	39 144	518	473	6.84
9.12 to < 18.23	B-	12.84	12.63	5 957	8 177	560	272	16.52
18.23 to < 99.99	Below B-	39.21	38.50	4 846	9 846	4 045	718	41.10
100 (default)	Defaulted	100.00	100.00	6 448	10 783	8 422	8 311	100.00
Total		6.47	6.39	977 994	1 135 228	21 704	17 193	6.76



					Retail mortgages	8		
				А	s at 30 June 20	16		
				Number o	of obligors	Defaulte	Average	
PD scale	External rating equivalent	Weighted average PD %	Arithmetic average PD by obligors %	End of prior year	End of current year	During current year	New during current year	historical annual default rate %
0.00 to < 0.12	AAA, AA, A	0.04	0.03	1 749	1 751	2	_	0.12
0.12 to < 0.45	BBB	0.37	0.36	23 382	24 038	4	-	0.09
0.45 to < 1.08	BB+, BB	0.76	0.75	72 287	76 050	23	1	0.19
1.08 to < 1.80	BB-	1.44	1.38	88 924	104 646	103	_	0.32
1.80 to < 3.23	B+	2.33	2.33	57 036	63 626	362	1	0.66
3.23 to < 9.12	В	5.26	5.04	31 859	38 343	566	5	1.68
9.12 to < 18.23	B-	14.60	12.12	27 496	28 477	658	3	5.86
18.23 to < 99.99	Below B-	41.43	42.38	10 610	11 400	2 124	19	26.29
100 (default)	Defaulted	100.00	100.00	10 942	11 068	5 439	73	100.00
Total		4.97	4.89	324 285	359 399	9 281	102	1.25

					Retail revolving						
0.00 to < 0.12 0.12 to < 0.45			As at 30 June 2016								
			Arithmetic average PD by obligors %	Number (	of obligors	Defaulted obligors		Average			
PD scale	External rating equivalent	Weighted average PD %		End of prior year	End of current year	During current year	New during current year	historical annual default rate %			
0.00 to < 0.12	AAA, AA, A	0.07	0.07	84 734	102 662	3	-	0.60			
0.12 to < 0.45	BBB	0.28	0.28	219 742	258 559	9	1	0.70			
0.45 to < 1.08	BB+, BB	0.73	0.73	588 971	644 102	439	4	0.86			
1.08 to < 1.80	BB-	1.44	1.43	435 411	477 975	857	1	1.34			
1.80 to < 3.23	В+	2.47	2.46	520 444	581 493	1 965	21	1.94			
3.23 to < 9.12	В	5.27	5.51	760 017	846 054	6 604	117	3.22			
9.12 to < 18.23	В-	12.17	12.81	323 069	396 007	6 850	289	5.86			
18.23 to < 99.99	Below B-	40.50	40.31	298 100	448 664	14 589	1 199	19.53			
100 (default)	Defaulted	100.00	100.00	880 244	935 100	106 975	9 984	100.00			
Total		5.94	6.00	4 110 732	4 690 616	138 291	11 616	2.48			

					Other retail			
0.00 to < 0.12 0.12 to < 0.45 0.45 to < 1.08				А	s at 30 June 20	16		
			Arithmetic average PD by obligors %	Number (	of obligors	Defaulte	d obligors	Average
PD scale	External rating equivalent	Weighted average PD %		End of prior year	End of current year	During current year	New during current year	historical annual default rate %
0.00 to < 0.12	AAA, AA, A	0.03	0.08	198	198	6	-	2.28
0.12 to < 0.45	BBB	0.42	0.40	17 674	17 808	70	12	0.36
0.45 to < 1.08	BB+, BB	0.86	0.85	78 046	80 867	341	55	0.71
1.08 to < 1.80	BB-	1.51	1.49	173 269	187 378	748	164	1.11
1.80 to < 3.23	B+	2.28	2.32	312 056	276 304	1 672	476	1.97
3.23 to < 9.12	В	5.16	5.45	382 500	472 736	6 392	1 861	5.34
9.12 to < 18.23	B-	12.20	12.60	99 743	173 410	8 437	4 262	11.99
18.23 to < 99.99	Below B-	40.17	38.57	139 459	231 310	108 134	26 966	35.57
100 (default)	Defaulted	100.00	100.00	94 977	114 251	30 396	12 486	100.00
Total		11.75	11.73	1 297 922	1 554 262	156 196	46 282	10.61

## CREDIT RISK UNDER STANDARDISED APPROACH

For regulatory capital purposes, the group uses the AIRB approach for FirstRand Bank SA exposures and the standardised approach for the group's other legal entities and the bank's offshore branches. Due to the relatively smaller size of the subsidiaries and the scarcity of relevant data, the group plans to continue using the standardised approach for the foreseeable future for the majority of these portfolios.

For portfolios using the standardised approach, only S&P Global Rating's (S&P)'s ratings are used. As external ratings are not available for all jurisdictions and for certain parts of the portfolio, the group uses its internally developed mapping between FR grades and S&P's grades (refer to the table *mapping of FirstRand (FR) grades to rating agency scales* on page ••).

For cases where the bank invests in particular debt issues, the risk weight of claims are based on these assessments. If investment is not in a specific assessed issue then the following factors apply when determining the applicable assessments in accordance with the Basel prescriptions;

- the borrower's issuer assessment;
- the borrower's specific assessment on issued debt;
- ranking of the unassessed claim; and
- the entire amount of credit risk exposure the bank has.



The following table provides the credit risk exposures, credit risk mitigation effects and RWA for standardised approach exposures per asset class. RWA density is the ratio of RWA to exposures post-CCF and CRM.

## CR4: STANDARDISED APPROACH – CREDIT RISK EXPOSURE AND CREDIT RISK MITIGATION EFFECTS

				As at 30 .	June 2016		
		Exposures and	before CCF CRM		post-CCF CRM	RWA and F	RWA density
R n	nillion	On-balance sheet amount	Off-balance sheet amount	On-balance sheet amount	Off-balance sheet amount	RWA amount	RWA density %
	Asset classes						
1.	Sovereigns and their central banks	18 582	502	17 705	500	13 759	75.58
2.	Non-central government public sector entities	4 062	1 396	2 510	867	1 555	46.05
3.	Multilateral development banks	1	21	5	-	2	40.00
4.	Banks	13 366	756	13 358	726	2 594	18.42
5.	Securities firms	319	_	319	-	159	49.84
6.	Corporates	20 270	11 546	22 543	5 516	24 623	87.75
7.	Regulatory retail portfolios	23 885	9 848	26 418	4 314	21 333	69.42
8.	Secured by residential property	17 600	2 189	17 600	1 360	7 137	37.64
9.	Secured by commercial real estate	5 388	551	5 382	503	5 938	100.90
10.	Equity	_	_	_	_	-	_
11.	Past due advances	1 963	131	1 414	30	1 188	82.27
12.	Higher-risk categories	-	_	_	_	-	_
13.	Other assets	34 728	_	32 995	-	23 272	70.53
14.	Total	140 164	26 940	140 249	13 816	101 560	65.92

The following tables provide a breakdown of exposures rated through the standardised approach by asset class to show the effect of credit risk mitigation. Further breakdown by risk weight per asset class is shown where the risk weights used are those prescribed in the Regulations and will differ primarily by asset class as well as credit rating.

CR5: STANDARDISED APPROACH - EXPOSURES BY ASSET CLASSES AND RISK WEIGHTS

						As at 30 J	une 2016				
						Risk weight					Total
R n	nillion	0%	10%	20%	35%	50%	75%	100%	150%	Others	credit exposures amount (post- CCF and post- CRM)
	Asset classes										
1.	Sovereigns and their central banks	649	_	4 466	_	777	_	11 486	827	_	18 205
2.	Non-central government public sector entities	_	_	_	_	3 377	_	_	_	_	3 377
3.	Multilateral development banks	_	_	_	_	5	_	_	_	_	5
4.	Banks	7 889	-	2 219	_	2 772	_	1 204	_	<b>–</b>	14 084
5.	Securities firms	-	-	-	_	319	-	-	-	-	319
6.	Corporates	_	-	640	_	3 642	_	21 291	895	1 591	28 059
7.	Regulatory retail portfolios	_	-	_	_	_	29 397	1 335	_	_	30 732
8.	Secured by residential property	_	-	_	17 979	86	644	251	_	_	18 960
9.	Secured by commercial real estate	_	_	_	_	_	_	5 780	105	_	5 885
10.	Equity	_	-	_	_	_	_	-	_	_	_
11.	Past due advances	_	-	-	-	651	_	287	506	_	1 444
12.	Higher-risk categories	-	-	_	-	_	-	-	_	_	_
13.	Other assets	1 530	-	3 835	_	328	_	2 978	_	24 324	32 995
14.	Total	10 068	_	11 160	17 979	11 957	30 041	44 612	2 333	25 915	154 065

## Specialised lending exposures under slotting

The following table provides information relating to specialised lending exposures that are rated through the slotting approach. The exposures are split between regulatory asset classes.

## CR10: AIRB SPECIALISED LENDING

		Othe	er than high-	volatility comm	ercial real est	ate*			
R million			Off-		Е	xposure amou	nt		
Regulatory categories	Remaining maturity	On-balance sheet amount	balance sheet amount	Risk weight	Project finance	Income- producing real estate	Total	RWA	Expected losses
Strong	Less than 2.5 years	161	_	50%	_	161	161	271	2
	Equal to or more than 2.5 years	10 901	17	70%	10 164	755	10 919	8 751	46
Good	Less than 2.5 years	-	_	70%	_	_	_	-	_
	Equal to or more than 2.5 years	6 069	1 016	90%	7 085	_	7 085	6 758	57
Satisfactory		99	_	115%	_	100	100	121	2
Weak		8	_	250%	_	8	8	20	_
Total		17 238	1 033		17 249	1 024	18 273	15 921	107

<sup>\*</sup> There were no high-volatility commercial real estate exposures during the year. For specialised lending exposures other than high-volatility commercial real estate, there were no exposures to object finance or commodities asset classes during the year.



## Credit risk exposures considered for regulatory purposes

The following table provides a breakdown of the total credit risk exposure considered for regulatory purposes as provided in the *Link between financial statement and regulatory exposures* section in *LI2: Sources of difference between regulatory exposure amounts and carrying value in financial statements* table on page 30.

 $BREAKDOWN\ OF\ TOTAL\ CREDIT\ RISK\ EXPOSURE\ CONSIDERED\ FOR\ REGULATORY\ PURPOSES-PILLAR\ 3\ TABLE\ PAGE\ REFERENCE$ 

	As at 30	June 2016
R million	Exposure amount	Page number
Exposure post-credit conversion factors and credit risk mitigation		
AIRB – total FirstRand Bank (SA)	898 749	75
Standardised approach		90
<ul> <li>On-balance sheet amount</li> </ul>	140 249	
- Off-balance sheet amount	13 816	
Specialised lending exposures under slotting		91
- On-balance sheet amount	17 238	
- Off-balance sheet amount	1 033	
Total	1 071 085	

#### SELECTED RISK ANALYSES

The graphs below provide loan balance-to-value ratios and age distributions of residential mortgages.

Loan-to-value ratios for new business are an important consideration in the credit origination process. The group, however, places more emphasis on counterparty creditworthiness as opposed to relying only on the underlying security.

#### RESIDENTIAL MORTGAGES BALANCE-TO-ORIGINAL VALUE

41 35 14 16 17 19 23 24 5 6 5 6 2015 2016

#### RESIDENTIAL MORTGAGES BALANCE-TO-MARKET VALUE

52 61 15 13 15 12 14 9

## RESIDENTIAL MORTGAGES AGE DISTRIBUTION

The following graph shows arrears in the FNB HomeLoans portfolio. It includes arrears where more than one full payment is in arrears expressed as a percentage of total advances. The increase in the last quarter reflects the reclassification of distressed debt.

81 - 90

91 - 100

> 100

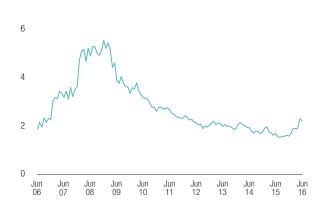
#### FNB HOMELOANS ARREARS

71 – 80

2016

% 8 ≤ 70

2015

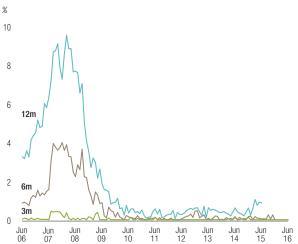




The following graphs provide the vintage analyses for FNB HomeLoans, WesBank retail VAF, FNB card, FNB loans and WesBank loans. Vintage graphs reflect the default experience three, six and twelve months after each origination date as well as the impact of origination strategies and the macroeconomic environment on portfolio performance. It does not take into account the impact of cures or subsequent recoveries. As such, vintage graphs are not indicative of the actual credit impairment charge of a product.

Vintages in home loans have increased marginally from previous record low levels. The increase is attributed to the rate hiking cycle with consumers under pressure as a result of the most recent series of 125 bps in interest rate increases over the 12-month performance period. Coupled with job losses and other challenges in the macroeconomic environment, this has caused a slight increase in the vintages.

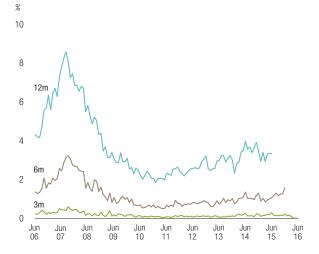
#### FNB HOMELOANS VINTAGE ANALYSIS



The WesBank retail VAF cumulative vintage analysis continues to show a noticeable improvement in the quality of business written since mid-2007. This is due to improved customer profiles and enhanced collection strategies.

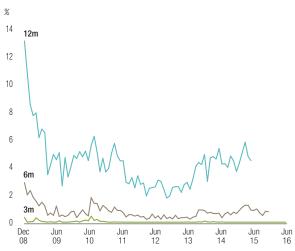
Since then, vintages are reflecting increases, this is expected given the challenging macroeconomic environment. Risk appetite has been adjusted, with a continued focus on originating a portfolio weighted towards quality low risk business. Vintage deterioration is closely monitored and credit parameters adjusted to ensure that performance remains in line with expectations when considering the credit cycle.

#### WESBANK RETAIL VAF VINTAGE ANALYSIS



FNB card default rates remain at low levels, even on a through-the-cycle basis. There was a minor increase in risk appetite from October 2013, which resulted in more business written in the lower-end consumer segment at slightly higher default rates. This was subsequently reviewed and adjusted downwards again. In the group's view, default rates have bottomed and moderate increases are expected from this level.

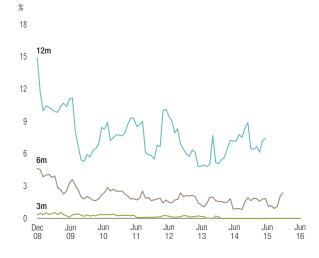
#### FNB CARD VINTAGE ANALYSIS



The default experience of the FNB and WesBank personal loans portfolios is within risk appetite. There is continued action to ensure these portfolios remain within risk appetite.

Defaults in FNB personal loans have trended upwards from historical low levels as a result of the macroeconomic conditions.

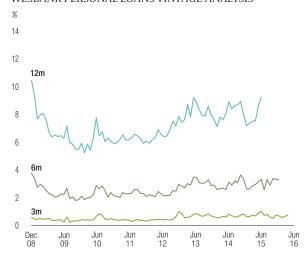
#### FNB PERSONAL LOANS VINTAGE ANALYSIS



As expected, WesBank personal loans vintages show a marginal deterioration from 2010 levels. This is expected given the challenging macroeconomic conditions and increased debt review applications.

To counter this, credit parameters are continuously adjusted to ensure performance is in line with expectations. Recent adjustments to credit appetite are proving effective and have assisted in countering macroeconomic conditions.

## WESBANK PERSONAL LOANS VINTAGE ANALYSIS





## **COUNTERPARTY CREDIT RISK**

#### INTRODUCTION AND OBJECTIVES

Counterparty credit risk is the risk of a counterparty to a contract, transaction or agreement defaulting prior to the final settlement of the transaction's cash flows.

Counterparty credit risk measures a counterparty's ability to satisfy its obligations under a contract that has positive economic value to the group at any point during the life of the contract. It differs from normal credit risk in that the economic value of the transaction is uncertain and dependent on market factors that are typically not under the control of the group or the client.

Counterparty credit risk is a risk taken mainly in the group's trading and securities financing businesses. The objective of counterparty credit risk management is to ensure that this risk is appropriately measured, analysed and reported on, and is only taken within specified limits in line with the group's risk appetite framework as mandated by the board.

#### Year under review and focus areas

Year under review		isk manage	ment focus areas
Focused on integrated assessm market risks of complex counter	nent of credit, legal, liquidity and erparty derivative portfolios.		the group's internal counterparty credit risk exposure nent methodology.
Performed impact assessment capital regulations on derivative	of upcoming liquidity, margin and eportfolios.		ent the standardised approach counterparty credit risk e at default measure by 1 January 2017.
		group's	for the implementation of mandatory clearing for the international counterparties under the European Market cture regulation.
			for the implementation Basel margin requirements for ential cleared derivatives.
		Refine in	nternal derivative credit portfolio reporting.
		Build ec exposure	onomic capital capability for counterparty credit risk e.

#### ORGANISATIONAL STRUCTURE AND GOVERNANCE

RMB's credit department is responsible for the overall management of counterparty credit risk. It is supported by RMB's derivative counterparty risk department which is responsible for ensuring that market and credit risk methodologies are consistently applied in the quantification of risk.

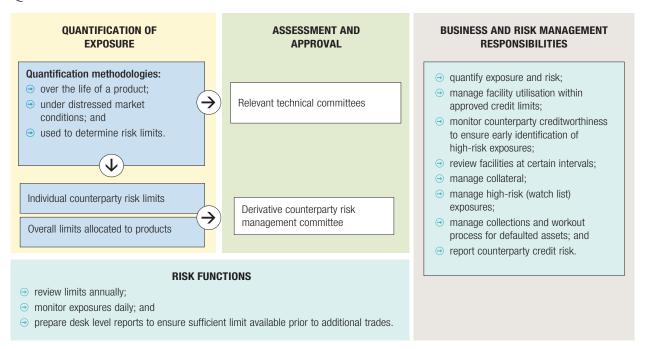
Counterparty credit risk is managed on the basis of the principles, approaches, policies and processes set out in the credit risk management framework for wholesale credit exposures. In this respect, counterparty credit risk governance aligns closely with the group's credit risk governance framework, with mandates and responsibilities cascading from the board through the RCC committee to the respective credit committees and subcommittees, as well as deployed and central risk management functions. Refer to the *risk governance* section and organisational structure and governance in the *credit risk* section for more details.

The derivative counterparty risk committee supports the credit risk management committee and its subcommittees with analysis and quantification of counterparty credit risk for traded product exposures.

#### ASSESSMENT AND MANAGEMENT

Measurement of counterparty credit risk aligns closely with credit risk measurement practices and is focused on establishing appropriate limits at a counterparty level and ongoing portfolio risk management. The quantification of risk exposure is described in the following diagram.

#### QUANTIFICATION OF COUNTERPARTY CREDIT RISK EXPOSURE



The expected tail loss method is applied internally to estimate counterparty credit risk exposure at counterparty and/or portfolio level. These exposures are monitored daily against limits. Excesses and covenant breaches are managed in accordance with the excess approval and escalation mandates.

#### Counterparty credit risk mitigation

Where appropriate, various instruments are used to mitigate the potential exposure to certain counterparties. These include financial or other collateral in line with common credit risk practices, Collateral, in the form of cash and/or cash equivalents, is the primary credit risk mitigant employed in counterparty credit risk. Collateral arises from margin arrangements which are stipulated in netting agreements and is also a function of providing market access to clients across certain business lines. The liquid nature of the collateral taken makes it effective as a mitigant in that their valuations, where applicable, are easily observable in the market and as lower regulatory haircuts apply. In addition, the group has set up a function to clear OTC derivatives centrally as part of risk mitigation.

The group uses ISDA and international securities market association agreements for the purpose of netting derivative transactions and repurchase transactions, respectively. These master agreements as well as associated credit support annexes (CSA), set out internationally accepted valuation and default covenants, which are evaluated and applied daily, including daily margin calls based on the approved CSA thresholds.

The effectiveness of the hedges and mitigants in place are monitored by a combination of counterparty risk limits and market risk limits. The setting of these limits is defined in accordance with the wholesale credit risk framework and the market risk limit framework. Global Markets' counterparty credit risk team is the custodian of policies that set collateral requirements for counterparties and portfolios. The business units are responsible for executing these policies and the RMB business resource management desk is responsible for the overall management of funding costs/benefits of the collateral. Client and portfolio exposures, concentrations and effectiveness of collateral and hedges are monitored on an ongoing basis via the relevant derivative risk and Global Market credit risk committees in RMB.

#### Wrong-way risk exposure

The methods applied in managing counterparty credit limits, exposures and collateral creates visibility on portfolio concentrations and exposures, which may be a source of wrong-way risk. These areas are monitored and managed within the relevant exposure mandates.

## Credit valuation adjustment (CVA)

CVA refers to the fair value adjustment to reflect counterparty credit risk in the valuation of derivative contracts. In essence, it is the mark-to-market adjustment required to account for credit quality deterioration experienced by a derivative counterparty. Under Basel III regulations, banks are required to hold capital for CVA risk. South African banks have in the past been exempt from holding capital for CVA risk as there was no suitably scaled rand derivative OTC clearing house. This CVA capital exemption has, however, lapsed from 1 April 2015, and has led to an increase in counterparty credit risk RWA.



# Collateral to be provided in the event of a credit rating downgrade

In rare instances, FirstRand has signed ISDA agreements where both parties would be required to post additional collateral in the event of a credit rating downgrade. The additional collateral to be provided by the group in the event of a credit rating downgrade is not material and would not adversely impact its financial position. The group is phasing out ISDA agreements with these provisions. The number of trades with counterparties with these types of agreements (and the associated risk) is also immaterial.

When assessing the portfolio in aggregate, the collateral that the group would need to provide in the event of a rating downgrade is subject to many factors, including market moves in the underlying traded instruments and netting of existing positions.

Whilst these variables are not quantifiable, the following table, in addition to showing the effect of counterparty credit risk mitigation, provides a guide to the order of magnitude of the netted portfolio size and collateral placed with the group. In aggregate, all positive mark-to-market values shown would need to reverse before the group would be a net provider of collateral.

#### **COUNTERPARTY CREDIT EXPOSURE**

The following table provides an overview of the counterparty credit risk arising from the group's derivative and structured finance transactions. The standardised approach for measuring counterparty credit risk (SA-CCR) will be applicable to the group from 1 January 2017. The information provided in row 1 (SA-CCR), therefore correspond to the requirements of the current exposure method. The group calculates exposures under both the standardised and current exposure method. Exposure at default (EAD) under the standardised method is quantified by scaling either the current credit exposure less collateral or the net potential future exposure by a factor of 1.4.

The comprehensive approach for credit risk mitigation is used to calculate the exposure for collateralised transactions other than collateralised OTC derivative transactions that are subject to CEM. This approach is typically applied to the securities financing and repo type of transactions.

The table below provides an explanation of the approaches used in the CCR1: Analysis of counterparty credit risk table on the next page.

Replacement cost	The replacement cost for trades that are not subject to margining requirements is the loss that would occur if a counterparty were to default and be closed out of its transactions immediately. For margined trades, the replacement cost is the loss that would occur if a counterparty were to default at present or at a future date, assuming that the close-out and replacement of transactions occur instantaneously. Under the current exposure method, the current replacement cost is determined by marking contracts to market, thus capturing the current exposure without any need for estimation.
Potential future exposure	The potential increase in the exposure between the present and the end of the margin period of risk. An add-on factor is applied to the replacement cost to determine the potential future exposure over the remaining life of the contract.
Effective expected positive exposure (EEPE)	The weighted average of the effective expected exposure over the first year, or, if all the contracts in the netting set mature before one year, over the time period of the longest-maturity contract in the netting set, where the weights represent the proportion of an individual expected exposure over the entire time interval.
EAD post credit risk mitigation (CRM)	Refers to the amount relevant to the calculated capital requirement over applying credit risk mitigation techniques, credit valuation adjustments and specific wrong-way adjustments.

The change in exposure numbers year-on-year is attributable to a number of factors. These include change in market prices, new exposures, changes in collateral, expired trades and hedges, counterparty rating mitigation, etc. With the introduction of the new regulatory approach for counterparty credit risk (SA-CCR), it is also expected that exposures will increase compared to previous years.

## CCR1: ANALYSIS OF COUNTERPARTY CREDIT RISK BY APPROACH FOR FIRSTRAND BANK (SA)

				As at 30 c	June 2016		
R n	nillion	Replacement cost	Potential future exposure	EEPE	Alpha used for computing regulatory EAD	EAD post CRM	RWA
1.	SA-CCR (for derivatives)*	7 579	12 752	-	1.4	28 463	16 330
4.	Comprehensive approach for credit risk mitigation for security financing transactions**	_	_	_	_	2 772	2 484
5.	VaR for security financing transactions#	_	_	_	_	_	_
6.	Total	7 579	12 752	_	_	31 235	18 814

<sup>\*</sup> EEPE is not calculated under the SA-CCR (for derivatives).

<sup>#</sup> Replacement cost, potential future exposure, alpha used for computing regulatory EAD, EAD post-CRM and RWA are not inputs into the VaR model calculation for security financing transactions.

			As at 30 J	lune 2015		
R million	Replacement cost	Potential future exposure	EEPE	Alpha used for computing regulatory EAD	EAD post CRM	RWA
1. SA-CCR (for derivatives)*	6 239	13 067	_	1.4	27 028	12 967
Comprehensive approach for credit risk mitigation for security financing transactions**	_	_	_	_	2 556	2 117
5. VaR for security financing transactions#	_	_	_	_	_	-
6. Total	6 239	13 067	_	_	29 584	15 084

<sup>\*</sup> EEPE is not calculated under the SA-CCR (for derivatives).

The internal model method (for derivatives and securities financing transactions) and simple approach for credit risk mitigation are not applicable to the group, rows 2 and 3 are excluded from CCR1.

<sup>\*\*</sup> Replacement cost, potential future exposure, EEPE and alpha used for computing regulatory EAD is not calculated under the comprehensive approach for credit mitigation for security financing transactions.

<sup>\*\*</sup> Replacement cost, potential future exposure, EEPE and alpha used for computing regulatory EAD is not calculated under the comprehensive approach for credit mitigation for security financing transactions.

<sup>#</sup> Replacement cost, potential future exposure, alpha used for computing regulatory EAD, EAD post-CRM and RWA are not inputs into the VaR model calculation for security financing transactions.



The following table provides the exposure at default post credit risk mitigation and risk weighted asset amounts for portfolios subject to the standardised CVA capital charge. The group does not apply the advanced approach for CVA charge, rows 1 and 2 are excluded from CCR2.

## CCR2: CVA CAPITAL CHARGE

	As at 30 c	lune 2016	As at 30 June 2015	
R million	EAD post CRM RWA		EAD post CRM	RWA
3. All portfolios subject to the standardised CVA capital charge	31 235	7 247	24 328	7 010
4. Total subject to the CVA capital charge	31 235	7 247	24 328	7 010

#### CCR3: STANDARDISED APPROACH - EXPOSURES BY REGULATORY PORTFOLIO AND RISK WEIGHTS\*

			As at 30 June 2016							
		Risk weight**								
R million	0%	Total credit 0% 20% 50% 100% exposure								
Asset classes#										
Sovereigns	_	446	_	292	738					
Non-central government public sector entities	_	_	139	_	139					
Banks	2 348	63	304	7	2 722					
Securities firms	_   _   47   7   54									
Corporates portfolios	600 600									
Total	2 348	508	489	906	4 252					

<sup>\*</sup> These exposures are for the subsidiaries in the rest of Africa and foreign branches.

 $<sup>^{\</sup>star\star}$  There were no exposures in the 10%, 35%, 75% and 150% risk weight buckets at 30 June 2016.

<sup>#</sup> There were no exposures in the multilateral development banks, regulatory retail and other asset classes at 30 June 2016.

The following tables provide the counterparty credit risk exposures per portfolio and PD range where the AIRB approach is used for credit risk. It also includes the main parameters used in the calculation of RWA. These exposures are for FirstRand Bank (SA), where AIRB for credit risk is applied.

The information provided in the different columns are explained as follows:

- exposure at default (EAD) post credit risk mitigation, gross of accounting provisions;
- average PD is the obligor-grade PD weighted by EAD;
- average LED is the obligor-grade LED weighted by EAD;
- average maturity in years is obligor maturity weighted by EAD; and
- RWA density is total risk weighted asset to EAD post CRM.

#### CCR4: AIRB - COUNTERPARTY CREDIT RISK EXPOSURES BY PORTFOLIO AND PD RANGE

		Total FirstRand Bank (SA)										
		As at 30 June 2016										
PD scale	EAD post CRM R million	Average PD %	Number of obligators	Average LGD %	Average maturity Years	RWA R million	RWA density %					
0.00 to <0.15	5 843	0.07	53	24.18	1.49	923	15.80					
0.15 to <0.25	9 047	0.16	159	21.57	1.59	1 571	17.37					
0.25 to <0.50	2 134	0.35	73	28.24	0.76	720	33.75					
0.50 to <0.75	390	0.56	35	49.37	3.42	297	76.01					
0.75 to <2.50	3 746	1.09	193	33.12	2.18	3 009	80.33					
2.50 to <10.00	1 741	2.96	212	46.48	1.04	2 410	138.42					
10.00 to <100.00	44	22.71	37	25.34	1.59	63	141.94					
Total	22 945		762			8 993	39.19					

		Total FirstRand Bank (SA)										
		As at 30 June 2015										
PD scale	EAD post CRM R million	Average PD %	Number of obligators	Average LGD %	Average maturity Years	RWA R million	RWA density %					
0.00 to <0.15	3 385	0.07	51	27.95	1.39	509	15.02					
0.15 to <0.25	10 792	0.16	142	24.16	2.05	2 073	19.21					
0.25 to <0.50	3 857	0.35	68	12.37	1.19	566	14.67					
0.50 to <0.75	197	0.56	44	44.55	0.99	119	60.46					
0.75 to <2.50	1 505	1.14	147	29.31	1.84	1 031	68.52					
2.50 to <10.00	1 792	3.08	214	26.14	1.42	1 441	80.43					
10.00 to <100.00	148	17.52	32	23.34	3.48	191	129.06					
100.00 (default)	150	100.00	3	5.00	2.39	_						
Total	21 826		701			5 930	27.17					



# CCR4: AIRB – COUNTERPARTY CREDIT RISK EXPOSURES BY PORTFOLIO AND PD RANGE (CONTINUED)

		Banks									
		As at 30 June 2016									
PD scale	EAD post CRM R million	Average PD %	Number of obligators	Average LGD %	Average maturity Years	RWA R million	RWA density				
0.00 to <0.15	5 154	0.07	42	24.24	1.55	849	16.48				
0.15 to <0.25	706	0.15	10	22.45	1.37	135	19.08				
0.25 to <0.50	94	0.35	10	33.05	0.33	41	43.31				
0.50 to <0.75	5	0.56	2	39.73	0.08	3	51.87				
0.75 to <2.50	195	1.21	3	40.08	0.09	183	93.72				
2.50 to <10.00	49	2.94	8	66.68	0.89	101	203.56				
10.00 to <100.00	22	32.18	12	29.70	0.62	37	165.17				
100.00 (default)	_	_	_	_	-	-	_				
Sub total	6 225		87			1 348	593.19				

		Banks									
			As	at 30 June 2015	)						
PD scale	EAD post CRM R million	Average PD %	Number of obligators	Average LGD %	Average maturity Years	RWA R million	RWA density %				
0.00 to <0.15	3 073	0.07	36	28.54	1.44	475	15.46				
0.15 to <0.25	839	0.15	9	18.98	1.53	145	17.32				
0.25 to <0.50	122	0.35	11	30.57	0.32	48	39.71				
0.75 to <2.50	27	1.22	4	35.70	0.50	23	85.15				
2.50 to <10.00	37	3.66	9	46.75	0.37	48	130.29				
10.00 to <100.00	5	32.14	10	19.98	1.40	5	113.86				
100.00 (default)	150	100.00	1	5.00	2.39	-	_				
Sub total	4 253		80			744	17.51				

# CCR4: AIRB – COUNTERPARTY CREDIT RISK EXPOSURES PORTFOLIO AND PD RANGE (CONTINUED)

		Securities									
	As at 30 June 2016										
PD scale	EAD post CRM R million	Average PD %	Number of obligators	Average LGD %	Average maturity Years	RWA R million	RWA density %				
0.00 to <0.15	382	0.06	2	27.79	1.36	48	12.60				
0.15 to <0.25	3 970	0.16	49	26.13	0.97	695	17.51				
0.25 to <0.50	557	0.35	13	5.92	0.65	39	6.99				
0.50 to <0.75	3	0.56	2	21.51	3.52	2	55.27				
0.75 to <2.50	2 064	1.18	72	32.98	1.74	1 727	83.65				
2.50 to <10.00	1 174	2.62	99	53.67	1.04	1 906	162.44				
10.00 to <100.00	19	10.24	10	17.29	2.98	19	98.87				
100.00 (default)	_	_	<b>-</b>	-	-	-	_				
Sub total	8 169		247			4 436	54.30				

		Securities									
		As at 30 June 2015									
PD scale	EAD post CRM R million	Average PD %	Number of obligators	Average LGD %	Average maturity Years	RWA R million	RWA density %				
0.00 to <0.15	129	0.06	2	30.23	1.45	18	14.17				
0.15 to <0.25	4 954	0.16	36	34.94	1.14	1 129	22.79				
0.25 to <0.50	1 509	0.35	10	5.51	1.05	91	6.05				
0.50 to <0.75	5	0.56	1	20.00	4.72	3	61.17				
0.75 to <2.50	1 115	1.18	43	28.20	1.70	764	68.51				
2.50 to <10.00	1 474	2.98	110	25.19	1.42	1 164	79.00				
10.00 to <100.00	99	10.24	14	20.43	1.58	101	102.31				
100.00 (default)	_	_	-	-	-	-	_				
Sub total	9 285		216			3 270	35.23				



# CCR4: AIRB – COUNTERPARTY CREDIT RISK EXPOSURES PORTFOLIO AND PD RANGE (CONTINUED)

		Corporate										
		As at 30 June 2016										
PD scale	EAD post CRM R million	Average PD %	Number of obligators	Average LGD %	Average maturity Years	RWA R million	RWA density					
0.00 to <0.15	306	0.08	8	18.78	0.70	26	8.37					
0.15 to <0.25	4 208	0.16	90	16.86	2.15	680	16.16					
0.25 to <0.50	928	0.35	41	39.95	0.36	377	40.59					
0.50 to <0.75	382	0.56	29	49.77	3.46	292	76.59					
0.75 to <2.50	696	1.10	108	35.45	0.80	463	66.47					
2.50 to <10.00	496	3.63	98	27.95	0.93	373	75.26					
10.00 to <100.00	3	30.23	15	42.70	0.08	7	235.12					
100.00 (default)	_	_	-	- 1	-	<del>-</del>	_					
Sub total	7 019		389			2 218	31.60					

PD scale		Corporate As at 30 June 2015									
	EAD post CRM R million	Average PD %	Number of obligators	Average LGD %	Average maturity Years	RWA R million	RWA density %				
0.00 to <0.15	179	0.08	10	16.39	0.48	15	8.15				
0.15 to <0.25	4 377	0.16	89	12.34	2.66	529	12.09				
0.25 to <0.50	1 966	0.35	39	16.16	1.03	363	18.45				
0.50 to <0.75	176	0.56	41	47.56	0.80	109	62.28				
0.75 to <2.50	283	1.06	90	35.66	2.11	208	73.35				
2.50 to <10.00	271	3.50	89	28.20	1.44	215	79.14				
10.00 to <100.00	45	31.92	8	30.05	7.86	85	189.17				
100.00 (default)	_	100.00	2	- I	- I	-					
Sub total	7 297		368			1 524	20.87				

# CCR4: AIRB – COUNTERPARTY CREDIT RISK EXPOSURES PORTFOLIO AND PD RANGE (CONTINUED)

	Public sector and local government									
	As at 30 June 2016									
PD scale	EAD post CRM R million	Average PD %	Number of obligators	Average LGD %	Average maturity Years	RWA R million	RWA density			
0.00 to <0.15	-	-	-	-	-	_	-			
0.15 to <0.25	141	0.17	6	29.49	3.51	56	39.52			
0.25 to <0.50	273	_	1	_	-	205	_			
0.50 to <0.75	1	_	1	-	-	_	_			
0.75 to <2.50	747	_	1	_	_	613	_			
2.50 to <10.00	_	_	1	_	_	_	_			
10.00 to <100.00	_	_	_	_	_	_	_			
100.00 (default)	_	_	_	_	_	_	_			
Sub total	1 162		10			874	75.25			

		Public sector and local government									
	As at 30 June 2015										
PD scale	EAD post CRM R million	Average PD %	Number of obligators	Average LGD %	Average maturity Years	RWA R million	RWA density %				
0.00 to <0.15	3	_	1	20.00	5.80	1	27.86				
0.15 to <0.25	545	_	4	30.22	5.88	253	46.35				
0.25 to <0.50	_	_	_	_	_	_	_				
0.50 to <0.75	1	0.56	1	45.00	0.05	_	58.75				
0.75 to <2.50	_	_	_	-	-	_	_				
2.50 to <10.00	_	_	_	-	-	_	_				
10.00 to <100.00	_	_	_			_	_				
100.00 (default)	_	_	_	_	_	_	_				
Sub total	549		6			254	46.26				



# CCR4: AIRB – COUNTERPARTY CREDIT RISK EXPOSURES PORTFOLIO AND PD RANGE (CONTINUED)

		Sovereign									
		As at 30 June 2016									
PD scale	EAD post CRM R million	Average PD %	Number of obligators	Average LGD %	Average maturity Years	RWA R million	RWA density %				
0.00 to <0.15	0.05	0.03	1	45.00	0.01	_	8.03				
0.15 to <0.25	0.15	0.19	2	42.92	2.09	_	53.54				
0.25 to <0.50	-	_	_	_	_	_	_				
0.50 to <0.75	<del>-</del>	_	_	_	_	_	_				
0.75 to <2.50	_	_	_	_	_	-	_				
2.50 to <10.00	_	_	_	_	_	-	_				
10.00 to <100.00	_	_	_	_	_	_	_				
100.00 (default)	-	_	_	_	_	_	_				
Sub total	0.20		3			_	42.55				

		Sovereign										
		As at 30 June 2015										
PD scale	EAD post CRM R million	Average PD %	Number of obligators	Average LGD %	Average maturity Years	RWA R million	RWA density %					
0.00 to <0.15	2.39	0.03	2	28.29	0.14	_	5.05					
0.15 to <0.25	1.57	0.19	3	45.00	1.39	1	36.57					
0.25 to <0.50	_	_	_	_	_	_	_					
0.50 to <0.75	_	_	_	_	_	_	_					
0.75 to <2.50	_	_	_	_	-	_	_					
2.50 to <10.00	_	_	_	_	-	_	_					
10.00 to <100.00	_	_	_	_	_	_	_					
100.00 (default)	_	_	_	_	_	_	_					
Sub total	3.95		5			1	17.53					

# CCR4: AIRB – COUNTERPARTY CREDIT RISK EXPOSURES PORTFOLIO AND PD RANGE (CONTINUED)

		Other									
		As at 30 June 2016									
PD scale	EAD post CRM R million	Average PD %	Number of obligators	Average LGD %	Average maturity Years	RWA R million	RWA density %				
0.15 to <0.25	22	0.19	2	19.05	3.67	5	24.03				
0.25 to <0.50	281	0.35	8	15.93	2.02	59	20.85				
0.50 to <0.75	1	0.56	1	15.00	1.83	-	23.63				
0.75 to <2.50	43	0.98	9	24.39	2.92	23	54.00				
2.50 to <10.00	23	5.68	6	34.99	4.07	30	134.15				
10.00 to <100.00	_	_	_	_	-	-	_				
100.00 (default)	_	_	_	_	-	-	_				
Sub total	370		26			117	31.82				

		Other									
		As at 30 June 2015									
PD scale	EAD post CRM R million	Average PD %	Number of obligators	Average LGD %	Average maturity Years	RWA R million	RWA density %				
0.15 to <0.25	75	0.19	1	15.00	4.51	16	21.76				
0.25 to <0.50	262	0.35	8	15.09	3.55	63	24.27				
0.50 to <0.75	16	0.56	1	20.00	1.83	7	40.76				
0.75 to <2.50	81	0.90	10	20.18	3.31	37	46.14				
2.50 to <10.00	10	4.81	6	36.12	4.34	14	142.91				
10.00 to <100.00	_	_	_	-	-	-	_				
100.00 (default)	_	_	_	-	-	-	_				
Sub total	444		26			137	31.10				



The following tables provide the composition of collateral for counterparty credit risk exposures per category for collateral used in derivative transactions, split between fair value of collateral received and posted collateral. "Segregated" refers to collateral which is held in a bankruptcy-remote manner and "unsegregated" refers to collateral not held in a bankruptcy-remote manner.

# CCR5: COMPOSITION OF COLLATERAL FOR COUNTERPARTY CREDIT RISK EXPOSURE PER COLLATERAL CATEGORY\*

			As at 30 c	June 2016			
			al used in transactions			Collateral used in security finance transactions	
	Fair va collateral		Fair va posted o	alue of collateral	Fair value of collateral	Fair value of posted	
R million	Segregated	Unsegregated	Segregated	Unsegregated	received	collateral	
Cash – domestic currency	11 020	6 339	_	2 277	-	_	
Cash – other currencies	-	2 846	_	_	_	_	
Domestic sovereign debt	-	_	_	190	277 691	273 047	
Other sovereign debt	-	_	_	_	79	79	
Government agency debt	-	_	_	255	12 545	12 821	
Corporate bonds	-	_	_	3 973	2 451	2 461	
Other collateral	-	_	_	10	_	-	
Total	11 020	9 185	_	6 705	292 767	288 408	

<sup>\*</sup> There was no collateral in the and equity securities category during the year.

			As at 30 J	lune 2015		
•		Collateral derivative tr			Collateral use finance tra	
	Fair va collateral		Fair va posted c		Fair value of collateral	Fair value of posted
R million	Segregated	Unsegregated	Segregated	Unsegregated	received	collateral
Cash – domestic currency	8 207	6 419	-	923	_	_
Cash – other currencies	_	1 810	_	_	_	_
Domestic sovereign debt	-	_	_	817	281 401	280 111
Other sovereign debt	-	_	_	_	60	60
Government agency debt	-	_	_	26	12 726	11 755
Corporate bonds	-	-	-	83	1 102	876
Other collateral	-	-	-	3 109	-	_
Total	8 207	8 229	-	4 958	295 289	292 802

<sup>\*</sup> There was no collateral in equity securities category during the year.

The group employs credit derivatives primarily for the purposes of protecting its own positions and for hedging its credit portfolio as indicated in the following tables.

# CCR6: CREDIT DERIVATIVES

	As at 30 June 2016		
R million	Protection bought	Protection sold	
Notionals*			
- Single-name credit default swaps	16 344	6 460	
Total notionals	16 344	6 460	
Fair values	99	(223)	
- Positive fair value (asset)	102	2	
Negative fair value (liability)	(3)	(225)	

	As at 30 J	lune 2015
R million	Protection bought	Protection sold
Notionals*		
- Single-name credit default swaps	5 461	13 624
Total notionals	5 461	13 624
Fair values	(39)	60
Positive fair value (asset)	992	481
Negative fair value (liability)	(1 031)	(421)

<sup>\*</sup> There were no credit derivatives in the index credit default swaps, total return swaps, credit options and other credit derivative categories in 2015 and 2016.



The group's exposure to central counterparties and related risk weighted assets is provided below.

#### CCR8: EXPOSURES TO CENTRAL COUNTERPARTIES

		As at 30 J	une 2016
R 1	nillion	EAD post-CRM	RWA
2.	Exposures for trade at qualifying central counterparties (excluding initial margin and default fund contributions); of which:	5 223	104
3.	- OTC derivatives	154	3
4.	- Exchange-traded derivatives	5 069	101
5.	Nettings sets where cross-product netting has been approved	-	_
6.	- Securities financing transactions	-	_
7.	Segregated initial margin	11 020	
8.	Non-segregated initial margin	-	_
9.	Pre-funded default fund contributions	-	1 188
10	Unfunded default fund contributions	_	_
1.	Total exposures to qualifying central counterparties*	16 243	1 292

<sup>\*</sup> There are no exposures to non-qualifying central counterparties (rows 11-20) for the year.

		As at 30 J	une 2015
R n	nillion	EAD post-CRM	RWA
2.	Exposures for trade at qualifying central counterparties (excluding initial margin and default fund contributions); of which:	5 256	105
3.	– OTC derivatives	120	2
4.	- Exchange-traded derivatives	5 136	103
5.	- Nettings sets where cross-product netting has been approved	-	-
6.	- Securities financing transactions	-	-
7.	Segregated initial margin	8 207	_
8.	Non-segregated initial margin	_	_
9.	Pre-funded default fund contributions	_	1 188
10.	Unfunded default fund contributions	-	_
1.	Total exposures to qualifying central counterparties*	13 463	1 293

<sup>\*</sup> There are no exposures to non-qualifying central counterparties (rows 11-20) for the year.

### Counterparty credit risk exposure breakdown

The following table provides a breakdown of the total counterparty credit risk exposure considered for regulatory purposes provided in the *Link* between financial statements and regulatory exposures section in the *LI2: Sources of differences between regulatory exposure amounts and carrying value in financial statements* table on page 30.

# $BREAKDOWN\ OF\ COUNTERPARTY\ CREDIT\ RISK\ EXPOSURE\ CONSIDERED\ FOR\ REGULATORY\ PURPOSES-PILLAR\ 3\ TABLE\ PAGE\ REFERENCE$

	As at 30 .	June 2016
R million	Exposure amount	Page reference
Standardised approach for derivatives		
– FirstRand Bank (SA)	7 579	100
- Subsidiaries in the rest of Africa and foreign branches	4 252	101
Comprehensive approach for credit risk for security financing transactions (EAD post-CRM)	2 772	100
Total	14 603	

# **SECURITISATION**

#### INTRODUCTION AND OBJECTIVES

Securitisation is the structured process whereby loans and other receivables are packaged, underwritten and sold in the form of asset-backed securities to capital market investors.

#### Objectives of securitisation activities

Asset securitisations enable the group to access funding markets at ratings higher than its own corporate credit rating, which generally provides access to broader funding sources at more favourable rates. The removal of the assets and supporting funding from the balance sheet enables the group to reduce some of the costs of on-balance sheet financing and manage potential asset-liability mismatches and credit concentrations.

The group uses securitisation as a tool to achieve one or more of the following objectives:

- improve the group's liquidity position through the diversification of funding sources;
- match the cash flow profile of assets and liabilities;
- reduce balance sheet credit risk exposure; and
- manage credit concentration risk.

#### Exposures intended to be securitised or resecuritised in the future

FirstRand uses securitisation primarily as a funding tool. The ability to securitise assets depends on the availability of assets to securitise, investor appetite for securitisation paper and comparison with alternative funding sources. All assets on the group's balance sheet are considered as possible exposures that could be securitised within market constraints. The group obtains SARB approval of the structure and limits imposed by the board on the size of assets that may be securitised.

#### Resecuritisation

A resecuritisation exposure is a structure where the risk associated with an underlying pool of exposures is tranched and at least one of the underlying exposures is a securitisation.

Resecuritisation results from portfolio management actions and the size of the exposure is dependent on future market factors. This exposure is reported as part of the investor reporting process. The group's asset-backed commercial paper conduit occasionally acquires securitisation paper, which is managed as part of the underlying portfolio. This represents a minimal portion of the total portfolio and is accounted for as a resecuritisation exposure for regulatory capital purposes.



# ORGANISATIONAL STRUCTURE AND GOVERNANCE

#### GROUP'S ROLE IN SECURITISATION AND CONDUIT STRUCTURES

Transaction	Originator	Sponsor	Servicer	Investor	Liquidity provider	Credit enhance- ment provider	Swap counter- party
Own securitisations							
Nitro 5	<b>✓</b>	✓	✓	✓			✓
Turbo Finance 3	<b>✓</b>	✓	✓	✓			
Turbo Finance 4	<b>✓</b>	✓	✓	✓			
Turbo Finance 5	<b>✓</b>	✓	✓	✓			
Turbo Finance 6	<b>✓</b>	✓	✓	✓			
MotoHouse	<b>✓</b>	✓	✓	✓			
Conduit structures							
iNdwa*		✓	✓		✓		✓
iVuzi*		✓	✓		✓	✓	✓
iNkotha**			✓				
iNguza**			✓				
Third party							
Homes Obligor Mortgage Enhanced Securities					✓		
Private Residential Mortgages 2					✓		
Superdrive Investments				✓			
Torque Securitisation					✓		
Velocity Finance				✓			✓

<sup>\*</sup> Conduits incorporated under regulations relating to securitisation scheme.

FirstRand Limited does not have any affiliated entities that it manages or advises nor does the group have affiliated entities that invest in securitisation exposures that the group has securitised.

Ultimate responsibility for determining risk limits and appetite for the group vests with the board. Independent oversight for monitoring is through the RCC committee, who, in turn, has delegated responsibility for securitisations to group ALCCO. ALCCO also maintains responsibility on behalf of the board for the allocation of sublimits and remedial action to be taken in the event of limit breaches. The FirstRand wholesale credit committee approves individual retained securitisation exposures per special purpose vehicle (SPV).

<sup>\*\*</sup> Conduits incorporated under regulations relating to commercial paper.

#### ASSESSMENT AND MANAGEMENT

#### Oversight and risk mitigation

The group's role in securitisation transactions (both for group-originated and group-sponsored transactions) as well as third-party securitisations, results in various financial and operational risks, including:

- compliance risk;
- credit risk;
- currency risk;
- interest rate risk;
- liquidity and funding risk;
- operational risk; and
- reputational risk.

For securitisations originated by the group, exposures are managed from a credit perspective by the originating business units as if the securitisation had never occurred. Resultant risks from retained exposures and the overall origination and maintenance of securitisation structures are covered as part of the day-to-day management of the various risk types. This includes risk mitigation and management actions depending on risk limits and appetite per risk area. Securitisation performance is monitored on an ongoing basis and reported to management and governance forums.

Some governance and management processes in place to monitor securitisation-related risks are outlined below:

- rigorous internal approval processes are in place for proposed securitisations and transactions are reviewed by ALCCO, the RCC committee and the board against approved board limits;
- changes to retained exposures (as result of ratings changes, reviews, note redemptions and credit losses) are reflected in the monthly BA 500 regulatory return; and
- transaction investor reports, alignment with SPV financial reporting and the impact of underlying asset performance are reflected on the quarterly BA 501 regulatory return.

The group does not employ credit risk mitigation techniques to hedge credit risk on retained securitisation tranches.

# Summary of accounting policies for securitisation activities

From an accounting perspective, traditional securitisations are treated as sales transactions. At inception, the assets are sold to a SPV at carrying value and no gains or losses are recognised. For synthetic securitisations, credit derivatives used in the transaction are recognised at fair value, with any fair value adjustments reported in profit or loss.

Securitisation entities are consolidated into FRIHL for financial reporting purposes. Any retained notes are accounted for as available-for-sale investment securities in the banking book. Liabilities as a result of securitisation vehicles are accounted for in line with group accounting policies for liabilities, provisions and contingent liabilities.



#### Year under review

Turbo Finance 3	Turbo Finance 4	Turbo Finance 5
With the remaining underlying assets representing less than 10% of the assets sold at inception, the clean-up call option was exercised. The legal process to repurchase the outstanding assets was completed in August 2015, with all notes fully redeemed on 21 September 2015.  MotoNovo repurchased approximately GBP30 million of assets from Turbo 3 to bring the transaction to a close. All note holders were fully redeemed with no losses materialising on any of the issued tranches.	In September 2015, Fitch upgraded the class B and C notes of Turbo Finance 4 to AA- and BBB+ respectively. The rating action reflected the transaction's solid performance to date. Fitch indicated that it expected the performance of UK consumer ABS transactions to remain stable based on the agency's expectations of future performance and a steady economic outlook.	Fitch also affirmed the ratings of the Turbo Finance 5 rated notes in September 2015. Ongoing performance continues to track Fitch's expectations with cumulative defaults and losses remaining low.

#### **MotoNovo Finance Warehouse Structure (MotoHouse)**

MotoHouse was concluded with Wells Fargo in July 2015. The warehouse (incorporating a 36-month revolving period) has allowed FirstRand Bank London branch to raise funding against the MotoNovo assets at attractive levels through the issuance of senior and subordinated notes. Wells Fargo has provided a GBP280 million senior loan facility, with FirstRand International Guernsey subscribing for GBP14 million and GBP5 million under the class B and C notes respectively (listed notes on the Channel Island Stock Exchange).

#### Turbo Finance 6

FirstRand Bank London branch and MotoNovo structured a sixth securitisation under the Turbo Finance programme. As with Turbo Finance 4 and 5, Turbo Finance 6 was structured to include a 12-month revolving period. Minor improvements on the latest transaction included improved subordination levels, improved ratings on the class B tranche and efficient use of excess spread to reduce the size of the class D tranche and consequently the related capital requirement.

Tranche	Final ratings (S&P/Moody's)	Tranche size (GBP)	Spread
Class A	AAA/Aaa	352.8	1m Libor + 0.75%
Class B	AA-/Aa2	29.4	1m Libor + 1.40%
Class C	BBB/Ba1	9.83	5.25%
Class D	Unrated	2.74	15%
Total		394.77	

Transaction timing was ideal as competing transactions began pricing wider in light of the increasing market softness and investor fears around Britain's withdrawal from the European Union.

# External credit assessment institutions (ECAIs)

The group employs eligible ratings issued by nominated ECAIs to riskweight its securitisation and resecuritisation exposure where the use is permitted. The ECAIs nominated by the group for this purpose are Moody's Investor Services (Moody's), S&P and Fitch. The following tables show the traditional securitisations currently in issue and the rating distribution of any exposures retained. Global scale ratings are used for internal risk management purposes and regulatory capital reporting.

#### TRADITIONAL SECURITISATION TRANSACTIONS\*

Traditional securitisations	Asset type	Rating agency	Year initiated	Expected close
Nitro 5	Retail: Auto Ioans	S&P	2015	2018
Turbo Finance 3	Retail: Auto loans	Moody's and Fitch	2012	2015
Turbo Finance 4	Retail: Auto loans	Moody's and Fitch	2013	2017
Turbo Finance 5	Retail: Auto loans	Moody's and Fitch	2014	2018
Turbo Finance 6	Retail: Auto loans	S&P and Moody's	2016	2020
MotoHouse	Retail: Auto loans	n/a	2015	2018

Ass	Assets	Assets out	standing**	Notes ou	tstanding	Retained exposure		
R million	securitised	2016	2015	2016	2015	2016	2015	
Nitro 5	2 399	1 316	2 349	1 428	2 469	226	226	
Turbo Finance 3	4 570	_	732	-	833	_	603	
Turbo Finance 4	6 095	2 129	4 749	2 328	5 083	646	1 326	
Turbo Finance 5	7 790	5 064	7 688	5 430	8 137	1 588	2 159	
Turbo Finance 6	8 839	7 429	_	7 768	_	2 414	_	
MotoHouse	5 667	5 561	_	5 917	_	408	_	
Total	35 360	21 499	15 518	22 871	16 522	5 282	4 314	

<sup>\*</sup> Includes transactions structured by the group and excludes third-party transactions.

<sup>\*\*</sup> Does not include cash reserves.



# SECURITISATION EXPOSURES IN THE BANKING BOOK

The following tables provide a breakdown of the group's traditional securitisation exposures in the banking book for the retail and corporate portfolio where the group acts as originator, sponsor, investor, or originator and sponsor.

# SEC1: SECURITISATION EXPOSURES IN THE BANKING BOOK PER PORTFOLIO

		As at 30 June 2016									
		Traditional securitisation									
R million	Group acts as originator	Group acts as sponsor	Group acts as investor	Group acts as originator and sponsor	Total						
1. Retail											
2. – Residential mortgage	-	<del>-</del>	<del>-</del>	<del>-</del>	_						
4. – Auto Ioans	5 282	31	14 994	<del>-</del>	20 307						
6. Corporate											
7 Loans to corporates	-	_	_	3 088	3 088						
11 Resecuritisation	-										
Total	5 282	31	14 994	3 088	23 395						

		As at 30 June 2015									
		Traditional securitisation									
R million	Group acts as originator	Group acts as sponsor	Group acts as investor	Group acts as originator and sponsor	Total						
1. Retail											
2 Residential mortgage	_	144	_	_	144						
4. – Auto Ioans	4 314	31	7 732	<del>-</del>	12 077						
6. Corporate											
7 Loans to corporates	_	_	_	5 699	5 699						
11 Resecuritisation	-	9 9									
Total	4 314	175	7 732	5 708	17 929						

There were no credit card and resecuritisation exposures in the retail portfolio (rows 3 and 5) and no commercial mortgage, lease and receivables and other corporate exposures in the corporate portfolio (rows 5-10).

The regulatory approaches for securitisations exposures in the following tables are explained as follows.

Internal ratings based approach (IRB)	Ratings-based approach (RBA) Securitisation exposures to notes rated by an ECAI and held in an entity that uses the IRB approach.
	Internal assessment approach (IAA)  The group does not use the IAA for calculating risk weighted assets on securitisation exposures.
	Supervisory formula approach (SFA) Where the SFA is used, these exposures are captured in the IRB SFA column.
Standardised approach (SA)	Exposures subject to the look-through approach are disclosed in the simplified supervisory approach (SSFA).
Unrated notes	Exposures to unrated notes are risk weighted at 1250%.

# SEC3: TRADITIONAL SECURITISATION EXPOSURES IN THE BANKING BOOK AND ASSOCIATED REGULATORY CAPITAL REQUIREMENTS – BANK ACTING AS ORIGINATOR OR AS SPONSOR

	As at 30 June 2016									
	E	Exposure value	s by RW bands	*	Exposure values by regulatory approach					
		>20%	>100%		IF.	RB	SA			
R million	≤20% RW	to 50% RW	to <1250% RW	1250% RW	RBA	SFA	SSFA	1250%		
Securitisation										
4. – Retail	3 465	329	627	892	31	_	4 390	892		
5. – Corporate	62	3 026	_	_	<b>–</b>	62	3 026	_		
6. Resecuritisation										
7. – Senior	_	_	_	_	_	_	_	_		
8. – Non-senior	_	_	-	_	-	-	-	-		
Total	3 528	3 354	627	892	31	62	7 416	892		

<sup>\*</sup> There were no exposures in the >50% to 100% RW band.

	As at 30 June 2015											
	E	xposure value	s by RW bands	*	Expos	ure values by	regulatory app	oroach				
	2004	>20%	>100%		IRB		SA					
R million	≤20% RW	to 50% RW	to <1250% RW	1250% RW	RBA	SFA	SSFA	1250%				
Securitisation												
4. – Retail	2 721	319	421	1 028	186	-	3 275	1 028				
5. – Corporate	- I	5 699	_	_	_	2 275	3 424	_				
6. Resecuritisation												
7. – Senior	T - 1	_	_	_	_	_	_	_				
8. – Non-senior	9	_	_	_	-	_	9	_				
Total	2 730	6 018	421	1 028	186	2 275	6 708	1 028				

<sup>\*</sup> There were no exposures in the >50% to 100% RW band.

There were no synthetic securitisations (rows 9-15) during the year.



	As at 30 June 2016											
	RWA by regula	ntory approach		Capital charge after cap								
IR	lB	SA		IF	В	SA						
RBA	SFA	SSFA	1250%	RBA	SFA	SSFA	1250%					
7	-	3 045	11 150	1	-	327	1 199					
_	6	911	_	_	1	98	-					
_	-	_	-	_	_	_	-					
-	_	_	_	_	_	_	-					
7	6	3 956	11 150	1	1	425	1 199					

As at 30 June 2015											
I	RWA by regula	atory approach	1	Capital charge after cap							
IRB SA				IF	RB	SA					
RBA	SFA	SSFA	1250%	RBA	SFA	SSFA	1250%				
39	_	2 140	12 849	4	_	214	1 285				
_	1 064	1 061	_	_	106	106	- 1				
-	-	-	-	-	-	_	_				
_	_	1	_	_	_	_	_				
39	1 064	3 202	12 849	4	106	320	1 285				

# $SEC4: TRADITIONAL\ SECURITISATION\ EXPOSURES\ IN\ THE\ BANKING\ BOOK\ AND\ ASSOCIATED\ CAPITAL\ REQUIREMENTS\\ -\ BANK\ ACTING\ AS\ INVESTOR$

		As at 30 June 2016						
		Exposure values by RW bands*		Exposure values by regulatory approach				
		>20% 20% to 50% RW RW	li	IRB				
R million	≤20% RW		RBA	SFA	SSFA	1250%		
Securitisation								
4. – Retail	14 994	-	353	14 641	-	-		
5. – Corporate	_	_	-	-	_	-		
6. Resecuritisation								
7. – Senior	_	_	_	_	_	_		
8 Non-senior	_	_	-	-	-	-		
Total	14 994	_	353	14 641	_	_		

<sup>\*</sup> There were no exposures in the >20% to 50%, >50% to 100%, >100% to <1250% and 1250% RW bands.

		As at 30 June 2015					
		Exposure values by RW bands*		Exposure values by regulatory approach			
	0004	>20%	IF	RB	SA		
R million	≤20% RW	to 50% RW	RBA	SFA	SSFA	1250%	
Securitisation							
4. – Retail	353	7 379	353	_	7 379	_	
5. – Corporate	_	_	_	_	_	_	
6. Resecuritisation							
7. – Senior	_	_	_	_	_	_	
8. – Non-senior		_	_	-	-	_	
Total	353	7 379	353	_	7 379	_	

<sup>\*</sup> There were no exposures in the >50% to 100%, >100% to <1250% and 1250% RW bands.

There were no synthetic securitisations (rows 9-15) during the year.



As at 30 June 2016							
RWA by regulatory approach				Capital charge after cap			
IR	RB	SA		IRB		SA	
RBA	SFA	SSFA	1250%	RBA	SFA	SSFA	1250%
51	2 328	_	_	5	250	_	-
-	_	_	_	_	-	_	-
_	_	_	_	_	_	_	-
_	_	_	_	_	_	_	-
51	2328	_	_	5	250	_	_

As at 30 June 2015									
RWA by regulatory approach				Capital charge after cap					
IR	RB	SA		IF	IRB				
RBA	SFA	SSFA	1250%	RBA	SFA	SSFA	1250%		
51	_	2 885	_	5	_	288	_		
_	_	_	_	_	_	_	-		
_	_	_	_	_	_	_	_		
_	-	_	_	_	_	_	_		
51	_	2 885	_	5	_	288	_		

# MARKET RISK IN THE TRADING BOOK

# INTRODUCTION AND OBJECTIVES

Market risk in the trading book is the risk of adverse revaluation of any financial instrument as a consequence of changes in market prices or rates.

The group distinguishes between **market risk in the trading book** and **non-traded market risk**. The following diagram describes the traded and non-traded market risks and the governance bodies responsible for managing these risks.

#### TRADED AND NON-TRADED MARKET RISK ELEMENTS

MARKET RISK IN THE TRADING BOOK				NON-TRADED	MARKET RISK	
Traded equity and credit risk  Management	Commodity risk	Interest rate risk in the trading book	Interest rate risk in the RMB banking book managed as trading book	Foreign exchange risk	Interest rate risk in the banking book	Structural foreign exchange risk
	RMB RISK, CAPITAL AND COMPLIANCE COMMITTEE					
	Market risk metrics, group limit and utilisation – VaR/ETL					
					GROUP TREASURY	
					IRRBB, group macro- tion and hedging strat	•
Independent overs	ight					
ERI	ERM AND MARKET AND INVESTMENT RISK COMMITTEE (MIRC)					
	FCC AUDIT, RISK AND COMPLIANCE, AND FIRSTRAND ALCCO COMMITTEES					



Market risk in the trading book includes interest rate risk in the trading book, traded equity and credit risk, commodity risk, foreign exchange risk and interest rate risk in the RMB banking book which is managed as part of the trading book.

#### Market risk in the trading book activities

The group's market risk in the trading book emanates mainly from the provision of hedging solutions for clients, market-making activities and term-lending products and is taken and managed by RMB. The relevant businesses in RMB function as centres of expertise for all market risk-related activities. Market risk is managed and contained within the group's appetite.

The group's objective is to manage and control market risk exposures, based on three pillars, each with its own objective:

- strategic business mix ensure that RMB's current and future strategies, spanning various activities and geographies, achieve its growth and return targets within acceptable levels of risk;
- financial performance optimise portfolio performance and manage the interplay between growth and ROE given the differentiated risk/return characteristics of activities; and
- risk and capital impact only accept an appropriate level of risk commensurate with performance objectives and the market opportunity.

The nature of hedging and risk mitigation strategies performed across the group corresponds to the market risk management instruments available in each operating jurisdiction. These strategies

range from the use of traditional market instruments, such as interest rate swaps, to more sophisticated hedging strategies to address a combination of risk factors arising at portfolio level.

The group uses global models and operating platforms for measuring market risk. These operating platforms support regulatory reporting, external disclosures and internal management reporting for market risk. The risk infrastructure incorporates the relevant legal entities and business units, and provides the basis for reporting on risk positions, capital adequacy and limit utilisation to the relevant governance and management functions on a regular and *ad hoc* basis. Established units in risk management functions assume responsibility for measurement, analysis and reporting of risk while promoting sufficient quality and integrity of risk-related data. The VaR and sVaR calculations and aggregations are performed daily by these operating platforms and risk measures are compared to limits. Breaches are escalated to senior management.

#### Interest rate risk in the banking book activities

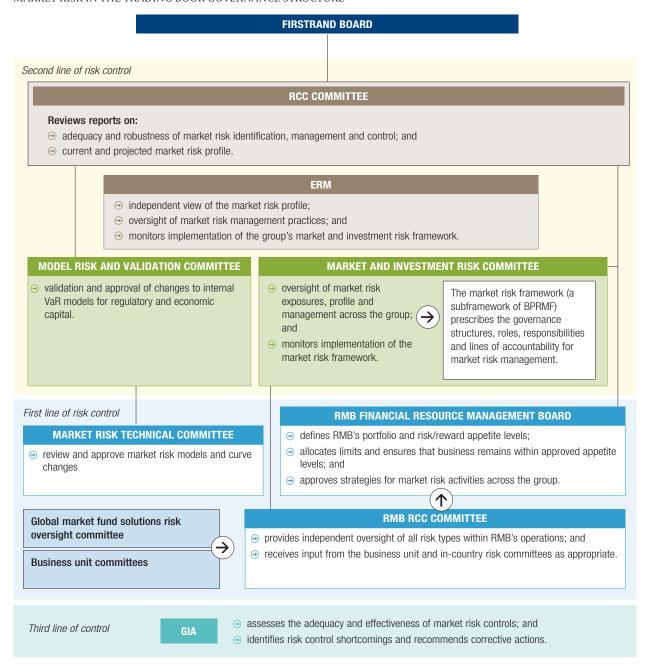
Management and monitoring of interest rate risk the banking book is split between the RMB banking book and the remaining domestic banking book. RMB manages the majority of its banking book under the market risk framework, with risk measured and monitored in conjunction with the trading book and management oversight provided by the market and investment risk committee. The RMB banking book interest rate risk exposure was R95.3 million on a 10-day ETL basis at 30 June 2016 (2015: R49.6 million). Interest rate risk in the remaining domestic banking book is discussed in the *interest rate risk in the banking book* section.

#### Year under review and focus areas

Ye	ar under review	Risk management focus areas
0	Overall diversified levels of market risk remained relatively low over the last few years with this trend continuing during the year. There are no significant concentrations in the portfolio.  Across the group, the only areas where market risk increased are the subsidiaries in the rest of Africa, but these remain small in the context of the group.	Given the impending regulatory changes to the BCBS's consultative document, <i>Fundamental review of the trading book</i> , RMB is reviewing the current target operating platform for market risk, taking into account platform capabilities across both front office and risk areas and aligning market risk processes, analysis and reporting in line with these requirements.

#### ORGANISATIONAL STRUCTURE AND GOVERNANCE

MARKET RISK IN THE TRADING BOOK GOVERNANCE STRUCTURE





#### Market risk reporting

High quality risk reporting enables senior management and governance committees to make well considered decisions to achieve objectives and manage key risks. The market risk reporting process aims to accurately and transparently depict RMB's risk profile. The group regularly reviews the content of market risk reports to ensure continuous relevance, and to ensure that reporting adequately and accurately reflects the group's market risk profile. Market risk reporting follows the market risk governance structure on the previous page. The frequency of each report aligns with the timing of governance committee meetings and content is driven by information requirements of the target audience.

Market risk reports are provided to the RMB RCC committee, the RMB FRM board and MIRC on a quarterly basis. Daily and monthly reports on market risk movements, risk factors and limit utilisation are provided to senior management and executive committees as appropriate. Information included in market risk reports includes, but is not limited to:

- ETL/VaR and sVaR, and specific risks;
- utilisation of the above against predefined limits;
- concentrations and risk build-ups;
- governance issues, such as limit breaches;
- risk factor sensitivities, stress test results and earnings volatility;
- nominal exposures;
- profit and loss attribution;
- risk and profit trends; and
- internal model back testing results.

# INTERNAL MODELS APPROACH (IMA): DOMESTIC TRADING PORTFOLIOS

The internal VaR model for general market risk was approved by the SARB for domestic trading units. For all international entities, the standardised approach is used for regulatory market risk capital purposes. Economic capital for market risk is calculated using liquidity-adjusted ETL plus an assessment of specific risk.

The risk related to market risk-taking activities is measured as the higher of the group's internal expected tail loss (ETL) measure (as a proxy for economic capital) and regulatory capital based on VaR plus sVaR. The 10-day holding period used in calculation of a 10-day VaR, 10-day sVaR and ETL is directly modelled in the group's operating platform.

Market risk in the trading book for the group is taken and managed by RMB using risk limits approved by the RMB financial resource management board and MIRC. VaR limits are set for portfolios and risk types, with market liquidity being a primary factor in determining the level of limits set. RMB is responsible for setting market risk management policies and measurement techniques. The market risk limits are governed according to the market risk framework. The VaR model is designed to take into account a comprehensive set of risk factors across all asset classes.

VaR enables the group to apply a consistent measure across all trading desks and products. It allows a comparison of risk in different businesses and provides a means of aggregating and netting positions in a portfolio to reflect correlations and offsets between different asset classes. Furthermore, it facilitates comparisons of market risk both over time and against daily trading results.

#### QUANTIFICATION OF RISK EXPOSURES

ETL	The internal measure of risk is an ETL metric at the 99% confidence level under the full revaluation methodology using historical risk factor scenarios (historical simulation method). In order to accommodate the regulatory stress loss imperative, the set of scenarios used for revaluation of the current portfolio comprises historical scenarios which incorporate both the past 260 trading days and at least one static period of market distress.  The ETL is liquidity adjusted for illiquid exposures. Holding periods, ranging between 10 and 90 days or more, are used in the calculation and are based on an assessment of distressed liquidity of portfolios.
VaR and sVaR	VaR is calculated at the 99%, 10-day actual holding period level using data from the past 260 trading days. For regulatory capital purposes, this is supplemented with a sVaR, calibrated to a one-year period of stress observed in history (2008/2009). The choice of period 2008/2009 is based on the assessment of the most volatile period in recent history.
	sVaR calculations are based on the same systems, trade information and processes as VaR calculations. The only difference is that sVaR is supplemented with historical risk factor scenarios (historical simulation method) as an input for the full revaluation methodology. The historical factor scenarios include historical market data from a period of significant financial stress, characterised by high volatilities in recent history. When simulating potential movements in risk factors, both absolute and relative risk factors are used. VaR calculations over a holding period of one day are used as an additional tool in the assessment of market risk. The updating of historical scenarios is kept within the one month regulatory requirement and is monitored on a daily basis.

The group's VaR should be interpreted in light of the limitations of this methodology, namely:

- historical simulation VaR may not provide an accurate estimate of future market moves:
- the use of a 99% confidence level does not reflect the extent of potential losses beyond that percentile - ETL is a better measure to quantify losses beyond that percentile (but still subject to similar limitations as stated for VaR);
- the use of a 1-day time horizon is not a fair reflection of profit or loss for positions with low trading liquidity, which cannot be closed out or hedged in one day;
- as exposures and risk factors can change during daily trading, exposures and risk factors are not necessarily captured in the VaR calibration which uses end-of-day trading data; and
- where historical data is not available, time series data is approximated or backfilled using appropriate quantitative methodologies. Use of proxies is, however, limited.

These limitations mean that the group cannot guarantee that losses will not exceed VaR. Recognising its limitations, VaR is supplemented with stress testing to evaluate the potential impact on portfolio values of more extreme, though plausible, events or movements in a set of financial variables.

The group does not apply the incremental risk charge or comprehensive risk capital charge approach.

#### Risk concentrations

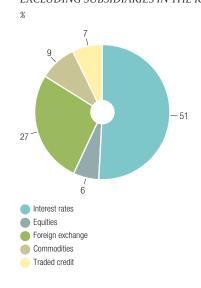
Risk concentrations are controlled by means of appropriate ETL sublimits for individual asset classes and the maximum allowable exposure for each business unit. In addition to the general market risk limits described above, limits covering obligor-specific risk and event risk and utilisation against these limits are monitored continuously, based on the regulatory building block approach.

#### VaR exposure per asset class

The following chart shows the distribution of exposures per asset class across the group's trading activities at 30 June 2016 based on the VaR methodology. VaR equity exposure shown relates mainly to listed equity exposures in RMB Australia which relate to the RMB resources portfolio. These exposures are predominantly in the junior resources sector. This risk is measured on a 90-day liquidity adjusted basis

The overall asset class mix has remained consistent with the prior year. The interest rate asset class represented the most significant exposure at year end.

#### VAR EXPOSURE PER ASSET CLASS FOR THE GROUP EXCLUDING SUBSIDIARIES IN THE REST OF AFRICA



#### MR3: IMA VALUES FOR TRADING PORTFOLIOS\*

			As at 30 June					
		FirstRand*	FirstRand** FirstRand Bank (SA					
		2016	2015	2016	2015			
	VaR (10-day 99%)							
1.	Maximum value	199	182	170	148			
2.	Average value	108	112	85	75			
3.	Minimum value	67	51	47	29			
4.	Period end	172	88	147	55			
	sVaR (10-day 99%)							
5.	Maximum value	222	218	222	218			
6.	Average value	145	117	145	117			
7.	Minimum value	75	49	75	49			
8.	Period end	146	66	146	66			

<sup>\*</sup> The group does not use the incremental risk charge (rows 9 - 12) and comprehensive risk measure (rows 13 - 17) approaches.

<sup>\*\*</sup> FirstRand VaR numbers include the foreign branches but exclude the subsidiaries in the rest of Africa which is reported on the standardised approach for market risk. The sVaR numbers relate to FirstRand Bank (SA) only.

<sup>#</sup> FirstRand Bank (SA) excludes the foreign branches.



#### Stress testing

Stress testing provides an indication of potential losses that could occur under extreme market conditions. The ETL assessment provides a view of risk exposures under stress conditions.

Additional stress testing, to supplement the ETL assessment, is conducted using historical market downturn scenarios and includes the use of what-if hypothetical and forward-looking simulations. Stress test calibrations are reviewed regularly to ensure that results are indicative of the possible impact of severely distressed and event-driven market conditions. Stress and scenario analyses are regularly reported to and considered by the relevant governance hodies

#### **Earnings volatility**

A key element of the group's risk appetite framework is an assessment of potential earnings volatility that may arise from underlying activities. Earnings volatility for market risk is quantified by subjecting key market risk exposures to predetermined stress conditions, ranging from business-as-usual stress through severe stress and event risks.

In addition to assessing the maximum acceptable level of earnings volatility, stress testing is used to understand sources of earnings

volatility and highlight unused capacity within the group's risk appetite. Market risk earnings volatility is calculated and assessed on a quarterly basis.

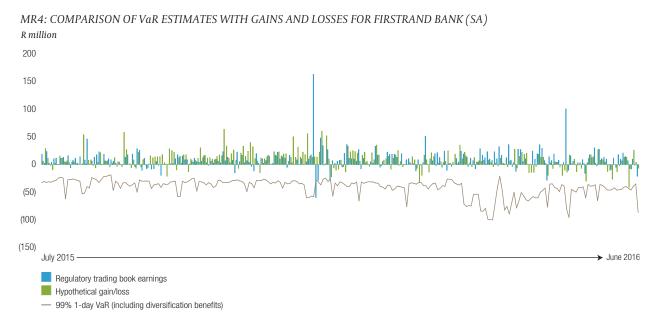
#### Regulatory back testing

Back testing is performed to verify the predictive ability of the VaR model and ensure ongoing appropriateness. The back testing process is a regulatory requirement and seeks to estimate the performance of the regulatory VaR model. Performance is measured by the number of exceptions to the model, i.e. net trading profit and loss in one trading day is greater than the estimated VaR for the same trading day. The group's procedures could be underestimating VaR if exceptions occur regularly (a 99% confidence interval indicates that one exception will occur in 100 days).

The regulatory standard for back testing is to measure daily actual and hypothetical changes in portfolio value against VaR at the 99th percentile (one-day holding period equivalent). The number of breaches over a period of 250 trading days is calculated, and, should the number exceed that which is considered appropriate, the model is recalibrated.

#### Back testing: daily regulatory trading book earnings versus 1-day, 99% VaR

The group tracks its daily domestic earnings profile as illustrated in the following chart. The earnings and 1-day VaR relate to the group's internal VaR model. Exposures were contained within risk limits during the year.



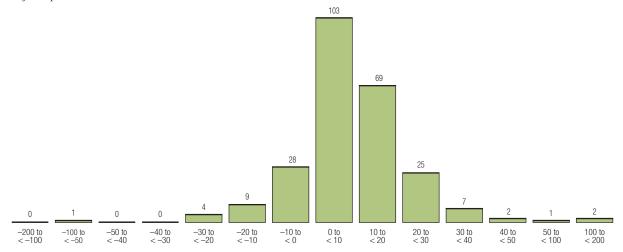
Trading book earnings exceeded 1-day VaR on one occasion during the year. This indicates a good quantification of market risk provided by the group's internal model.

# Distribution of daily trading earnings from trading units

The following histogram shows the daily revenue for the group's domestic trading units for the year. The results are skewed towards profitability.

# FIRSTRAND BANK (SA) DISTRIBUTION OF DAILY EARNINGS – FREQUENCY

Days in a period



# STANDARDISED APPROACH: GENERAL AND SPECIFIC RISK

FirstRand Bank (India and London branches) and the group's subsidiaries in the rest of Africa have market risk exposure. The India and London branches are measured and managed on the same basis as the domestic portfolios for internal measurement, with regulatory capital based on the regulatory standardised approach. The subsidiaries in the rest of Africa are measured using the regulatory standardised approach for regulatory capital and an internal stress loss methodology for internal measurement of risk. Under the standardised approach, capital is calculated for general market risk and specific risk. Capital for specific risk is held in addition to general market risk capital.

General market risk capital	The general market risk capital calculation is based on the duration methodology.  To calculate the general market risk capital charge, the long or short position (at current market value) of each debt instrument and other sources of interest rate exposure, including derivatives, is distributed into appropriate time-bands and maturity. The long and short positions in each time band are then summed respectively and multiplied by the appropriate risk-weight factor (reflecting the price sensitivity of the positions to changes in interest rates) to determine the risk-weighted long and short market risk positions for each time band.
Specific risk regulatory capital	Specific risk accurately measures idiosyncratic risk not captured by general market risk measures for interest rate and equity risk, such as default, credit migration and event risks, and identifies concentrations in a portfolio.  The total regulatory specific risk capital amount is the sum of equity specific risk and interest rate specific risk and is based on the Basel III standardised approach duration method.



The local balance sheet is exposed to interest rate risk specific risk and the equity specific risk relates to listed equity exposures in the RMB resources portfolio. FirstRand Bank (India and London branches) and the group's subsidiaries in the rest of Africa are exposed to interest rate and foreign exchange (general risk) and commodity risk (capital calculated on the simplified approach).

The following table represents the group's general market risk under the standardised approach and specific risk. At 30 June 2016, the subsidiaries in the rest of Africa collectively held the majority of market risk exposures when compared to the India and London branches. The increase in interest rate specific risk emanates from the local balance sheet and is mainly a result of an increase in bond exposures to Indian financial institutions and African sovereign bonds. Equity specific risk increased year-on-year due to increased positions in global market fund situations.

Market risk was contained within acceptable stress loss limits and effectively managed across the subsidiaries during the year under review. Options are capitalised using the internal model approach (rows 5-7) (refer to *MR3: IMA values for trading portfolios* table on page 126, and securitisations (row 8) are capitalised under the securitisation framework (refer to the *securitisation* section).

#### MR1: MARKET RISK UNDER STANDARDISED APPROACH - RISK WEIGHTED ASSETS

		As at 30 June		
		RWA		
Rı	nillion		2015	
_	Outright products			
1.	Interest rate risk	2 388	1 387	
	– Specific risk	2 236	1 366	
	– General risk	152	21	
2.	Equity specific risk	495	485	
	- Specific risk	452	351	
	– General risk	43	134	
3.	Foreign exchange general risk	1 437	1 217	
4.	Commodity risk	_	2	
9.	Total	4 320	3 091	

# **NON-TRADED MARKET RISK**

For non-traded market risk, the group distinguishes between **interest rate risk in the banking book** and **structural foreign exchange risk**. The following table describes how these risks are measured, managed and governed.

Risk and jurisdiction	Risk measure	Managed by	Oversight
Interest rate risk in the banking book			
Domestic – FNB, WesBank and FCC	<ul><li>12-month earnings sensitivity; and</li><li>economic sensitivity of open risk position.</li></ul>	Group Treasury	FCC Risk Management Group ALCCO
Subsidiaries in the rest of Africa and international branches	<ul> <li>12-month earnings sensitivity; and</li> <li>economic sensitivity of open risk position.</li> </ul>	In-country management	Group Treasury FCC Risk Management In country ALCCOs International ALCCO
Structural foreign exchange			
Group	<ul> <li>total capital in a functional currency other than rand;</li> <li>impact of translation back to rand reflected in group's income statement; and</li> <li>foreign currency translation reserve value.</li> </ul>	Group Treasury	Group ALCCO

#### INTEREST RATE RISK IN THE BANKING BOOK

#### Introduction and objectives

IRRBB relates to the sensitivity of a bank's financial position and earnings to unexpected, adverse movements in interest rates.

Interest rate risk in the banking book originates from the differing repricing characteristics of balance sheet positions/instruments, yield curve risk, basis risk and client optionality embedded in banking book products.

The endowment effect, which results from a large proportion of non- and low-rate liabilities that fund variable rate assets, remains the primary driver of IRRBB and results in the group's earnings being vulnerable to interest rate cuts, or conversely benefiting from a hiking cycle.

IRRBB is an inevitable risk associated with banking and can be an important source of profitability and shareholder value. FirstRand continues to manage IRRBB on an earnings approach, with the aim to protect and enhance the group's earnings and economic value through the cycle within approved risk limit and appetite levels. The endowment hedge portfolio is managed dynamically taking into account the continuously changing macroeconomic environment.

South Africa has been in an interest rate hiking cycle that started at the beginning of 2014. The increase in the repo rate during the financial year has had a positive impact on margins as a result of the endowment effect.

Strategic hedge positions are in place to protect the group's net interest margin against macroeconomic uncertainty, which can impact the timing and extent of the hiking cycle and protects group earnings should rates remain lower for longer. These hedges are actively monitored along with macroeconomic factors impacting rates in the domestic economy, as well as the foreign entities.

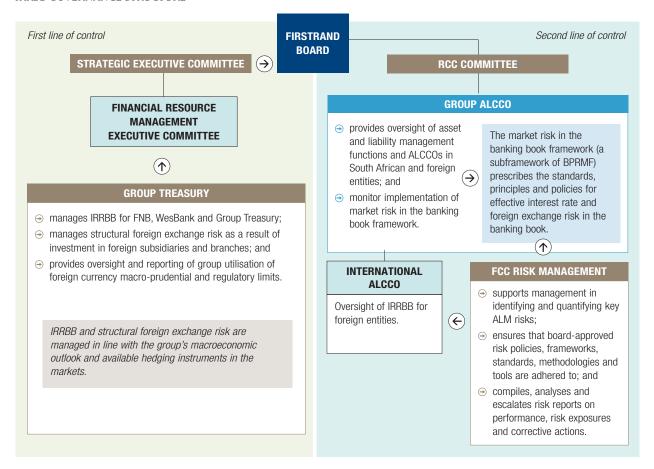
#### Year under review and focus areas

Year under review	Risk management focus areas
The Monetary Policy Committee increased rates by 125 bps since July 2015. This positively impacted the group's earnings as a result of the endowment impact.	● The extent and timing of rate normalisation in South Africa are impacted by various global macroeconomic factors. The group continues to actively manage IRRBB.
	The BCBS, through the task force for interest rate risk in the banking book, has published a more robust regulation for IRRBB which is due to be implemented by December 2017. The group is addressing these new requirements.



#### Organisational structure and governance

IRRBB GOVERNANCE STRUCTURE



# Assessment and management FirstRand Bank (South Africa)

The measurement techniques used to monitor IRRBB include NII sensitivity/earnings risk and NAV/economic value of equity (EVE). A repricing gap is also generated to better understand the repricing characteristics of the balance sheet. In calculating the repricing gap, all banking book assets, liabilities and derivative instruments are placed in gap intervals based on repricing characteristics. The repricing gap, however, is not used for management decisions.

The internal funds transfer pricing process is used to transfer interest rate risk from the franchises to Group Treasury. This process allows risk to be managed centrally and holistically in line with the group's macroeconomic outlook. Management of the resultant risk position is achieved by balance sheet optimisation or through the use of derivative transactions. Derivative instruments used are mainly

interest rate swaps, for which a liquid market exists. Where possible, hedge accounting is used to minimise accounting mismatches, thus ensuring that amounts deferred in equity are released to the income statement at the same time as movements attributable to the underlying hedged asset/liability. Interest rate risk from the fixed-rate book is managed to low levels with remaining risk stemming from timing and basis risk.

#### Foreign operations

Management of subsidiaries in the rest of Africa and international branches is performed by in-country management teams with oversight provided by Group Treasury and FCC Risk Management. For subsidiaries, earnings sensitivity measures are used to monitor and manage interest rate risk in line with the group's appetite. Where applicable, PV01 and ETL risk limits are also used for endowment hedges.

### INTEREST RATE RISK MANAGEMENT AND ASSESSMENT



#### Sensitivity analysis

A change in interest rates impacts both the earnings potential of the banking book (as underlying assets and liabilities reprice to new rates), as well as in the economic value/NAV of an entity (as a result of a change in the fair value of any open risk portfolios used to manage the earnings risk). The role of management is to protect both the financial performance as a result of a change in earnings and to protect the long-term economic value. To achieve this, both earnings sensitivity and economic sensitivity measures are monitored and managed within appropriate risk limits and appetite levels, considering the macroeconomic environment and factors which can cause a change in rates.

#### **Earnings sensitivity**

Earnings models are run on a monthly basis to provide a measure of the NII sensitivity of the existing banking book balance sheet to shocks in interest rates. Underlying transactions are modelled on a contractual basis and behavioural adjustments are applied where relevant. The calculation assumes a constant balance sheet size and product mix over the forecast horizon. A pass-through assumption is applied in relation to non-maturing deposits, which reprice at the group's discretion. This assumption is based on historical product behaviour.

The following tables show the 12-month NII sensitivity for sustained, instantaneous parallel 200 bps downward and upward shocks to interest rates. The decreased sensitivity is attributable to the level of strategic hedges put in place to manage the margin impact of the capital and deposit endowment books through the cycle. At 30 June 2016, the book was positioned to benefit from further interest rate hikes, whilst protecting against rate uncertainty. Given current uncertainty on the length and extent of the hiking cycle, the endowment book remains actively managed.

Most of NII sensitivity relates to the endowment book mismatch. The group's average endowment book was R162.5 billion for the year. Total sensitivity in the bank is measured to rand rate moves and to local currency moves in the subsidiaries in the rest of Africa.

#### PROJECTED NII SENSITIVITY TO INTEREST RATE MOVEMENTS

		As at 30 June 2016		
	Ch	Change in projected 12-month NII		
R million	FirstRand Bank	Subsidiaries in the rest of Africa*	FirstRand group	
Downward 200 bps	(1 821	) (498)	(2 319)	
Upward 200 bps	1 475	381	1 855	

<sup>\*</sup> Includes India and London branches.

		As at 30 June 2015	
	Change in projected 12-month NII		nth NII
R million	FirstRand Bank	Subsidiaries in the rest of Africa*	FirstRand group
Downward 200 bps	(2 517)	(404)	(2 921)
Upward 200 bps	2 343	318	2 661

<sup>\*</sup> Includes India and London branches.



Assuming no change in the balance sheet and no management action in response to interest rate movements, an instantaneous, sustained parallel 200 bps decrease in interest rates would result in a reduction in projected 12-month NII of R2 319 million. A similar increase in interest rates would result in an increase in projected 12-month NII of R1 855 million.

#### Economic value of equity

An EVE sensitivity measure is used to assess the impact on the total NAV of the group as a result of a shock to underlying rates. Unlike the trading book, where a change in rates will impact fair value income and reportable earnings of an entity when a rate change occurs, the realisation of a rate move in the banking book will impact the distributable and non-distributable reserves to varying degrees and is reflected in the NII margin more as an opportunity cost/benefit over the life of the underlying positions. As a result, a purely forward-looking EVE measure applied to the banking book, be it a 1 bps shock or a full stress shock, is monitored relative to total risk limit, appetite levels and current economic conditions.

The EVE shock applied is based on regulatory guidelines and is a sustained, instantaneous parallel 200 bps downward and upward shock to interest rates. This is applied to risk portfolios as managed by Group Treasury which, as a result of the risk transfer through the internal funds transfer pricing process, captures relevant open risk positions in the banking book. This measure does not take into account the unrealised economic benefit embedded as a result of the banking book products which are not recognised at fair value.

The following table:

- highlights the sensitivity of banking book NAV as a percentage of total capital; and
- reflects a point-in-time view which is dynamically managed and can fluctuate over time.

#### BANKING BOOK NAV SENSITIVITY TO INTEREST RATE MOVEMENTS AS A PERCENTAGE OF TOTAL GROUP CAPITAL

	As at 30 June				
%	2016 2015 2016				
Downward 200 bps	0.11	0.52	0.08	0.52	
Upward 200 bps	(0.07)	(0.59)			

The decrease in NAV sensitivity in the year under review is attributable to active management of strategic hedges. The group has decreased its endowment book hedge position relative to the prior financial year in line with macroeconomic conditions.

#### STRUCTURAL FOREIGN EXCHANGE RISK

# Introduction and objectives

Foreign exchange risk is the risk of an adverse impact on the group's financial position and earnings as a result of movements in foreign exchange rates impacting balance sheet exposures.

Structural foreign exchange risk arises as a result of the group's offshore operations with a functional currency other than the South African rand, and is the risk of a negative impact on the group's financial position, earnings, or other key ratios as a result of negative translation effects.

The group is exposed to foreign exchange risk both as a result of on-balance sheet transactions in a currency other than the rand, as well as through structural foreign exchange risk from the translation of foreign entities' results into rand. The impact on equity as a result of structural foreign exchange risk is recognised in the foreign currency translation reserve balance, which is included in qualifying capital for regulatory purposes.

Structural foreign exchange risk as a result of net investments in entities with a functional currency other than rand is an unavoidable consequence of having offshore operations and can be a source of investor value through diversified earnings, as well as unwanted volatility from currency fluctuations. Group Treasury is responsible for actively monitoring the net capital invested in foreign entities, as well as the rand value of any capital investments and dividend distributions.

#### Year under review and focus areas

Υ	ear under review	Risk management focus areas
•	Continued to strengthen principles of the management of foreign exchange positions and funding of the group's foreign entities.	• Continue to assess and review the group's foreign exchange exposures and enhance the quality and frequency of reporting.
•	Monitored the net open forward position in foreign exchange (NOFP) limits in each of the group's foreign entities.	



#### Organisational structure and governance

Reporting and management for the group's foreign exchange exposure and macro-prudential limit utilisation is centrally owned by Group Treasury as the clearer of all group currency positions. Group Treasury is also responsible for oversight of structural foreign exchange risk with reporting through to group ALCCO, a subcommittee of the RCC committee. Refer to the governance structure in the *interest rate risk in the banking book* section.

#### Assessment and management

The ability to transact on-balance sheet in a currency other than the home currency (rand) is governed by in-country macro-prudential and regulatory limits. In the group, additional board limits and management appetite levels are set for this exposure. The impact of any residual on-balance positions is managed as part of market risk reporting (see *market risk in the trading book* section). Group Treasury is responsible for consolidated group reporting and utilisation of these limits against approved limits and appetite levels.

Foreign exchange risk in the banking book comprises funding and liquidity management, and risk mitigating activities which are managed to low levels. To minimise funding risk across the group, foreign currency transactions are matched where possible, with residual liquidity risk managed centrally by Group Treasury (see funding and liquidity section). Structural foreign exchange risk impacts both the current NAV of the group as well as future profitability and earnings potential. Economic hedging is undertaken where viable, given market constraints and within risk appetite levels. Where possible, hedge accounting is applied. Any open hedges are included as part of market risk in the trading book.

#### Net structural foreign exposures and sensitivity

The following table provides an overview of the group's exposure to entities with functional currencies other than rand. There were no significant structural hedging strategies in the current financial year.

#### NET STRUCTURAL FOREIGN EXPOSURES

		As at 30 June			
	20	016	2015		
R million	Exposure	Impact on equity from 15% currency translation shock	Exposure	Impact on equity from 15% currency translation shock	
Functional currency					
Botswana pula	3 714	557	3 273	491	
United States dollar	4 016	602	2 301	345	
Sterling	2 308	346	1 975	296	
Nigerian naira	1 131	170	1 135	170	
Australian dollar	1 454	218	987	148	
Zambian kwacha	792	119	890	133	
Mozambican metical	652	98	702	105	
Indian rupee	737	111	720	108	
Ghanaian cedi	493	74	473	71	
Tanzanian shilling	774	116	236	35	
Common monetary area (CMA) countries*	5 345	802	4 505	676	
Total	21 416	<b>21 416 3 213</b> 17 197			

<sup>\*</sup> Currently Namibia, Swaziland and Lesotho are part of the CMA. Unless these countries decide to exit, rand volatility will not impact these entities' rand reporting values.

# **EQUITY INVESTMENT RISK**

#### INTRODUCTION AND OBJECTIVES

Equity investment risk is the risk of an adverse change in the fair value of an investment in a company, fund or listed, unlisted or bespoke financial instrument.

Equity investment risk in the group arises primarily from equity exposures from private equity and investment banking activities in RMB, e.g. exposures to equity risk arising from principal investments or structured lending. Where appropriate and attractive investment opportunities arise in FNB through lending activities to medium corporate clients, there is a memorandum of understanding between RMB and FNB to co-invest in the entity, provided the arrangement is within approved mandates and policies and is aligned with group strategy.

Other sources of equity investment risk include strategic investments held by WesBank, FNB and FCC. These investments are, by their nature, core to the individual businesses' daily operations and are managed as such.

Ashburton Investments, the group's asset management business, also contributes to equity investment risk. This risk emanates from long-term or short-term seeding activities both locally and offshore. Short-term seeding of new traditional and alternative funds exposes the group to equity investment risk until the funds reach sufficient scale for sustainable external distribution. The timeline for short-term seeding is defined in the business cases for the funds and typically ranges between one and three years.

Long-term seeding is provided if there is alignment with the business strategy, the business case meets the group's internal return hurdle

requirements and the liquidity and structure of the funds imply that an exit will only be possible over a longer period, aligned with the interests of other investors in these funds. Long-term investments, such as investment in private equity and real estate, will only be exited at the end of the investment horizon of the funds, and this maturity period typically ranges from five to eight years post investment into the fund.

#### Regulatory developments

The BCBS published the standard on *Capital requirements for banks'* equity investments in funds in December 2013 which requires banks' equity investment risk exposures in funds to be risk-weighted using the following approaches with varying degrees of risk sensitivity:

- look-through approach;
- mandate-based approach; and
- fall-back approach.

To ensure that banks have appropriate incentives to enhance the management of their exposures, the degree of conservatism increases with each successive approach. The BCBS also incorporated a leverage adjustment to the RWAs derived from the above approaches to appropriately reflect a fund's leverage. This standard will become effective from 1 January 2017. The group is refining its processes to comply with the standard. The overall quality of the investment portfolio remains acceptable and is within risk appetite.

#### Year under review and focus areas

#### Year under review

- Private Equity concluded the disposal of a number of investments. Acquisitions remained muted across the investing portfolios.
- Difficult trading conditions were experienced in the resources sector.
- The unrealised value of RMB Private Equity's portfolio unrealised value decreased to R4.2 billion at 30 June 2016 (2015: R4.9 billion) driven primarily by investment disposals.
- Ashburton Investments implemented fund reporting capabilities across the business and initiated the implementation of a risk reporting system.
- FirstRand Bank subscribed for shares in African Bank Holdings Limited.

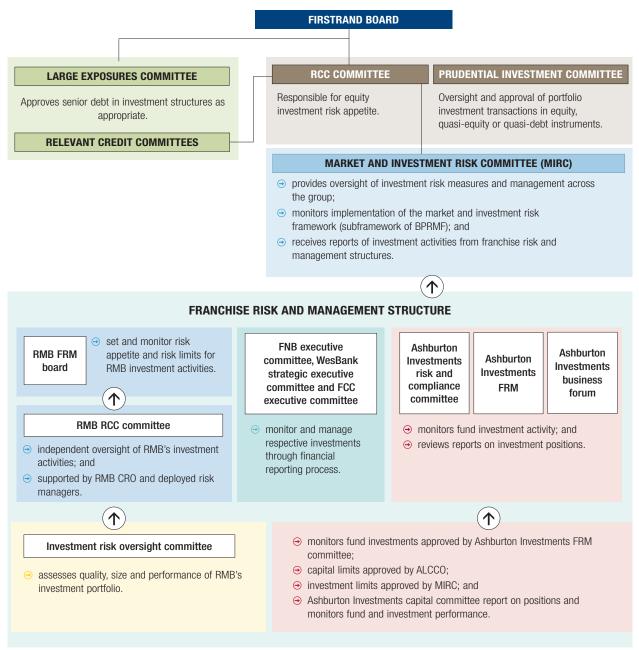
# Risk management focus areas

- Continue to focus on non-performing exposures, particularly in the RMB Resources portfolio which is being wound down, and realising value from the existing portfolio.
- Prepare for the introduction of the new BCBS standard relating to the treatment of investment in funds.
- Ashburton Investments will focus on strengthening its distribution capability with its recently established customer value management function and increasing its offshore distribution capabilities.



#### ORGANISATIONAL STRUCTURE AND GOVERNANCE

EQUITY INVESTMENT RISK GOVERNANCE STRUCTURE



#### ASSESSMENT AND MANAGEMENT

#### Management of exposures

The equity investment risk portfolio is managed through a rigorous evaluation and review process from inception to exit of a transaction. All investments are subject to a comprehensive due diligence, during which a thorough understanding of the target company's business, risks, challenges, competitors, management team and unique advantage or value proposition is developed.

For each transaction, an appropriate structure is put in place which aligns the interests of all parties involved through the use of incentives and constraints for management and the selling party. Where appropriate, the group seeks to take a number of seats on the company's board and maintains close oversight through monitoring of operations and financial discipline.

The investment thesis, results of the due diligence process and investment structure are discussed at the investment committee before final approval is granted. In addition, normal biannual reviews are performed for each investment and crucial parts of these reviews, such as valuation estimates, are independently peer reviewed.

#### Recording of exposures – accounting policies

IAS 39 requires equity investments to be classified as financial assets at fair value through profit or loss, or available-for-sale financial assets

Consistent with the group's accounting policies, the consolidated financial statements include the assets, liabilities and results of operations of all equity investments over which the group has control over the relevant activities and the ability to use that control to affect the variable returns received from the entity.

Equity investments in associates and joint ventures are included in the consolidated financial statements using the equity accounting method. Associates are entities where the group holds an equity interest of between 20% and 50%, or over which it has the ability to exercise significant influence, but does not control. Joint ventures are entities in which the group has joint control over the relevant activities of the joint venture through a contractual agreement.

#### Measurement of risk exposures and stress testing

Risk exposures are measured in terms of potential loss under stress conditions. A series of standardised stress tests are used to assess potential losses under current market conditions, adverse market conditions, as well as severe stress/event risk. These stress tests are conducted at individual investment and portfolio level.

In the private equity portfolio, the group targets an investment profile that is diversified along a number of pertinent dimensions, such as geography, industry, investment stage and vintage.

Economic and regulatory capital calculations are augmented by regular stress tests of market values and underlying drivers of valuation, e.g. company earnings, valuation multiples and assessments of stress resulting from portfolio concentrations.

### Regulatory and economic capital

The simple risk-weighted method under the market-based approach (250% (Basel III investments in financial entities), 300% (listed) or 400% (unlisted)) is applied with the scalar (where appropriate) for the quantification of regulatory capital. Under the Regulations, the risk weight applied to investments in financial, banking and insurance institutions is subject to the aggregate and individual value of the group's shareholding in these investments and also in relation to the group's qualifying CET1 capital. Shareholdings in investments are bucketed depending on the percentage held.

For economic capital purposes, an approach using market value shocks to the underlying investments is used to assess economic capital requirements for unlisted investments after taking any unrealised profits into account.

Where price discovery is reliable, the risk of listed equity investments is measured based on a 90-day ETL calculated using RMB's internal market risk model. The ETL risk measure is supplemented by a measure of the specific (idiosyncratic) risk of the individual securities per the specific risk measurement methodology.

#### **EQUITY INVESTMENT RISK VALUATIONS**

During the year, the private equity portfolio had significant realisations with robust realisation profits. The unrealised value of the private equity investment portfolio at 30 June 2016 was R4.2 billion (2015: R4.9 billion).

The table below shows the equity investment risk exposure and sensitivity. The 10% sensitivity movement is calculated on the carrying value of investments excluding investments subject to the ETL process and includes the carrying value of investments in associates and joint ventures.

#### INVESTMENT RISK EXPOSURE AND SENSITIVITY OF INVESTMENT RISK EXPOSURE

	As at 30 June		
R million	2016	2015	
Listed investment risk exposure included in the equity investment risk ETL process	66	63	
ETL on above equity investment risk exposures	5	5	
Estimated sensitivity of remaining investment balances			
Sensitivity to 10% movement in market value on investment fair value	367	378	
Cumulative gains realised from sale of positions in the banking book during the year	1 416	1 693	



# EQUITIES UNDER THE SIMPLE RISK-WEIGHT METHOD

			As at 30 June 2016		
R million	On-balance sheet amount	Off-balance sheet amount	Risk weight	Exposure amount	RWA
Categories					
Exchange-traded equity exposures*	595	_	300%	595	1 892
Private equity exposures*	6 156	-	400%	6 156	26 101
Financial and insurance entities	3 293	-	250%	3 293	8 232
Total	10 044	_		10 044	36 225

<sup>\*</sup> Includes 6% scalar.

The following tables include the investment valuations and regulatory capital requirements.

# INVESTMENT VALUATIONS AND ASSOCIATED REGULATORY CAPITAL REQUIREMENTS

	As at 30 June 2016		
R million	Publicly quoted investments	Privately held	Total
Carrying value of investments	595	9 449	10 044
Per risk bucket			
250% – Basel III investments in financial entities	_	3 293	3 293
300% – listed investments	595	_	595
400% – unlisted investments	-	6 156	6 156
Latent revaluation gains not recognised in the balance sheet*	70	5 433	5 503
Fair value	665	14 882	15 547
Total unrealised gains recognised directly in the balance sheet through equity instead			
of the income statement*	_	141	141
Capital requirement**	189	2 676	2 865

<sup>\*</sup> These unrealised gains or losses are not included in Tier 1 or Tier 2 capital and the decrease from 2015 to 2016 relates to WesBank investments.

<sup>\*\*</sup> Capital requirement calculated at 10% of RWA (excluding the bank-specific individual capital requirement) and includes capital on investments in financial entities

	As at 30 June 2015			
R million	Publicly quoted investments	Privately held	Total	
Carrying value of investments	1 100	9 802	10 902	
Per risk bucket	•••			
250% - Basel III investments in financial entities	_	3 091	3 091	
300% – listed investments	1 100	_	1 100	
400% – unlisted investments	_	6 711	6 711	
Latent revaluation gains not recognised in the balance sheet*	138	11 876	12 014	
Fair value	1 238	21 678	22 916	
Total unrealised gains recognised directly in the balance sheet through equity instead of the income statement*	_	183	183	
Capital requirement**	350	2 907	3 257	

<sup>\*</sup> These unrealised gains or losses are not included in Tier 1 or Tier 2 capital.

<sup>\*\*</sup> Capital requirement calculated at 10% of RWA (excluding the bank-specific individual capital requirement), and includes capital on investments in financial entities

# **INSURANCE RISK**

Insurance risk arises from the inherent uncertainties of liabilities payable under an insurance contract. These uncertainties can result in the occurrence, amount or timing of the liabilities differing from expected. Insurance risk can arise throughout the product cycle and is related to product design, pricing, underwriting or claims management.

The risk arises from the group's long term insurance operations, underwritten through its subsidiary, FirstRand Life Assurance Limited (FirstRand Life).

FirstRand Life was granted approval to operate as a long-term insurer in March 2015 and, through the FNB franchise, policies exposed to insurance risk were sold from July 2015. Insurance policies were previously sold on behalf of Momentum Life.

FirstRand Life currently underwrites funeral policies, risk policies and credit life policies against FNB loan products. Funeral policies pay benefits upon death of the policyholder and therefore expose the group to mortality risk. The underwritten risk policies and credit life policies further cover policyholders for disability and critical illness, introducing morbidity risk. Credit life policies also cover retrenchment risks. As a result of these insurance risk exposures, the group is exposed to catastrophe risk, stemming from the possibility of an extreme event linked to any of the above.

For all of the above, the risk is that the decrement rates (e.g. mortality rates, lapse rates, etc.) and associated cash flows are different from those assumed when pricing or reserving. Mortality, morbidity and retrenchment risk can further be broken down into parameter risk, random fluctuations and trend risk, which may result in the parameter value assumed differing from actual experience.

FirstRand Life also writes linked-investment policies distributed by Ashburton Investments. There is, however, no insurance risk associated with these policies.

#### Year under review and focus areas

Year under review		Risk management focus areas		
0	Initiated sales of funeral policies, linked-investment policies and credit life policies under the FirstRand Life licence, previously sold by the group on Momentum Life's licence.  Launched a new policy administration system.	0	Continue to monitor incidence rates, claims ratios and business mix of funeral sales.  Enhance IT risk capabilities to support the new policy system.	

#### Organisational structure and governance

FirstRand Life is a wholly-owned subsidiary of FirstRand Insurance Holdings, which in turn is a wholly-owned subsidiary of the group. FirstRand Life is an approved long-term insurer, in terms of the Long-term Insurance Act and also an approved group entity under section 52 of the Banks Act.

FirstRand Life's board committees include an audit and risk committee, actuarial and product committee, remuneration committee and ethics and market conduct committee. The actuarial and product committee is responsible for:

- providing oversight of the product suite;
- approving new products; and
- governance and challenging inputs, models and results of pricing and valuations.

To ensure consistency with the rest of the group, there are common members of the FirstRand Life and FirstRand Insurance Holdings boards and audit and risk committees with the group committees. Relevant group and FNB committees have oversight of and receive feedback from the appropriate FirstRand Life committees.

### Assessment and management

The assessment and management of insurance risk is influenced by the frequency and severity of claims, especially if actual benefits paid are greater than originally estimated, and the subsequent impact on estimated long term claims.

FirstRand Life manages the insurance risk of its funeral and credit life policies through monitoring incidence rates, claims ratios and business mix as the policies are not underwritten, and pricing is flat. Any other risk policies sold to a different target market will be underwritten. This will allow underwriting limits and risk-based pricing to be applied to manage the insurance risk. There is also a reinsurance agreement in place to manage catastrophe risk.

Rigorous and proactive risk management processes to ensure sound product design and accurate pricing include:

- independent model validation;
- challenging assumptions, methodologies and results;
- debating and challenging design, relevance, target market, market competitiveness and treating customers fairly;
- identifying potential risks;
- monitoring business mix and mortality risk of new business; and
- thoroughly review policy terms and conditions.



# **OPERATIONAL RISK**

#### INTRODUCTION AND OBJECTIVES

Operational risk is defined as the risk of loss resulting from inadequate or failed internal processes, people, or systems, or from external events.

The group continuously evaluates and enhances existing frameworks, policies, methodologies, processes, standards, systems and infrastructure to ensure that the operational risk management practices are practical, adequate, effective, adaptable and in line with regulatory developments and emerging best practice.

#### OPERATIONAL RISK OBJECTIVES AND PROGRAMME

# **KEY OBJECTIVES**

The group's objective is to focus on building an effective and forward-looking operational risk management programme. OPERATIONAL RISK
MANAGEMENT PROGRAMME
COMPONENTS

Improve control environment to support achievement of strategic objectives.

Refine operational risk appetite to deliver greater value in business decision making

Make greater use of risk information and analysis outcomes in:

- strategic decision making.

Promote forward-looking operational risk assessments.

Assess impact of operational risk-related regulatory developments and ensure compliance.

Enhance risk management, measurement, capital calculation and allocation methods.

Enhance operational efficiencies through operational risk management processes.

- operational risk management framework and policies – establishment, review and implementation;
- operational risk management tools and processes (including risk identification, assessment and quantification);
- $\ensuremath{\,\ominus\,}$  operational risk analytics and capital;
- operational risk management IT system and management information; and
- $\odot$  operational risk governance and reporting.

#### Year under review and focus areas

A number of control improvement initiatives, aimed at addressing key operational risk themes and improving operational risk maturity, took place during the year. The progress on these initiatives and the impact on the operational risk profile is tracked and reported on regularly at group level through the management and risk governance process and is also considered as part of the operational risk appetite setting and risk scenario processes.

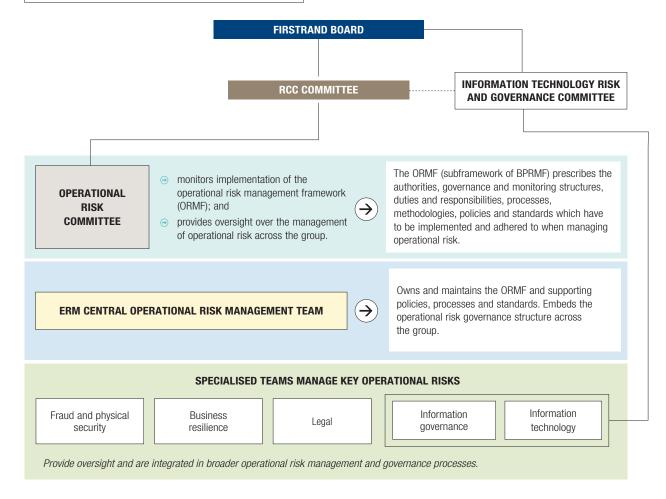
The principal operational risks currently facing the group are:

- commercial and violent crime (including internal fraud);
- information security risk (risk of loss or theft of information), given the growing sophistication of cyberattacks locally and globally;
- business disruption due to external factors and the associated impact on operations; and
- execution, delivery and process management risk (the risk of process weaknesses and control deficiencies) as the business continues to grow and evolve.

Yea	r under review	Ris	k management focus areas
0	Introduced key risk drivers to refine scenario analysis and refined linkages between scenarios and risk mitigation plans.	0	Enhance the quality and coverage of process-based risk and control identification and assessments.
0	Refined actions for compliance with the Basel principles for risk data aggregation and reporting and introduced minimum operational risk data quality control standards.	٥	Refine operational risk appetite to deliver greater value in decision-making.
0	Formalised contingency plans to manage business resilience risks	•	Enhance the use of operational risk management information and analysis.
	associated with potential national water and electricity supply shortages.	0	Embed and automate key risk drivers in the application of risk assessment and management tools.
0	Reviewed key outsourcing arrangements to manage associated operational risks.	٥	Address gaps relating to Basel principles for risk data aggregation and reporting.
0	Process automation projects continued to reduce manual processes and improve controls.	0	Embed control testing as part of the responsibilities of the second line of control.
0	Power supply, management equipment and infrastructure were upgraded for key facilities with completion of planned for 2018.	0	Continue to enhance risk measurement, capital calculation and allocation methods.
0	Continued to review risk mitigation strategies to combat cybercrime to ensure that controls are adequate and effective.	0	Ongoing assessment of risk management and measurement impact (including capital) of changes to the BCBS's operational risk capital
0	Refined processes, and improved data quality and records		approach.
0	management practices.  Information governance committees established in all franchises.	0	Align IT and related frameworks with changing business models and the technology landscape.
0	Information governance committees established in all maintainess.  Information governance now forms an integral part of the group's	0	Conduct regular IT risk assessments to ensure improvement of
	overall risk management framework.		identified gaps.
		0	Improve information management capabilities and the control environment, and roll out awareness programmes on records management, data quality and data privacy management.



## ORGANISATIONAL STRUCTURE AND GOVERNANCE



#### MEASUREMENT OF OPERATIONAL RISK

#### **Basel** approaches

FirstRand applies the advanced measurement approach (AMA) for its domestic operations. Offshore subsidiaries and operations continue to use the standardised approach (TSA) for operational risk and all previously unregulated entities that now form part of FRIHL use the basic indicator approach (BIA). FirstRand continuously assesses the feasibility of migrating TSA and BIA entities to AMA (subject to internal and regulatory constraints).

Under **AMA**, FirstRand uses a sophisticated statistical model for the calculation of capital requirements, which enables a more accurate risk-based measure of capital for business units on AMA. Operational risk scenarios (covering key risks that, although low in probability, may result in severe losses) and internal loss data are direct inputs into this model.

Scenarios are derived through an extensive analysis of the group's operational risks in consultation with business and risk experts from across the group. Scenarios are cross-referenced to external loss data, internal losses, key risk indicators, process-based risk and control identification and assessments, and other pertinent information about relevant risk exposures. To ensure ongoing accuracy of risk and capital assessments, all scenarios are reviewed, supplemented and/or updated semi-annually, as appropriate.

The loss data used for risk measurement, management and capital calculations are collected for all seven Basel event types across various internal business lines. Data collection is the responsibility of business units and is overseen by the operational risk management team in ERM.

The modelled operational risk scenarios are combined with modelled loss data in a simulation model to derive the annual, aggregate distribution of operational risk losses. Basel Pillar 1 minimum capital requirements are then calculated (for the group and each franchise) as the operational VaR at the 99.9<sup>th</sup> percentile of the aggregate loss distribution, excluding the effects of insurance, expected losses and correlation/diversification.

Capital requirements are calculated for each franchise using the AMA capital model and then allocated to legal entities in the group based on gross income contribution ratios. This split of capital between legal entities is required for internal capital allocation, regulatory reporting and performance measurement purposes.

**TSA** and **BIA** capital calculations are based on a multiplication factor applied to gross income, as specified by Basel and SARB regulations. These capital calculations and allocations do not make use of any risk-based information.

Business practices continuously evolve and the operational risk control environment is, therefore, constantly changing to reflect the underlying risk profile. The assessment of the operational risk profile and exposures and associated capital requirements take the following into account:

- changes in the operational risk profile, as measured by the various operational risk tools;
- material effects of expansion into new markets, new or substantially changed products or activities as well as the closure of existing operations;
- changes in the control environment the group targets a continuous improvement in the control environment, but deterioration in effectiveness is also possible due to, for example, unforeseen increases in transaction volumes;
- changes in organisational structure resulting in the movement of businesses and/or products from one business unit to another; and
- changes in the external environment, which drives certain types of operational risk.



#### ASSESSMENT AND MANAGEMENT

#### Operational risk assessment and management tools

The group obtains assurance that the principles and standards in the operational risk management framework are being adhered to by the three lines of control model, which is integrated in operational risk management. In this model, business units own the operational risk profile as the first line of control. In the second line of control, ERM is responsible for consolidated operational risk reporting, policy ownership and facilitation, and coordination of operational risk management and governance processes. GIA, as the third line of control, provides independent assurance on the adequacy and effectiveness of operational risk management processes and practices.

In line with international best practice, a variety of tools are employed and embedded in the assessment and management of operational risk. The most relevant of these are outlined in the following chart.

#### OPERATIONAL RISK ASSESSMENT AND MANAGEMENT TOOLS

Pro	cess-based risk and control identification and assessment	Key risk indicators		
0 0 0	the risk and control assessment per product/service based on key business processes; integrated in day-to-day business and risk management processes; and used by business and risk managers to identify and monitor key risks and assess the effectiveness of existing controls.	0 0 0	used across the group in all businesses as an early warning risk measure; highlight changing trends in exposures to specific key operational risks; and inform operational risk profiles which are reported periodically to the appropriate management and risk committees and are monitored on a continuous basis.	
Inte	Internal/external loss data		Risk scenarios	
0 0 0	capturing internal loss data is a well-entrenched discipline within the group; internal loss data reporting and analyses occur at all levels with specific focus on root causes, process analysis and corrective action; and external loss databases are used to learn from the loss experience of other companies and are also an input into the risk scenario process.	0 0 0	risk scenarios are widely used to identify and quantify low frequency, extreme loss events; senior management actively participates in the biannual reviews; and results are tabled at the appropriate risk committees and are used as input into the capital modelling process.	

FirstRand uses an integrated and reputable operational risk system in which all operational risk assessment and management tools have been automated to provide a holistic view of the group's operational risk profile.

#### Operational risk events

As operational risk cannot be avoided or mitigated entirely, frequent events resulting in small losses are expected as part of business operations (e.g. external card fraud) and are budgeted for appropriately. Business units minimise these losses through continuously monitoring and improving relevant business and control practices and processes. Operational risk events resulting in substantial losses occur much less frequently and the group strives to minimise these and limit the frequency and severity within its risk appetite levels through appropriate controls. For the year under review, operational losses were within operational risk appetite levels.

#### Operational risk management processes

A number of key risks exist for which specialised teams, frameworks, policies and processes have been established and integrated into the broader operational risk management and governance programmes as described in the next diagram.

#### KEY OPERATIONAL RISKS AND MANAGEMENT PROCESSES

#### 1. BUSINESS RESILIENCE 2. LEGAL RISK 3. IT RISK Operations should be resilient to Protection of information systems Creation and ongoing management severe disruptions from internal of contractual relationships. against unauthorised access, destruction, modification and use. failures or external events. Management of disputes. Management Business continuity strategies ⊕ Ensure confidentiality, availability Protection and enforcement of include regular review of business and integrity of systems that property rights (including continuity plans (including disaster maintain, process and disseminate intellectual property). this information. recovery plans) and testing. Account for the impact of change Disruptions or incidents are in legislation or decisions by the assessed and reported to the courts. relevant risk stakeholders Business resilience steering Compliance with legislation Information technology risk and committee (a subcommittee of the managed by RRM. governance committee (board operational risk committee). committee). → Legal risk committee Practices are documented in the (subcommittee of operational risk IT risk management framework and information security policy. business resilience policy and standards. Legal risk management framework. 4. INFORMATION GOVERNANCE **5. FRAUD AND SECURITY RISK** 6. RISK INSURANCE Information is a valuable asset. Overs internal (staff) and Structured insurance risk financing external fraud. programme in place for material → Focus on quality and protection of losses from first-party risks. information against unauthorised Contain external fraud losses with Management access, destruction, modification, enhanced controls and introduction Insurance refined through risk use and disclosure. of improved real-time detection profile assessment, change in Ensure confidentiality, availability, models group strategy or markets. integrity, sensitivity of and Mitigate the growing cybercrime Cover for professional indemnity, accountability for all information. threat with measures to improve directors' and officers' liability, crime, public and general liability, resilience against cyberattacks. assets, etc. Information governance committee → Fraud risk management function Cover through FirstRand Insurance Services Company (FRISCOL) (the (subcommittee of the operational reporting to FNB CRO with a group group's wholly-owned first-party risk committee). mandate. insurance company). Information governance framework Fraud risk management framework. and acceptable use of information resources policy.

#### Risk insurance

The group has a structured insurance risk financing programme in place, which has been developed over many years, to protect the group against unexpected material losses arising from non-trading risks. The programme is designed, where appropriate, to complement the risk management strategy to protect against the identified risks which can affect the group's financial performance or position and, therefore, negatively impact shareholder value.

The insurance risk programme is continuously refined through ongoing assessment of changing risk profiles, organisational strategy and growth, and monitoring international insurance markets. The levels and extent of insurance cover is reviewed and benchmarked annually.

The group's insurance-buying philosophy is to self-insure as much as is economically viable in line with its risk appetite and to only protect itself against catastrophic risks through the use of third-party insurance providers. Accordingly, the majority of cover is placed into the group's whollyowned, first-party, dedicated insurance company, FRISCOL. This captive insurer retains the expected loss exposure and supplements this with risk transfer for catastrophic risks. All cover on the main programme is placed with reinsurers with a minimum credit rating of A-.

The insurance programme includes, *inter alia*, cover for operational risk exposures such as professional indemnity, directors' and officers' liability, crime, public and general liability, assets, etc. This protection extends across the group and into the subsidiaries in the rest of Africa. This results in effective risk financing and the extraction of economies of scale benefits for the group. The group does not consider insurance as a mitigant in the calculation of capital for operational risk purposes.



## OTHER RISKS

#### STRATEGIC RISK

Any business runs the risk of choosing an inappropriate strategy or failing to execute its strategy appropriately. The group aims to minimise this risk in the normal course of business.

Risk to current or prospective earnings arising from inappropriate business decisions or improper implementation of such decisions.

Strategic risk is not a readily quantifiable risk and not a risk that a company can or should hold a protective capital buffer against. The development and execution of business level strategy is the responsibility of the strategic executive committee and the individual business areas, subject to approval by the board. This includes the approval of any subsequent material changes to strategic plans, budgets, acquisitions, significant equity investments and new strategic alliances.

Business unit and group executive management, as well as Group Treasury and ERM review the external environment, industry trends, potential emerging risk factors, competitor actions and regulatory changes as part of the strategic planning process. Through this review, as well as regular scenario planning and stress testing exercises, the risk to earnings and the level of potential business risks faced are assessed. Reports on results of these exercises are discussed at various business, risk and board committees and are ultimately taken into account in the setting of risk appetite and potential revisions to existing strategic plans.

### **BUSINESS RISK**

Risk to earnings, capital and sustainability from potential changes in the business environment as well as planned expansion activities.

#### Business risk stems from:

- the potential inability to generate sufficient volumes to maintain a positive net operating margin in a volatile business environment (resulting in severe earnings volatility) that is unrelated to other known, material and capitalised risk types; and
- the potential inability to execute on strategy according to the business plan in order to remain sustainable and well capitalised on a forward-looking basis and relates to large investments, mergers and acquisitions.

The group's objective is to develop and maintain a portfolio that delivers sustainable earnings and minimises the chance of adverse, unexpected outcomes

#### BUSINESS RISK COMPONENTS AND RISK DRIVERS

Components

#### **VOLUME AND MARGIN RISK**

### **EXPANSION ACTIVITIES**

Relates to the group's ability to generate sufficient levels of revenue to offset its costs.

Risk of downside deviation from planned expansion activities, where franchise value is lower than expected due to lower revenues or higher costs than expected.



Risk drivers

## Direct risk drivers:

- competitive environment risk;
- economic environment; technological progress;
- new products;inability to hedge risk;
- behavioural risk;
- new markets; and
- assumption risk;

## Indirect risk drivers:

- reputational risk;
- → internal risk management decisions and organisational design; and
- political risk.

In managing the volume and margin changes component, the group performs trend analyses of its revenue volatility, pre-tax operating margin, cost-to-income ratio and the fixed-to-total cost ratio, and targets a portfolio of low earnings volatility, high-margin activities with a variable cost structure. The risk inherent in expansion activities is managed through the execution of a robust business plan approval process. This includes in-depth scrutiny of business plans, understanding and documentation of risk drivers and root causes that could lead to additional capital injections, as well as frequent reporting of execution variance against plan.

For economic capital purposes, business risk is the internal risk measure to capture unexpected losses over a one-year time horizon from the remaining material risks not captured by Pillar 1 and 2. Volume and margin changes, as well as expansion activities are considered part of strategic planning and assessed through the group's management and governance processes, and incorporated in the annual ICAAP submission.



#### REPUTATIONAL RISK

The risk of reputational damage due to compliance failures, pending litigations, underperformance or negative media coverage.

The group's business is inherently built on trust and close relationships with its clients. Its reputation is, therefore, built on the way in which it conducts business and the group protects its reputation by managing and controlling risks across its operations. Reputational risk can arise from environmental and social issues or as a consequence of financial or operational risk events. The group seeks to avoid large risk concentrations by establishing a risk profile that is balanced within and across risk types. Potential reputational risks are also taken into account as part of stress testing exercises. The group aims to establish a risk and earnings profile within the constraints of its risk appetite, and seeks to limit potential stress losses from credit, market, liquidity or operational risks that may otherwise introduce an undesirable degree of volatility in its financial results and adversely affect its reputation.

#### **ENVIRONMENTAL AND SOCIAL RISK**

Relates to environmental and social issues which impact the group's ability to sustainably implement business strategy.

FirstRand has formal governance processes for managing environmental and social risk. These include detailed environmental and social risk analyses (ESRA). Environmental and social risk management processes are formally integrated into the group's credit risk governance process, which is supported by enterprise-wide social and ethics committee structures.

FirstRand is an Equator Principles (EP) finance institution. EP forms part of ESRA and is a specific framework for determining, assessing and managing environmental and social risk in affected transactions. The group's report on the ESRA process and EP transactions is available on the group's website, www.firstrand.co.za/sustainability/pages/environment-programme.aspx.

#### **MODEL RISK**

The use of models causes model risk, which is the potential for adverse consequences from decisions based on incorrect or misused model outputs and reports. Model risk can lead to financial losses, poor business and strategic decision making, or damage to the group's reputation.

The group recognises two types of model risk:

Intrinsic model risk – the risk inherent in the modelling process, which cannot be directly controlled, but can be appropriately mitigated. Examples of intrinsic model risk drivers include model complexity, availability of data and model materiality.

**Incremental model risk** – the risk caused by inadequate internal practices and processes, which can be actively mitigated through quality model documentation, robust governance processes and a quality model implementation environment.

A model is defined as a quantitative method, system, or approach that applies statistical, economic, financial, or mathematical theories, techniques and assumptions to process input data into quantitative estimates. A model generally consists of three components:

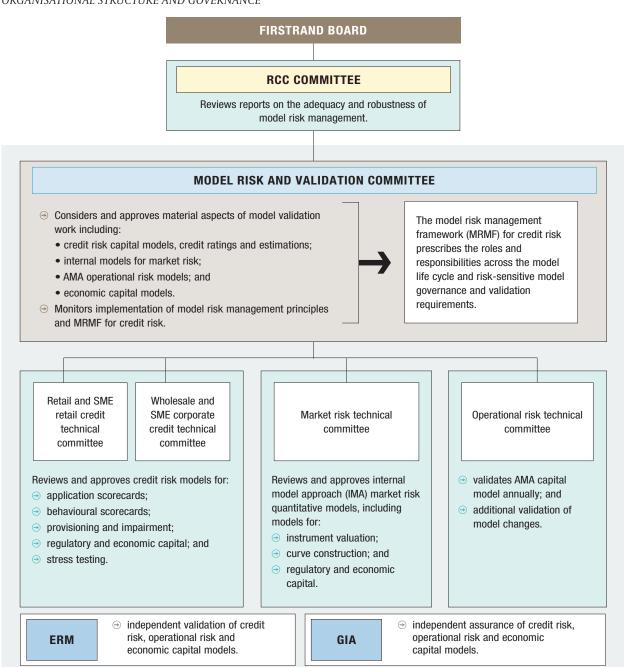
- an information input component, which delivers assumptions and data to the model;
- a processing component, which transforms inputs into estimates; and
- a reporting component, which translates the estimates into useful business information.

Model risk exists as models may have fundamental errors and produce inaccurate outputs when assessed against the design objective and intended business use. Model risk may also arise as a result of model results being used incorrectly or inappropriately.

### Year under review and focus areas

Yea	Year under review		Risk management focus areas	
0 0	- Developed a model new management manner on the dream new		Rollout of model risk management software to credit, operational and market risk models.	
0	Developed measurement and monitoring methodology for model risk.  Refined the quantification of model risk economic capital.	0	Continue to track improvements in model risk management.  Embed model risk measurement in model governance and validation process.	
		0	Continue to refine the model risk economic capital calculation.	

#### ORGANISATIONAL STRUCTURE AND GOVERNANCE





### Assessment and management

Model risk increases with greater model complexity, higher uncertainty about inputs and assumptions, broader use and the larger the potential impact. The risks from individual models, and in aggregate, are assessed and managed. Aggregated model risk is affected by interaction and dependencies among models, reliance on common assumptions, data or methodologies and any other factors that could adversely affect several models and their outputs at the same time. As an understanding of the source and magnitude of model risk is key to the effective management of this risk, model risk management is integrated into the group's risk management processes.

Various principles are applied in the model risk management process. Risk owners assess which of these principles are applicable to a specific model and determine the levels of materiality for model evaluation and validation.

#### MODEL RISK MANAGEMENT PRINCIPLES

Data and systems	Development	Testing and validation	Monitoring	Governance
<ul> <li>⇒ use systems that ensure data and reporting integrity;</li> <li>⇒ use suitable data;</li> <li>⇒ maintain master list of field data;</li> <li>⇒ implement appropriate system controls; and</li> <li>⇒ assess data quality.</li> </ul>	<ul> <li>document model design, theory and logic which is supported by published research and industry practice;</li> <li>expert challenge of methods and assumptions; and</li> <li>ensure appropriate conservatism.</li> </ul>	<ul> <li>provide independent validation;</li> <li>review documentation, empirical evidence, model construction assumptions and data;</li> <li>perform sensitivity analysis;</li> <li>perform stress testing; and</li> <li>obtain independent assurance from GIA.</li> </ul>	<ul> <li>perform regular stress testing and sensitivity analysis;</li> <li>perform quantitative outcome analysis;</li> <li>perform back testing and establish early warning metrics;</li> <li>assess model limitations;</li> <li>set and test error thresholds; and</li> <li>test model validity.</li> </ul>	<ul> <li>provided by three lines of control;</li> <li>approve model risk; management framework;</li> <li>ensure effective management;</li> <li>ensure approval committees with adequate skills; and</li> <li>ensure appropriate documentation.</li> </ul>

#### Model risk measurement

A scorecard with risk factors based on model risk management principles is used for model risk measurement and quantification of capital. The scorecard is tailored for each risk type by applying risk-type specific weightings to each scorecard dimension and by refining the considerations for each dimension specific to each risk type. The risk ratings produced by the scorecard are low, medium or high risk and determine a judgemental capital add-on multiplier applied to regulatory capital to derive the economic capital requirement.

#### **REGULATORY RISK**

Regulatory risk refers to the risk of statutory or regulatory sanction or material financial loss or reputational damage as a result of failure to comply with any applicable laws, regulations or supervisory requirements.

The group expects ethical behaviour that contributes to the overall objective of prudent regulatory compliance and risk management by striving to observe both the spirit and the letter of the law. Management's ownership and accountability contributes to this through providing responsible financial products and services, and treating customers fairly. The compliance culture also embraces broader standards of integrity and ethical conduct which affects all employees.

### RRM OBJECTIVE AND APPROACH

### **OBJECTIVE**

Ensure business practices, policies, frameworks and approaches across the group are consistent with applicable laws and that regulatory risks are identified and proactively managed.



#### APPROACH

- Maintain an effective and efficient regulatory risk management framework with sufficient operational capacity to assess financial products and services against fair market conduct principles, and promote and oversee compliance with legislative and best practice requirements.
- Training of staff ensures a high level of understanding and awareness of applicable legal and regulatory frameworks pertaining to the group's business activities.

Compliance with laws and regulations applicable to its operations is critical to the group as non-compliance may have potentially serious consequences and lead to both civil and criminal liability, including penalties, claims for loss and damages, or restrictions imposed by regulatory authorities. Applicable laws and regulations include:

- Banks Act, 1990 and related Regulations;
- Competition Act, 1998;
- Collective Investment Schemes Control Act, 2002;
- Financial Intelligence Centre (FIC) Act, 2001;
- Long-term Insurance Act, 1998;
- Short-term Insurance Act, 1998;
- Financial Advisory and Intermediary Services Act, 2002;
- National Credit Act, 2005;
- Onsumer Protection Act, 2008;
- JSE rules and directives;
- ◆ Financial Markets Act, 2012;
- Foreign Account Tax Compliance Act; and
- Protection of Personal Information Act, 2013.

Effective regulatory risk management promotes compliance with applicable laws, regulations and related requirements as a business outcome and supports integration into business processes. RRM assists senior management in effectively and expeditiously resolving identified compliance issues. RRM interacts and cooperates closely with other group and franchise functions, as well as with the group's various regulatory authorities.



#### Year under review and focus areas

#### Year under review

- Deliberations on the FIC Amendment Bill have been concluded and were referred for approval in May 2016.
- Public comment on the Financial Sector Regulation Bill was concluded. The bill is currently in the parliamentary process.
- The amended Regulations relating to Banks became effective from 1 July 2016.
- Public comment on the Financial Markets Amendment Bill will be finalised by the end of August 2016 whereafter it is expected that the bill, together with ministerial regulations, will be tabled.

#### Risk management focus areas

- Continue to cooperate with regulatory authorities and other stakeholders.
- Continue to make significant investments in people, systems and processes to manage risks emanating from the large number of new local and international regulatory requirements.
- Ongoing investment in systems, processes and resources to ensure compliance with anti-money laundering and combating the financing of terrorism (AML/CFT) legislation.
- Ongoing focus on remediation actions required in respect of identified regulatory risk management matters, including matters identified by the SARB during its AML/CFT inspection and AML/CFT compliance assessment by regulators in other jurisdictions such as Namibia and Botswana
- Continue to work closely with regulators and industry on the authenticated collections project, which main objective is to prevent debit order abuse.

#### Banking legislation

As a member of the BCBS, the SARB is committed to ensuring that the South African regulatory and legislative framework relating to the regulation and supervision of banks and banking groups remains fully compliant with international standards and market best practice. Accordingly, and in order to further strengthen and enhance South Africa's regulatory framework, a large volume of regulatory changes are being implemented and/or phased in, which usually results in amendments to the Regulations, such as the amendments which were published in Government Gazette No. 40002 of 20 May 2016.

In addition to the above, various other documents, frameworks and requirements that impact materially on the regulation and supervision of banks and banking groups, are being issued by the international standard-setting bodies on an ongoing basis, resulting in revised, additional and/or new regulatory requirements. These, together with the Basel III phase-in arrangements, largely resulted in the recent large volume of prudential regulatory changes and new and/or amended requirements and standards.

#### Twin peaks

Twin peaks refers to the government policy paper which was published in February 2011, entitled *A safer financial sector to serve South Africa better.* The paper, commonly referred to as the *Red Book*, sets out initial proposals to reform South Africa's financial sector regulatory system and provides information on a wide-ranging set of reforms and proposals relating to, amongst others, the implementation of a twin peaks model of financial regulation in South Africa. National Treasury published a revised draft of the Financial Sector Regulation Bill and a discussion document *Treating Customers Fairly in the Financial Sector: A Market Conduct Policy Framework for South Africa.* The second draft of the Financial Sector Regulation Bill was published in March 2015. Public comment on the Financial Sector Regulation Bill was subsequently concluded and the bill is currently in the parliamentary process.

The twin peaks approach will place equal focus on prudential and market conduct supervision with a separate focus on financial stability. In order to minimise the risks associated with the change, a phased-in approach will be followed for the implementation of the twin peaks system of financial regulation in South Africa. The group continues to work closely with regulators. The policy priorities identified in order to reform the financial sector, desired outcomes of the approach and phased in implementation are shown in the following diagram.

### TWIN PEAKS POLICY PRIORITIES AND IMPLEMENTATION

POLICY PRIORITIES	TWIN PEAKS IMPLEMENTATION
Financial stability	Phase 1
Consumer protection and market conduct	enactment of the Financial Sector
Expanding access to financial services through inclusion	Regulation Bill; and  → establishment of the required regulatory
Combating financial crime	architecture.
	$\bigcirc$
DESIRED OUTCOMES	Phone 0
Financial systemic stability	Phase 2
Strengthened financial regulatory system and structures	<ul> <li>establishment of a target framework,</li> <li>which will include the development of the</li> <li>required legal frameworks for prudential</li> </ul>
Sound market conduct, micro- and macro-prudential regulation	and market conduct regulation; and  introduction of new legislation and
Strengthened operational independence, governance and accountability of regulators	licencing procedures, where required.



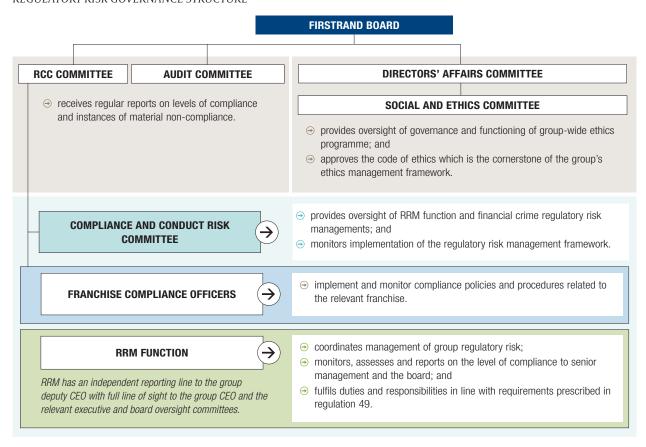
Other regulatory developments and focus areas during the year are described in the following diagram.

## $REGULATORY\,DEVELOPMENTS\,AND\,RRM\,FOCUS\,AREAS$

PROTECTION OF PERSONAL Information act (POPI)	AML AND CFT MEASURES	MARKET CONDUCT
<ul> <li>PoPI provides for privacy and protection of personal information held by the group in respect of employees, customers, suppliers and third parties.</li> <li>The effective date is yet to be announced.</li> <li>In the interim, the group continues to devote attention and resources to security safeguards, processing and purpose specification of personal information, quality of personal information held, customer notification and consent, third-party processors of personal information and complaints handling.</li> </ul>	<ul> <li>The group's objective is to ensure compliance with the provisions of AML/CFT legislation and other requirements pertaining thereto.</li> <li>The Financial Intelligence Centre Act (FICA) will be amended to align more closely with revised Financial Action Task Force recommendations.</li> <li>The Financial Intelligence Centre Amendment Bill was submitted for approval in May 2016.</li> <li>Ongoing focus on remediation action as required in respect of identified AML/CFT matters.</li> </ul>	<ul> <li>Participation in the public commentary process of proposed market conduct legislation, which includes the retail distribution review and other proposals.</li> <li>Other matters which will ultimately inform the future market conduct regulatory landscape include proposed amendments to the fit-and-proper rules prescribed in terms of the FAIS Act, 2002 and new product definitions tabled in the Insurance Laws Amendment Bill, 2015.</li> </ul>
NATIONAL ENVIRONMENTAL MANAGEMENT: WASTE ACT	GROUP ETHICS OFFICE	THE NATIONAL CREDIT AMENDMENT ACT (THE AMENDMENT ACT)
<ul> <li>The group is participating in relevant industry forums focusing on problematic areas relating to certain provisions of Part 8 of the Waste Act, 2008.</li> <li>The group adjusted its environmental and social risk analysis processes relating to contaminated land and raised extensive awareness in the credit community to mitigate the abovementioned problematic areas.</li> </ul>	<ul> <li>Continuously reinforces a culture of integrity and ethical business practices.</li> <li>Maintains focus on the promotion of responsible business and market conduct, including treating customers fairly principles.</li> <li>Provides training on whistle-blowing, conflict of interest avoidance, anti-bribery and corruption.</li> <li>Conveys market conduct regulations and related industry best practice to franchises and business units.</li> </ul>	<ul> <li>The Amendment Act came into effect on 13 March 2015.</li> <li>Governance arrangements aligned to the revised requirements have been implemented.</li> <li>Current focus includes embedding affordability assessments and preparation for implementation of published pricing changes.</li> </ul>

## Organisational structure and governance

REGULATORY RISK GOVERNANCE STRUCTURE





RRM's board mandate is to ensure full compliance with statutes and regulations. To achieve this, RRM has implemented appropriate structures, policies, processes and procedures to identify regulatory and supervisory risks. RRM monitors the management of these risks and reports on the level of compliance to the board and SARB. These include:

- risk identification through documenting which laws, regulations and supervisory requirements are applicable to the group;
- risk measurement through the development of risk management plans:
- risk monitoring and review of remedial actions;
- risk reporting; and
- providing advice on compliance-related matters.

Although independent of other risk management and governance functions, the RRM function works closely with the group's business units, the Public Policy and Regulatory Affairs Office, GIA, ERM, external auditors, internal and external legal advisors, and the Company Secretary's Office to ensure effective functioning of compliance processes.

### **Public Policy and Regulatory Affairs Office**

In line with the responsibilities of FirstRand as the group's holding company, the Public Policy and Regulatory Affairs Office facilitates the process through which the group maintains an effective relationship with both local and international regulatory authorities for its regulated subsidiaries and branches. The office also provides the group with a central point of engagement, representation and coordination in respect of relevant regulatory and public policy-related matters at a strategic level. This function is differentiated from the existing and continuing engagement with regulators at an operational level, i.e. regulatory reporting, compliance and audit. Its main objective is to ensure that group and franchise executives are aware of key developments relating to public policy, legislation and regulation pertinent to the group's business activities. It also supports executives in developing the group's position on issues pertaining to government policy, proposed and existing legislation and regulation.

This office reports directly to the group deputy CEO and indirectly, through designated subcommittees, to the board and maintains close working relationships with RRM, ERM and business units where specific technical expertise resides.

#### **CONDUCT RISK**

Conduct risk arises when employees and directors behave in a manner that would not be considered fair to other employees, financial market participants, clients or other societal stakeholders.

Governments increasingly recognise the importance of ethical conduct in banking and, as a result, develop regulation to enforce standards and hold business leaders responsible for their actions.

#### Introduction and objectives

The group endorses a risk philosophy which takes cognisance of the importance of ethical conduct. If an organisation's culture is compromised or it is not competently managed, compliance controls will be less effective and become a source of unnecessary cost without the benefits of risk mitigation.

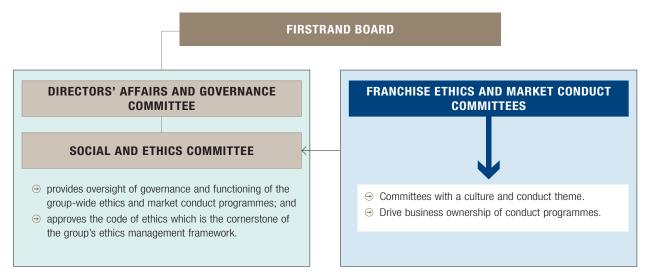
Leadership is required to integrate ethics and conduct risk objectives, especially in respect of market conduct, into commercial strategies. For this reason, strategy and leadership and the intersect with culture and conduct are continuously evaluated.

#### Year under review and focus areas

The FirstRand social and ethics committee oversees a culture and conduct framework with the following focus areas addressed during the year:

Year under review		Risk management focus areas		
0	Reviewed the outcomes of several culture risk assessments with a focus on the operations outside of South Africa.	0 0	Review market conduct maturity and associated platform developments.  Monitor and evaluate the group's social value proposition.	
0	Considered the group's environmental, social and governance disclosures, including those relating to Equator Principles and carbon emissions.	0	Focus on emerging culture risks and appropriate responses to increasing regulatory requirements.  Oversee implementation of business conduct programme with a focus	
0	Reviewed culture and conduct risk in specialised areas of FNB.			on emerging businesses in the rest of Africa.
0	Oversaw clients of interest with adverse news, origination, deliberation and remediation processes.			

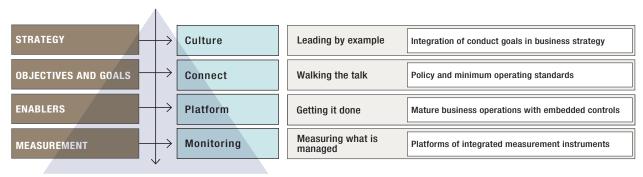
#### ORGANISATIONAL STRUCTURE AND GOVERNANCE



### Assessment and management

Conduct programmes are integrated in the group with a holistic management approach connecting leadership, business operations and the control environment.

## CONDUCT RISK MANAGEMENT APPROACH



In support of a sound risk culture, the group manages three conduct risk programmes, with appropriate levels of staff training and communication to ensure responsible conduct. The focus areas of each of the programmes are outlined in the following table.

Business conduct programmes		Market conduct programmes			Environmental conduct programmes	
safe verso and	licts of interest management; whistle-blowing; onal account trading, and bribery; uption prevention.	0 0 0	retail market conduct (treating customers fairly); ethical trading in financial markets (OTC derivatives); and responsible wholesale banking practice.	0 0 0	environmental and social risk analysis; environmental footprint reduction (electricity, waste and water); and green financing.	



## REMUNERATION AND COMPENSATION

FirstRand's compensation policies and practices observe international best practice and comply with the requirements of the Banks Act, 1990 (Act No. 94 of 1990) and FSB Principles for Sound Compensation Practices. In accordance with the requirements of regulation 43 of the Regulations, full disclosure of the group's compensation policies, practices and performance are included in the remuneration committee report in its annual integrated report, which is published on FirstRand's website, www.firstrand.co.za.

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OV1 Overview of RWA	<b>√</b>		39
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LI1 Differences between accounting and regulatory scope of consolidation	✓		28
LI2 Sources of differences between regulatory exposures and carrying values in financial statements	✓		30
LIA Explanation of differences between accounting and regulatory exposure amounts	✓		27
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CRB Additional disclosure related to credit quality of assets	✓		*
CRB Exposure by geographical, industry and residual maturity	✓		65
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CR5 Standardised approach exposure by asset class and risk weight	<b>√</b>		92
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Orbuit flore allalyolo		negulation 45	94

<sup>\*</sup> Refer to applicable section.



	Pillar 3	Banks Act regulation/	
Section and table	standard	directive	Page
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CCR2 CVA capital charge	✓		101
CCR3 CCR exposure by regulatory portfolio and risk weights (standardised approach)	✓		101
CCR4 IRB CCR exposure by portfolio and PD scale	<b>✓</b>		102
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SEC3 Securitisation exposure and associated capital requirements (originator or sponsor)	<i>✓</i>		118
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<sup>\*</sup> Refer to applicable section.

## **DEFINITIONS**

Additional Tier 1 capital (AT1)	NCNR preference share capital plus qualifying capital instruments issued out of fully consolidated subsidiaries to third parties less specified regulatory deductions.
Business performance and risk management framework (BPRMF)	Highlights the key principles and guidelines applied with respect to the effective management of risk across FirstRand Limited (FirstRand or the group) in the execution of strategy.
Capital adequacy ratio (CAR)	Capital divided by RWA.
Common Equity Tier 1 capital (CET1)	Tier 1 less Additional Tier 1 capital.
Common Equity Tier 1 capital	Share capital and premium plus accumulated comprehensive income and reserves plus qualifying capital instruments issued out of fully consolidated subsidiaries to third parties less specific regulatory deductions.
Credit loss ratio	Total impairment charge per the income statement expressed as a percentage of average advances (average between the opening and closing balance for the year).
Dividend cover	Normalised earnings per share divided by dividend per share.
Exposure at default (EAD)	Gross exposure of a facility upon default of a counterparty.
Loan-to-deposit ratio	Average advances expressed as a percentage of average deposits.
Loss given default (LGD)	Economic loss that will be suffered on an exposure following default of the counterparty, expressed as a percentage of the amount outstanding at the time of default.
Net income after capital charge (NIACC)	Normalised earnings less the cost of equity multiplied by the average ordinary shareholders' equity and reserves.
Probability of default (PD)	Probability that a counterparty will default within the next year (considering the ability and willingness of the counterparty to repay).
Return on assets (ROA)	Normalised earnings divided by average assets.
Return on equity (ROE)	Normalised earnings divided by average normalised ordinary shareholders equity.
Risk weighted assets (RWA)	Prescribed risk weightings relative to the credit risk of counterparties, operational risk, market risk, equity investment risk and other risk multiplied by on- and off-balance sheet assets.
Tier 1 ratio	Tier 1 capital divided by RWA.
Tier 1 capital	Common Equity Tier 1 capital plus AT 1 capital.
Tier 2 capital	Qualifying subordinated debt instruments plus qualifying capital instruments issued out of fully consolidated subsidiaries to third parties plus general provisions for entities on the standardised approach less specified regulatory deductions.
Total qualifying capital and reserves	Tier 1 capital plus Tier 2 capital.

# **ABBREVIATIONS**

AIRB	Advanced internal ratings based approach	
AMA	Advanced measurement approach	
AVC	Asset value correlation	
BIA	Basic indicator approach	
BPRMF	Business performance and risk management framework	
CVA	Credit value adjustment	
ICR	Individual capital requirement	
LCR	Liquidity coverage ratio	
NOFP	Net open forward position in foreign exchange	
NSFR	Net stable funding ratio	
TSA	The standardised approach	
VaR	Value-at-Risk	





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