FIRSTRAND

BASEL PILLAR 3 DISCLOSURE

for the year ended 30 June 2017

'17

contents

FIRSTRAND

1966/010753/06
Certain entities within the FirstRand group are Authorised Financial Services and Credit Providers. This report is available on the group's website:
www.firstrand.co.za

Email questions to
investor.relations@firstrand.co.za

OVERVIEW OF THE FIRSTRAND GROUP

FirstRand's portfolio of franchises comprises FNB, RMB, WesBank and Ashburton Investments and provides a universal set of transactional, lending, investment and insurance products and services. The FCC franchise represents group-wide functions.

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), BCBS 309 published in January 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*Regulations relating to Banks* (Regulations), issued in terms of the Banks Act, 1990 (Act No. 94 of 1990), where not superseded by the revised Pillar 3 disclosure requirements.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 of FirstRand. These are highlighted by reference to the appropriate entity, where necessary. This report has been internally verified through the group's governance processes, in line with the group's external communication and disclosure policy.

The external communication and 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.

SIMPLIFIED GROUP AND SHAREHOLDING STRUCTURE

- Remgro Limited: 3.9% (FirstRand); 28.2% (RMB Holdings Limited)
- Directors: 9.9% (RMB Holdings Limited)
- Royal Bafokeng Holdings (Pty) Ltd: 15.0% (RMB Holdings Limited)
- RMB Holdings Limited: 34.1% (FirstRand)
- BEE partners: 5.2% (FirstRand)

FIRSTRAND

LISTED HOLDING COMPANY (FIRSTRAND LIMITED, JSE: FSR)

100% FirstRand Bank Limited – Banking

- First National Bank[1]
- Rand Merchant Bank[1]
- WesBank[1]
- FirstRand Bank India[2]
- FirstRand Bank London[2,*]
- FirstRand Bank Guernsey[2,**]
- FirstRand Bank Kenya[3]
- FirstRand Bank Angola[3]
- FirstRand Bank Dubai[3]
- FirstRand Bank Shanghai[3]

100% FirstRand EMA Holdings (Pty) Ltd (FREMA) – Africa and emerging markets

- **58%** FNB Namibia
- **69%** FNB Botswana
- **100%** FNB Swaziland
- **90%** FNB Mozambique
- **100%** FNB Zambia
- **100%** FNB Lesotho
- **100%** FNB Tanzania
- **100%** First National Bank Ghana
- **100%** RMB Nigeria
- **100%** FirstRand International – Mauritius

100% FirstRand Investment Holdings (Pty) Ltd (FRIHL) – Other activities

- **96%** RMB Private Equity Holdings
- **93%** RMB Private Equity
- **100%** RMB Securities
- **50%** RMB Morgan Stanley
- **100%** FNB Securities
- **100%** RentWorks
- **100%** Direct Axis
- **81%** MotoVantage
- **100%** FirstRand International – Guernsey
- **100%** RMB Australia Holdings
- **100%** FirstRand Securities
- **48%** NewDisc

100% FirstRand Investment Management Holdings Limited – Investment management

- **100%** Ashburton Fund Managers
- **100%** Ashburton Investor Services
- **100%** Ashburton Management Company (RF)
- **100%** Ashburton Investments International Holdings
- **100%** FNB CIS Management Company (RF)
- **100%** Atlantic Asset Management
- **100%** Various general partners[#]

100% FirstRand Insurance Holdings (Pty) Ltd – Insurance

- **100%** FirstRand Life Assurance
- **100%** FirstRand Insurance Services Company (FRISCOL)[†]

1. Division
2. Branch
3. Representative office
** MotoNovo Finance is a business segment of FirstRand Bank Limited (London Branch).*
*** Trading as FNB Channel Islands.*

 # Ashburton Investments has a number of general partners for fund seeding purposes – all of these entities fall under FirstRand Investment Management Holdings Limited.
† With effect from 1 July 2017.

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 the results of the managing franchise. The group's securitisations and conduits are in FRIHL.

FirstRand strategy

FirstRand's portfolio of leading financial services franchises provides a universal set of transactional, lending, investment and insurance products and services. The franchises operate in markets and segments where they can deliver competitive and differentiated client-centric value propositions, 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 an owner-manager culture combined with the disciplined allocation of financial resources.

FirstRand's strategy accommodates a broad set of growth opportunities across the entire financial services universe from a product, market, segment and geographic perspective. The group believes this will create long-term franchise value, ensure sustainable and superior returns for shareholders, within acceptable levels of volatility and maintain balance sheet strength.

Currently group earnings are tilted to its domestic market where the lending and transactional franchises have delivered sustained growth since 2010 resulting from the acquisition of a deep and loyal customer base. The group recognises the imperative to continue to protect and grow these very valuable banking franchises, but it also believes that through the utilisation of the origination capabilities and distribution networks of those franchises, it can diversify and capture a larger share of profits from savings, insurance and investment products within its existing customer base.

The growth opportunity is significant given the annual flows to other providers from FNB's customer base alone. Through the manufacture and sale of its own insurance, savings and investment products, the group will, over time, offer differentiated value propositions for customers and generate new and potentially meaningful revenue streams for the group. To date, progress looks promising and FirstRand is incrementally increasing its share of the insurance, savings and investment profit pools that exist within its own customer base. The group also continues to protect and grow its large transactional and lending franchises.

The group's strategy outside of its domestic market centres on growing its presence and offerings in nine markets in the rest of Africa where it believes it can organically build competitive advantage and scale over time. In addition, it is focusing on leveraging its current operations in the UK to create new revenue streams.

Over the past year, the group has focused on execution on the strategic framework depicted in the schematic below.

FirstRand aims to create long-term franchise value, ensure sustainable and superior returns for shareholders within acceptable levels of volatility and maintain balance sheet strength

DELIVERED THROUGH CURRENT STRATEGIES:

- Protect and grow banking franchises
- **INCREASE DIVERSIFICATION – ACTIVITY AND GEOGRAPHY**
  - Broaden financial services offering
  - Portfolio approach to the rest of Africa
  - Build a sustainable developed markets business

SUCCESS LIES IN EXECUTING ON THE FOLLOWING:

- Disciplined allocation of financial resources
- Create a platform- and franchise-neutral business model
- Drive efficiencies and manage cost base
- Cross-franchise collaboration
- Build organisational structures and develop diverse talent pools to enable execution

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

	FNB	RMB	WesBank	Ashburton Investments	FCC
Key activities	**Retail and commercial banking, and insurance**	**Corporate and investment banking**	**Instalment finance and short-term insurance (VAPS)****	**Asset management**	**Group-wide functions**
Market segments	consumer small business agricultural medium corporate public sector	financial institutions large corporates public sector	retail, commercial and corporate	retail and institutional	custodianship mandate to manage relationships with key external stakeholders ownership of key frameworks ensure group delivers on commitments to stakeholders
Products and services	transactional and deposit taking mortgage and personal loans credit and debit cards investment products insurance products (funeral, risk, credit life) card acquiring credit facilities distribution channels FNB Connect wealth and investment management*	advisory structured finance markets and structuring transactional banking and deposit taking principal investing solutions and private equity	asset-based finance full maintenance leasing personal loans value-added products and services (short-term insurance)	traditional and alternative investment solutions	
Risks	Retail and commercial credit risk Insurance risk	Corporate and counterparty credit risk Traded market risk	Retail, commercial and corporate credit risk		Interest rate risk in the banking book Funding and liquidity risk Foreign exchange risk
	Equity investment risk				
	Operational risk				
Other risks	Strategic, business, reputational, model, environmental and social, and regulatory risk				

* *With effect from 1 July 2017, the wealth and investment management business moved from Ashburton Investments to FNB.*

** *Value-added products and services.*

Risk profile

The following table provides a high-level overview of the group's risk profile in relation to risk appetite. Refer to page 22 for a detailed discussion of the group's risk appetite.

Normalised ROE 23.4% 2016: 24.0% Long-term target **18% – 22%** **Normalised earnings growth** +7% 2016: +7% Long-term target **Nominal GDP plus >0% – 3%**	The quality of the group's operating franchises' growth strategies and disciplined allocation of financial resources has over time enabled the group to deliver on its earnings growth and return targets.	*The CFO's report in the annual integrated report provides an overview of the group's financial position and performance for the year ended 30 June 2017.*

Capital adequacy 17.1% 2016: 16.9% Target **>14%** **Tier 1** 14.9% 2016: 14.6% Target **>12%** **CET1** 14.3% 2016: 13.9% Target **10% – 11%** **Leverage ratio** 8.6% 2016: 8.4% Target **>5%**	FirstRand has maintained its strong capital position and continues to focus on loss-absorbing capital. The group continues to actively manage capital composition given the grandfathering and redemption of old-style Tier 2 instruments. To this end, the group has issued R2.3 billion Basel III-compliant Tier 2 instruments in the domestic market during the year. 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 the interplay between capital and leverage. FirstRand has maintained a leverage ratio above the group's internal targets.	*For a detailed analysis of capital adequacy and leverage refer to page 34 of this report.*

Note: Capital and leverage ratios include unappropriated profits.

Liquidity coverage ratio 97% 2016: 96% Minimum requirement 80% (2016: 70%)	Liquidity buffers are actively managed via high quality, highly liquid assets that are available as protection against unexpected events or market disruptions. The group exceeds the 80% minimum liquidity coverage ratio (LCR) as set out by the BCBS with an LCR measurement of 97%. The group's high quality liquid asset (HQLA) holdings amounted to R167 billion.	*For a detailed analysis of funding and liquidity risk refer to page 44 of this report.*

Normalised NPLs		
2.41% 2016: 2.45%	Group credit loss rates increased as expected, impacted by a more challenging macroeconomic environment. Performance is acceptable and within risk appetite. Credit origination strategies are aligned to the group's macroeconomic outlook.	*For a detailed analysis of credit risk refer to page 57 of this report.*
Normalised credit loss ratio		
0.91% 2016: 0.86% Long-run average **100 – 110 bps**		

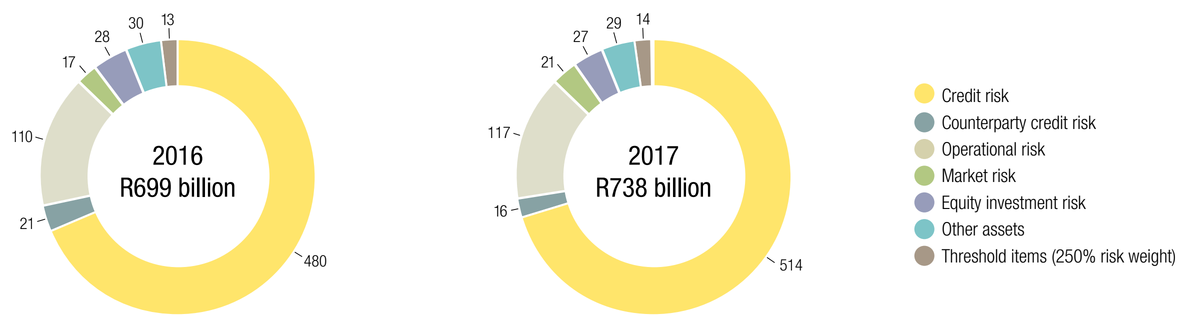
Market risk 10-day ETL		
R350 million 2016: R307 million	The interest rate risk asset class represents the most significant market risk in the trading book exposure at June 2017. The group's market risk profile remained within risk appetite.	*For a detailed analysis of market risk in the trading book refer to page 141 of this report.*

Equity investment risk exposure as % of Tier 1		
10.1% 2016: 10.5%	The year was characterised by some realisations and new investments added to the private equity portfolio. The quality of the investment portfolio remains acceptable and within risk appetite.	*For a detailed analysis of equity investment risk refer to page 158 of this report.*

NII sensitivity downward 200 bps		
-R2.1 billion 2016: -R2.3 billion	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 066 million. A similar increase in interest rates would result in an increase in projected 12-month NII of R1 366 million. The group's average endowment book was R192 billion for the year.	*For a detailed analysis of interest rate risk in the banking book refer to page 152 of this report.*
NII sensitivity upward 200 bps		
R1.4 billion 2016: R1.9 billion		

Risk weighted assets (RWA) analysis

R billion



For a detailed analysis of capital management, refer to the common disclosure templates on www.firstrand.co.za.

Current and emerging challenges

Identifying and monitoring challenges emerging in the wider operating environment and risk landscape, both domestically, in the rest of Africa and the UK, are integral to the group's approach to risk management. Challenges in the global environment are also monitored to identify possible impacts on the group's operating environment.

SOUTH AFRICA AND THE REST OF AFRICA

- Significant downward pressure on revenue growth given challenging macroeconomic conditions in South Africa.
- Effect of the sovereign rating downgrades on the macroeconomic environment and funding costs as well as risk of a further sovereign (local currency) downgrade.
- Increasing cost and scarcity of financial resources.
- Ongoing introduction of new regulations and legislation (particularly in banking activities), which could impact profitability over the medium to long term.
- Intensifying competition in banking profit pools from non-traditional competitors (specifically those with low-cost infrastructures) and insurance players.
- Increase in political risk.
- Increasing risk of protest actions and social unrest associated with deteriorating socio-economic conditions in South Africa.
- Rising regulatory and macroeconomic risks in the rest of Africa.

GLOBAL LANDSCAPE

- Rising income and wealth disparity.
- Global societal trends of deepening social and cultural polarisation, and intensifying national sentiment.
- Deteriorating job prospects and the impact of rapid economic and technological change on global labour markets.
- Importance of protecting and strengthening global cooperation in light of countries withdrawing from international cooperation agreements (for example Brexit) and the effect of migration.
- Environmental-related risks include extreme weather conditions, failure of climate change mitigation and possibility of a water crisis.
- Rising cyber dependency, increasing incidence of data fraud/theft as well as large-scale cyberattacks.

RESPONSES

These challenges and associated risks are continuously identified, potential impacts determined, reported to and debated by appropriate risk committees and management. Developments in South Africa and other key markets are monitored with appropriate responses, strategic adjustments and proactive financial resource management actions implemented where required. Credit origination and funding strategies are assessed and adjusted in light of macroeconomic conditions and market liquidity. Actions are in place to ensure a resilient funding model. Significant investment in people, systems, processes and data projects are made to:

- manage the risks emanating from the large number of regulatory requirements;
- address possible control weaknesses and improve system security;
- improve operational business resilience capability; and
- improve risk data management aggregation and reporting.

Risk management approach

FirstRand believes that effective risk, performance and financial resource management are key to its success and underpin 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
Key principles: • ensure material risks are identified, measured, monitored, mitigated and reported; • assess impact of the cycle on the group's portfolio; • understand and price appropriately for risk; and • originate within cycle-appropriate risk appetite and volatility parameters.	**Key principles:** • allocate capital appropriately; • ensure an efficient capital structure with appropriate/conservative gearing; and • require earnings to exceed cost of capital, i.e. positive net income after capital charge (NIACC).	**Key principles:** • execute sustainable funding and liquidity strategies; • protect credit rating; • preserve a "fortress" balance sheet that can sustain shocks through the cycle; and • ensure group remains appropriately capitalised.

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

Risk taking is an essential part of the group's business and the group explicitly recognises core risk 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 and performance, create opportunity, achieve desired objectives, and avoid 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 components.

CORE COMPETENCIES

Identification

↓

Assessment

↓

Monitoring

↓

Management

RISK TYPES	RISK COMPONENTS
Funding and liquidity risk	Funding liquidity risk Market liquidity risk
Credit risk	Pre-settlement risk Country risk Credit default risk Concentration risk Securitisation risk
Counterparty credit risk	Counterparty credit risk
Traded market risk	Interest rate risk in the trading book Traded equity and credit risk Foreign exchange risk Commodity risk
Non-traded market risk	Interest rate risk in the banking book Structural foreign exchange risk
Equity investment risk	Equity investment risk
Operational risk	Internal and external fraud People risk Technology and information risk Legal risk Business resilience risk Process risk
Other risks	Strategic risk
	Business risk: • Volume and margin risk • Expansion activities
	Reputational risk
	Model risk
	Insurance risk
	Environmental and social risk
	Regulatory risk
	Conduct risk

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 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

FIRST LINE OF CONTROL

RISK OWNERSHIP
Risk inherent in business activities

Head of business
Reports to franchise CEO

Group Treasury in FCC
Supports business owners, the board and Stratco

Franchise executive committees

Strategic executive committee (Stratco)
- Group CEO (chair)
- Group deputy CEO
- Group CFO
- Franchise CEOs
- Group Treasurer
- Head: Group Human Capital and Sustainability

Financial resource management executive committee | Conduct executive committee | Platform executive committee | People, leadership and talent forum | Africa executive committee

SECOND LINE OF CONTROL

RISK CONTROL
Risk identification, measurement, control and independent oversight and monitoring

Enterprise Risk Management (ERM)
Headed by group CRO, represented on platform and conduct executive committees

Regulatory Risk Management (RRM)
- RRM head represented on platform and conduct executive committees
- Franchise compliance heads have functional reporting lines to RRM head

Insurance control functions
Heads report to FirstRand Life Assurance CEO, ERM and RRM

Deployed franchise, segment and business unit risk managers
- Involved in all business decisions
- Represented at franchise executive committees

BOARD

RCC committee

Specialised risk committees | **Franchise risk committees**

Franchise CROs
Report to franchise CEOs and group CRO

THIRD LINE OF CONTROL

INDEPENDENT ASSURANCE
Adequacy and effectiveness of internal control, governance and risk management

Group Internal Audit (GIA)
Headed by chief audit executive with direct, unrestricted access to audit committee chairman, group CEO, franchises, records, property and personnel

External advisors

Audit committee

Franchise audit committees

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

FIRST LINE OF CONTROL RESPONSIBILITIES	
HEADS OF BUSINESS	**GROUP TREASURY**
• act in accordance with mandates approved by the board or its delegated authority; • identify, quantify and monitor key risks to business under normal and stress conditions; • implement strategy within approved risk appetite parameters; • design business processes to appropriately manage risk; • ensure that board-approved risk policies, frameworks, standards, processes, methodologies and risk tools are implemented; • specify and implement early warning measures, associated 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.	• provides an integrated approach to financial resource management; • optimises the group's portfolio to deliver sustainable returns within an acceptable level of risk; • performs scenario analyses and stress testing; • manages the group's liquidity, funding, interest rate risk in the banking book and foreign exchange mismatch; • performs capital management and planning; and • advises senior management on potential capital actions, dividend strategy and other capital management developments.
STRATEGIC EXECUTIVE COMMITTEE	**FRANCHISE EXECUTIVE COMMITTEES**
• sets group strategic framework (subject to approval by the board); • assisted by 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, and risk appetite) and assesses the group's risk and balance sheet capacity; – **the conduct executive committee** acts as the custodian of the group's conduct and ensures that the group treats its customers fairly and that market integrity remains; – **the platform executive committee** defines, manages and enhances the group's operating model; – **the people, leadership and talent** focuses on differentiated leadership and talent management practices aimed at delivering a compelling employee value proposition, thus helping to attract and retain the best talent available; and – **the Africa executive committee** provides oversight of the group's Africa businesses and provides a strategic forum to identify, guide and facilitate cross-franchise business opportunities in the rest of Africa.	• formulate and approve franchises' strategies with respect to products, markets, clients, people and culture, brand and marketing, and reputation; • approve the franchises' core committee and governance structures and mandates; • monitor the macroeconomic environment in South Africa as well as other relevant jurisdictions and the associated impact on the franchises' strategies and business plans; and • review and approve policies relating to business processes and employees.

SECOND LINE OF CONTROL RESPONSIBILITIES	
ERM	**DEPLOYED RISK MANAGEMENT FUNCTIONS**
• sets frameworks, policies, standards and risk governance structures; • develops and communicates risk management strategy, and challenges risk profiles; • monitors adequate and effective implementation of risk management processes and corrective action; • reports risk exposures and performance to management and governance structures; • supports management in risk aspects of business decisions; • ensures appropriate risk management skills and culture; • performs risk measurement validation; and • manages risk regulatory relationships.	• support management in identifying and quantifying key risks; • ensure that board-approved risk policies, frameworks, standards, methodologies and tools are adhered to; • ensure key business processes are designed and systems implemented with appropriate controls to manage risk; • identify process design flaws and risk management issues and ensure management initiate appropriate corrective action; • ensure timeous risk management and loss containment activities; and • compile, analyse and escalate risk reports on performance, risk exposures and corrective actions, through governance structures in appropriate format and frequency.
RRM	**INSURANCE CONTROL FUNCTIONS**
• monitors consistency of business practices, policies, frameworks and approaches with applicable laws and regulations.	• actuarial function provides assurance to the board on appropriateness of insurance liability assumptions and capital adequacy; and • risk management and compliance functions conduct risk and compliance assessments, and implement improvements.

THIRD LINE OF CONTROL RESPONSIBILITIES
GIA
• 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; • evaluates and assesses significant changes in functions, systems, services, processes, operations and controls; • provides an assessment of the adequacy and effectiveness of internal control systems (including financial controls) and risk management to the audit committee; and • conducts work in accordance with international internal audit practices and its activities are considered annually by external auditors.

RISK GOVERNANCE STRUCTURE

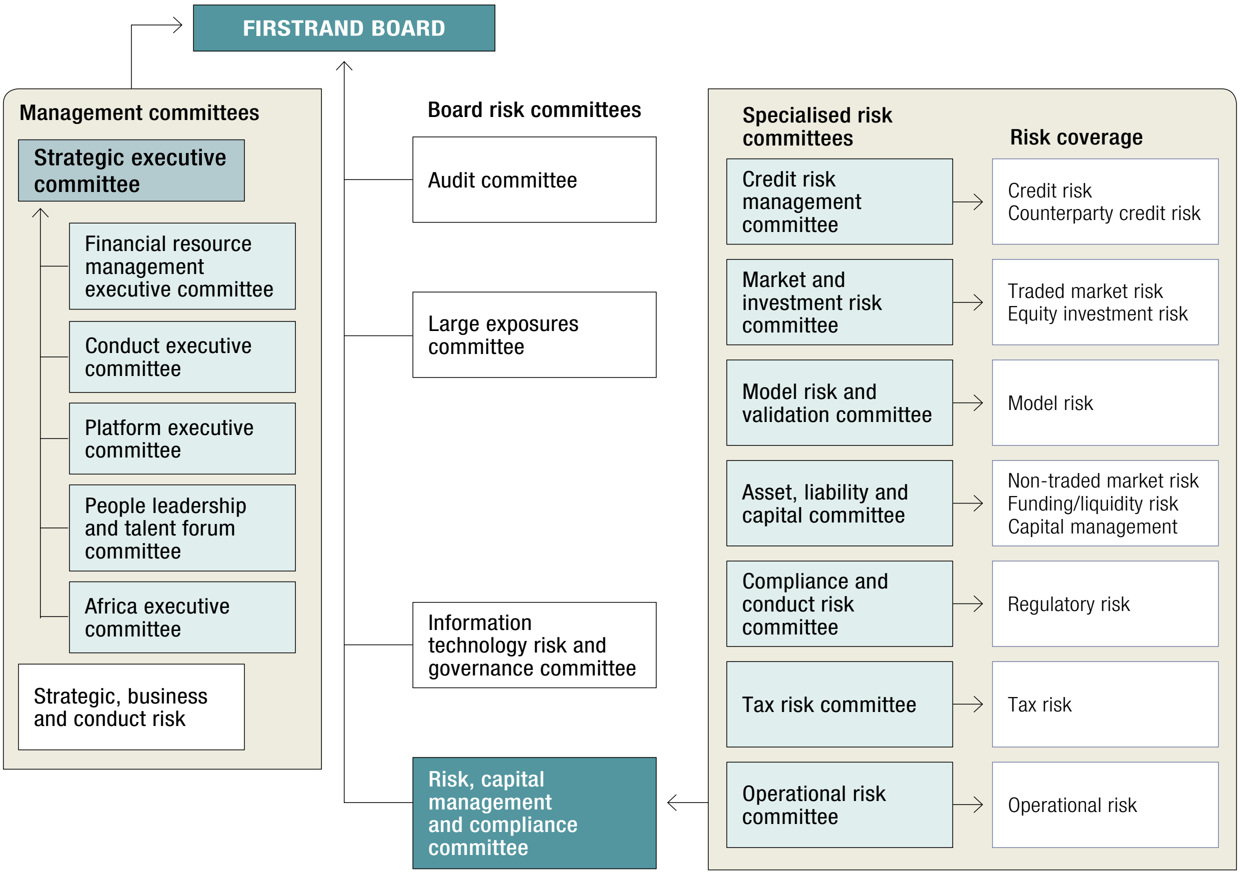
The risk management structure is set out in the group's BPRMF. As a policy of the board, the BPRMF delineates the roles and responsibilities of key stakeholders in business, support and control functions across the various franchises and the group.

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 risk type is provided in the major risk sections of this report.

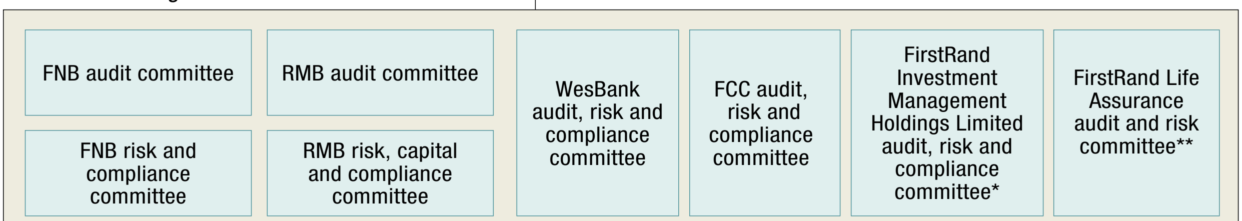
Additional risk, audit and compliance committees exist in each franchise, the governance structures of which align closely with that of the group, as illustrated in the risk governance structure diagram. The governance structures are in place to ensure a common understanding of the challenges businesses 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



Franchise risk governance structure



* *Represents the governance committee of Ashburton Investments.*

** *FirstRand Life Assurance is not a franchise but a subsidiary of FirstRand Insurance Holdings (Pty) Ltd. This committee provides oversight of the group's insurance risk.*

Board risk committees responsibilities

COMMITTEE	RESPONSIBILITY
Audit committee	• 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; • oversees and reviews work performed by the external auditors and internal audit function; and • oversees financial risks and internal financial controls including the integrity, accuracy and completeness of the financial information and annual integrated report, which is provided to shareholders and other stakeholders.
Risk, capital management and compliance committee	• approves risk management policies, frameworks, strategies and processes; • monitors containment of risk exposures within the risk appetite framework; • reports on assessment of adequacy and effectiveness of risk appetite, risk management, internal capital adequacy assessment process (ICAAP) and compliance processes to the board; • monitors implementation of the risk management strategy, risk appetite limits and effectiveness of risk management; • initiates and monitors corrective action, where appropriate; • monitors that the group takes appropriate action to manage its regulatory and supervisory risks, and complies with applicable laws, rules, codes and standards; • approves regulatory capital models, risk and capital targets, limits and thresholds; and • monitors capital adequacy and ensures that a sound capital management process exists.
Large exposures committee (LEC)	• reviews and approves applications or renewals for investments, advances or other credit instruments in excess of 10% of the group's qualifying capital and reserves; • reviews and approves transactions with a related party and the write-off of any related-party exposure exceeding 1% of the group's qualifying common equity tier 1 capital and reserve funds; and • delegates the mandate for approval of group and individual facilities to the FirstRand wholesale credit approval committee, commercial credit approval committee and the FirstRand retail credit policy, risk appetite and mandate approval committee, as appropriate.
Information technology risk and governance committee	• approves and monitors the implementation of IT risk and governance principles, policies, standards, frameworks and plans; • 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 • ensures that IT has appropriately skilled risk and management resources to deliver on the business mandate.

Subcommittees of the RCC committee responsibilities

RCC SUBCOMMITTEE	RESPONSIBILITY
Credit risk management committee	• approves credit risk management and risk appetite policies as well as forward-looking credit risk indicators developed by retail, commercial and corporate portfolio management; • 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; • monitors scenario and sensitivity analysis, stress tests, credit economic capital utilisation, credit pricing and credit concentrations; • ensures uniform interpretation of credit regulatory requirements and credit reporting; and • monitors corrective actions, where appropriate.
Market and investment risk committee	• approves market and investment risk management policies, standards and processes; • monitors the market and investment risk profile and the effectiveness of market and investment risk management processes; • monitors implementation of corrective action, where required; and • approves market and investment risk-related limits.
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)	• approves and monitors effectiveness of management policies, assumptions, limits and processes for liquidity and funding risk, capital and non-traded market risk; • monitors the group's funding management; • monitors capital management including level, composition, supply and demand of capital, and capital adequacy ratios; and • approves frameworks and policies relating to internal funds transfer pricing for the group.
Compliance and conduct risk committee	• approves regulatory risk, and anti-money laundering (AML) and combating the financing of terrorism management frameworks, plans, risk management policies and standards; • monitors effectiveness of regulatory risk management across the group and initiates corrective action, where required; • monitors compliance with the Regulations and supervisory requirements relating to banks; and • reviews regulatory compliance matters relating to financial crime, market conduct, prudential regulations, anti-bribery and corruption.
Tax risk committee	• sets tax strategy and tax risk appetite; • approves tax management frameworks and policies; and • monitors tax risk assessments and profiles, compliance tax risks, corrective actions and escalation to the RCC committee, where required.
Operational risk committee	• provides governance, oversight and coordination of relevant operational risk management practices, and initiates corrective action, where required; • recommends the group's operational risk appetite for approval by RCC committee; • monitors group and franchise operational risk profiles against operational risk appetite; and • approves operational risk management framework and all its subpolicies/frameworks, including fraud risk, legal risk, business resilience, information governance, information technology and physical security.

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.

The group established a combined assurance forum with the primary objective to assist the audit committee in discharging its responsibilities relating to the integration, coordination and alignment of the various risk management and assurance processes and activities across the group.

Combined assurance results in a more efficient assurance process through the elimination of duplication, more focused risk-based assurance against key risk themes and 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 and non-financial risk profile and to make appropriate strategic and business decisions.

Reporting of risk information follows the governance structure illustrated on page 13. 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 their impact on the group's capital adequacy and to make timely adjustments to the group's future capital requirements and strategic plans.

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 on 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 on 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 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 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 external and internal environment and its possible impact on the risk profile;
- impact of environmental changes on the strategic risk profile of the group;
- assessment that risk responses are effective and efficient in both design and operation;
- track implementation of risk responses;
- analysis and lessons learnt from changes, trends, successes, failures and events; and
- identification of emerging risks.

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 every franchise.

ERM ensures and GIA provides assurance 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 data aggregation and risk reporting

The BCBS published *The principles for effective risk data aggregation and risk reporting (BCBS 239)* in January 2013. This paper presents a set of principles to strengthen banks' risk data aggregation capabilities and internal risk reporting practices. In turn, effective implementation of the principles is expected to enhance risk management and decision-making processes at banks. Domestic systemically important banks (D-SIB) were required to comply with the principles by 1 January 2017.

Management recognises the need to comply and the enormity and complexity of remediation efforts. A strategic yet pragmatic approach has been adopted for implementation. Significant investment, commitment and notable progress has been made with the implementation of the principles, taking cognisance of the strategic data roadmap, supported by franchise IT strategies. FirstRand has set December 2020 as the date for completion of the implementation of the principles across all material entities and risk types, and has received condonation from the SARB.

GIA has played a proactive role in the BCBS 239 process in an advisory capacity to avoid potential compliance status misalignment, and is in the process of validating the group's compliance status. Despite the challenges posed by the complexity, scope and scale of the requirements, the group remains committed to ensure full implementation of the principles.

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 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 (independent assurance) lines 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
- 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.

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

Risk culture assessment framework

THEMES

- Ethical and competent leadership
- Accurate and timely flow of information with appropriate disclosure
- Ethical treatment of clients and ethical clients

PARAMETERS

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

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 for operational risk (TSA) **FRIHL entities:** • Basic indicator approach (BIA), TSA, AMA **FirstRand Investment Management Holdings (FRIM) entities:** • BIA
Other assets	Standardised approach	January 2008	Standardised approach

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

** *All entities were included in the approval for the use of AMA (from January 2009) and TSA (from January 2008). Some entities were moved to FRIHL (unregulated prior to 2010) with a subsequent legal entity restructure. All other entities in FRIHL adopted BIA in 2010.*

CREDIT RISK

The calculation of credit 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) are 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. Unrated exposures are risk weighted at 1250%. Capital for unrated exposures is determined using 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 group's 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 group entities with the exception of FRB.
Standardised method	The standardised method is applied for FirstRand Bank (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). Both VaR and sVaR is calculated at the 99% 10-day actual holding period level using 250 scenarios each. VaR is calculated using the last 260 trading days' data and sVaR using 260 trading days' during a pre-defined static stress period (2008/2009). For internal risk reporting purposes, an expected shortfall methodology calculated at a 99%, 10-day actual holding period is used over the same periods as VaR and sVaR. One-day VaR calculations are also used as an additional tool in the assessment of market risk. 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 the bank's foreign branches are measured using the 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 qualifying investments in financial, banking and insurance institutions (threshold rules). This is dependent on the size of the portfolio of the investments in relation to the group's qualifying CET1 capital. The full deduction method is applied to insurance entities. 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

The group applies AMA for its domestic operations. Offshore subsidiaries and operations use TSA and all previously unregulated entities (prior to 2010) in FRIHL use BIA. FRIM entities also follow BIA. Under AMA, the group uses a sophisticated statistical model for the calculation of capital requirements, which enables more accurate, risk-based measures of capital for business units on this approach. Operational risk scenarios and internal loss data (operational risk measurement tools) are used as direct inputs into this model, while risk and control assessments, key risk indicators and external data are used to inform the operational risk scenario analysis 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

The group 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 rules as per Regulation 38.

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 RISK 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 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 or risk stems from the fixed-rate book. Interest rate risk from the fixed-rate book is managed to low levels with residual 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 of which are classified as cash flow hedges.

CREDIT RISK

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.
- 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.
- Structured facilities in RMB are secured as part of the structure through financial or other collateral, including guarantees, credit derivative instruments and assets.
- Counterparty credit risk in RMB is mitigated through the use of netting agreements and financial collateral.
- Personal loans, overdrafts and credit card exposures are generally unsecured or secured by guarantees and sureties.
- Working capital facilities in RMB corporate banking are unsecured.

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 an index model 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 (ISMA) agreements for 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 the quarterly derivative counterparty risk management committee 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's insurance-buying philosophy is to protect itself against insurable catastrophic risks using retention through its risk financing programme as well as third-party insurance providers. The insurance programme includes, *inter alia*, cover for key insurable operational risk exposures, such as professional indemnity, directors' and officers' liability, crime, public and general liability, assets, etc. The group does not consider insurance as a mitigant in the calculation of capital for operational risk purposes.

Financial resource management

FirstRand is expected, at a defined confidence level, to deliver on its commitments to its stakeholders. The management of financial resources, defined as capital, funding, liquidity and risk capacity, is critical to the achievement of FirstRand's stated growth and return targets, and is driven by the group's overall risk appetite.

Forecast growth in earnings and balance sheet risk weighted assets is based on the group's macroeconomic outlook and evaluated against available financial resources, considering the requirements of capital providers and regulators. The expected outcomes and constraints are then stress tested and the group sets financial and prudential targets through different business cycles and scenarios to enable FirstRand to deliver on its commitments to stakeholders at a defined confidence level. These stress scenarios include further sovereign downgrades below investment grade on a local currency basis.

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 and pricing of financial resources. This also ensures that Group Treasury's mandate is aligned with the operating franchises' growth, return and volatility targets to deliver shareholder value.

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 house view which is used for budgeting, forecasting and business origination strategies. The house view focuses on the key macroeconomic variables that impact group financial and risk performance and position. The macroeconomic 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 quarterly. Business plans for the next three years are 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 will remain within the constraints that have been set. The scenarios are based on changing macroeconomic variables, plausible event risks, and regulatory and competitive changes.

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 macroeconomic environment also inform portfolio optimisation decisions and the price and allocation of financial resources.

Risk appetite

The group's risk appetite enables organisational decision-making and is integrated with FirstRand's strategic objectives. Business and strategic decisions are aligned to risk appetite measures to ensure these are met during a normal cyclical downturn. At a business unit-level, strategy and execution are influenced by 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. Risk capacity provides a reference for risk appetite and is not intended to be reached under any circumstances.

Risk limits are clearly defined risk boundaries for different measures per risk type, and are also referred to as thresholds, tolerances or triggers.

The following diagram includes the quantitative measures and qualitative principles of the risk appetite framework during normal business cycles. The measures are reassessed as part of the group's ongoing review and refinement of risk appetite.

Process for determining risk appetite

Risk capacity

EARNINGS	CAPITAL

Filters

Strategic objectives and growth, return and volatility targets

Constraints based on commitments to stakeholders including regulators, depositors, debtholders and shareholders

Risk appetite

QUANTITATIVE MEASURES

	EARNINGS GROWTH, RETURN AND VOLATILITY TARGETS	MINIMUM CAPITAL AND LEVERAGE RATIO TARGETS	MINIMUM LIQUIDITY TARGETS AND TARGETED CREDIT RATING
Normal business cycles	**ROE** 18% – 22%	**Capital** CET1: 10% – 11%	**Liquidity** To exceed minimum regulatory requirements with appropriate buffers
	Earnings growth Nominal GDP plus >0% – 3%	**Basel III leverage** > 5%	**Credit rating*** Equal to highest in SA banking industry

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

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.
Do not take risk 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.
Do not implement 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 sustainable growth across all the portfolios. Through this process 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.

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 and are measured point-in-time and on a forward-looking basis. Risk appetite influences franchise business plans and informs risk-taking activities and strategies.

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 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 group, supported through the three lines of control, the BPRMF and the group's risk governance committees. Risk appetite measures and risk limits per risk type are provided below.

Funding and liquidity risk

Liquidity risk is an inevitable consequence of the group's business activities. Group Treasury sets the group's funding risk appetite. This is done though ongoing engagement with stakeholders across franchises to determine funding requirements during business-as-usual and stress scenarios. Liquidity risk is managed by optimising the group's funding profile within structural and regulatory constraints with the objective of enabling franchises to operate in an efficient and sustainable manner.

Risk appetite levels are set in relation to the composition of funding as well as the marketability of the group's assets, in particular the mix and size of liquidity buffers held. These strategies are impacted by prudential requirements including Basel III liquidity requirements, namely the LCR and net stable funding ratio (NSFR). These regulatory constraints and risk appetite levels ultimately translate into the group's internal funds transfer pricing process framework.

The funds transfer pricing framework 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. The funds transfer pricing process is a key enabler of the funding appetite allowing for pricing of products within the group's desired risk appetite levels.

Risk appetite in relation to liquidity is additionally monitored in terms of liquidity survival periods. Survival periods are the minimum time frame over which the cumulative cash inflows exceed cash outflows. The objective of the survival period is to provide management sufficient time to change business strategy or take mitigating actions to adjust the group's liquidity profile. Risk appetite levels in relation to survival periods are analysed at various reporting levels and for significant currencies transacted across the group. The survival period aligns to prudential requirements inherent in the LCR of a 30-day survival period. Monitoring of actual performance against limits and limit utilisation is performed and reported daily, weekly and monthly as appropriate to management and governance committees.

Credit risk

The group aims to manage a credit portfolio that will contribute towards the overall achievement of the group's targeted earnings profile within acceptable levels of volatility. The group's credit risk appetite, aligned to the group's overall risk appetite, is determined through supplementing a top-down group credit risk appetite with an aggregated bottom-up assessment of the business unit-level credit risk appetites. Stress testing is used to enable measurement of financial performance and credit volatility profile of the different credit business units at a portfolio, segment, franchise, and ultimately on a diversified group-wide basis.

The credit risk appetite statement is articulated to describe acceptable downside risk, i.e. definition of acceptable performance outcomes under different economic cycles. The key performance measures are credit loss ratios, ROE and NIACC. These measures are forward-looking and stressed assessments correspond to macroeconomic stress scenarios (and severities) applied in the group's stress testing.

To achieve outcomes within these constraints, risk limits for new and existing business are articulated within business segments. This is done to manage concentrations in credit segments contributing to high and/or volatile credit losses. Business risk limits are managed through assessing volatility of credit losses, product pricing strategy, product cost structure and capital requirements. Business risk limits include the following elements:

- counterparty limits based on borrower risk segments, for example FirstRand rating grades;
- collateral limits for secured lending based on collateral profiles, for example loan-to-value bands;
- concentration limits including single counterparty, counterparty grouped by FirstRand ratings, collateral loan-to-value bands, gearing, industry, market, maturity and geography; and
- capacity limits based on measures of customer affordability, for example repayments-to-income bands.

Credit origination strategies are refined on an ongoing basis to ensure credit profiles are maintained within these risk limits. The financial performance, monitoring against limits, economic growth potential, lending conditions, financial soundness, and balance sheet structure of large counterparties as well as non-performing and impairment trends, economic indicators of specific industries, and macroeconomic and political factors are continually assessed to determine the appropriateness of limits.

Counterparty credit risk

The counterparty credit risk management process is aligned to credit risk management practices and includes the setting of credit risk limits, quantifying the potential credit exposure over the life of the product, monitoring of limit utilisation, collateral management and ongoing portfolio risk management.

Risk appetite for the OTC derivatives and prime financing portfolio is based on exposure appetite and a measure of the cost-to-close of a counterparty's position. Exposure appetite is based on the open exposure the group is willing to assume against a given counterparty, the activity that the counterparty is engaged in, quality and trading liquidity of the underlying securities, and associated impact on the counterparty's credit quality.

Credit risk management sets pre-settlement, settlement, contingent, concentration and other limits *vis-à-vis* each counterparty and has policies and procedures outlining the methodology for establishing these credit limits. Nominal (risk-equivalent amount) and loss in the event of default limits are set for prudential limit purposes. The loan equivalent risk amount is typically used in jurisdictions which recognise the legal right of netting exposures and collateral. In addition, regardless of the transaction credit limits to be applied, all transactions are subjected to specific country risk limits and the availability of these at the time of transacting.

Market risk in the trading book

Quantitative and qualitative market risk limits are set in line with the group's risk appetite. Quantitative limits for income volatility at a very high confidence level (99%) under distressed conditions per unit time are set and expressed as:

- VaR and ETL limits per asset class, business line and business unit;
- stress-loss limits at the risk factor level for less sophisticated trading businesses;
- nominal limits for specific risk items;
- absolute loss thresholds; and
- risk concentration limits.

Qualitative risk appetite measures include business mandates and strategy, specific product and strategy mandates, end-to-end transaction process breakdown tolerance levels and zero tolerance for operating outside of any legislation or supervisory regulations in respect of market risk.

Utilisation of ETL limits and market risk exposure against stress exposure limits are monitored daily. Monitoring includes the reporting of limit breaches, causes thereof and the rectification of the breaches to appropriate management and governance committees. The market risk portfolio is stressed on a quarterly basis to ensure that any volatility in earnings will not be breached in terms of the group's risk appetite.

Interest rate risk in the banking book

A change in interest rates impacts the group's short-term financial performance (earnings) and its long-term economic value. The group has both earnings sensitivity and net asset value (NAV) sensitivity limits in place to protect against volatility in the income statement and balance sheet respectively. The calibration of the interest rate risk in the banking book appetite is based on the group's economic view and market pricing.

Equity investment risk

Quantitative and qualitative investment risk limits are annually set in line with the group's risk appetite parameters. Qualitative aspects are expressed in terms of strategic business mix, business activity mandates and zero tolerance for operating outside legislative or regulatory constraints. Quantitative nominal value limits are set at a group level and then translated for business activities and business units within franchises. The entire investment risk portfolio is also managed by considering concentration factors such as geographic distribution, investment value size, counterparty exposures and industry concentrations.

Regulatory capital limits are applied to restrict the balance sheet size on a risk-adjusted basis. Rating agencies' guidance is considered in the setting of limits and monitoring of actual performance against limits to limit portfolio size equity exposure as a percentage of Tier 1 capital.

A key element of monitoring the risk appetite is an assessment of potential earnings volatility that may arise from underlying activities. The portfolio is stressed on a quarterly basis to ensure that earnings volatility remains within appropriate levels.

Operational risk

Operational risk appetite is set at group and franchise level and includes qualitative and quantitative statements. Operational risk appetite is set as the total annual operational loss amount the group is willing to accept at various confidence/probability levels. This process includes setting:

- a risk appetite profile and monitoring this against actual operational risk profile;
- operational loss thresholds and measuring these against actual loss experience; and
- other quantitative and qualitative measures including key risk indicators and zero tolerance statements.

Risk appetite levels are based on management's appetite for operational risk and considers historical loss experience, current actual risk exposures and the willingness of management to accept risk in pursuit of its strategic objectives. For different probability levels, current actual risk exposures are estimated using internal loss data and operational risk scenarios. Actual risk exposures are monitored against the set risk appetite profile.

Annualised loss thresholds are defined for reporting and escalation of losses. Loss thresholds are derived from set risk appetite profile probability levels. Qualitative expressions of risk appetite emphasise risk culture and the relationship between risk and business management/action.

Stress testing and scenario planning

Stress testing and scenario planning serve a number of regulatory and internal business purposes, and are conducted for the group and the bank across different risk types, factors and indicators. 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 determine or test capital buffers, enhance capital and liquidity planning, validate existing quantitative risk models and improve the understanding of required management actions/responses.

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, stress testing and scenario planning feed into the group's annual 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, 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 a supervisory stress test to assess the impact of a potential local currency sovereign downgrade on the South African banking industry.

Recovery and resolution regime

Financial Services Board (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 adopted this requirement and has, as part of the first phase, required D-SIBs 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 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 four annually-revised versions of its recovery plan to the SARB, the most recent in December 2016.

RESOLUTION FRAMEWORK

In September 2015, 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 (SRB).

The Resolution Authority (proposed new unit in SARB), will be responsible for bank resolution. The exact details of the legislative framework that will support the resolution regime and the Resolution Authority's respective powers are still being finalised and should be disclosed when the SRB is released. Resolution plans will allow the Resolution Authority to plan for an event from which a bank's recovery action has failed or is deemed likely to fail. Bank resolution plans will be owned and maintained by the Resolution Authority, but will require a significant amount of bilateral engagement and input from individual banks to enable it to develop a customised plan that is most appropriate to each bank. As part of the Resolution Framework and powers of the Resolution Authority, a Deposit Insurance Scheme (DIS) is proposed to protect depositors and enhance financial stability. A discussion paper on designing a DIS was issued in May 2017. Given the significant impact on the banks of funding the DIS, banks continue to actively engage with the SARB on the size of the fund and the funding mechanics.

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

<table>
<tr><th rowspan="2">SHAREHOLDING</th><th colspan="3">REGULATORY</th><th rowspan="2">IFRS</th></tr>
<tr><th>BANKING, SECURITY FIRM, FINANCIAL</th><th>INSURANCE</th><th>COMMERCIAL</th></tr>
<tr><td>Less than 10%</td><td colspan="2">Aggregate of investments (CET1, Additional Tier 1 (AT1) and Tier 2):
• amount exceeding 10% CET1 capital – deduction against corresponding component of capital; and
• up to 10% – risk weight based on nature of instrument and measurement approach.</td><td rowspan="2">Standardised approach:
• minimum risk weight of 100%.
Internal rating-based approach:
• maximum risk weight of 1250%.</td><td rowspan="2">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.</td></tr>
<tr><td>Between 10% and 20%</td><td colspan="2">CET1 capital:
• individual investments in excess of 10% CET1 – deduction against CET1 capital; and
• individual investments up to 10% apply threshold rules.
AT1 and Tier 2:
• deduct against corresponding component of capital.</td></tr>
<tr><td>Between 20% and 50%</td><td>Legal or de facto support (other significant shareholder):
• proportionately consolidate.
No other significant shareholder:
• apply threshold rules.</td><td rowspan="2">• Apply deduction methodology, with 100% derecognition of IFRS NAV.
• Cost of investment subject to threshold rules.</td><td rowspan="2">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%.
• aggregate of investments exceeding 60% of CET1, AT1 and Tier 2: excess risk weighted at 1250% (standardised only).</td><td>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.</td></tr>
<tr><td>Greater than 50%</td><td>Entity conducting trading activities/other bank, security firm or financial entity:
• consolidate.</td><td>Consolidate, unless the substance of the transaction indicates that the group does not control the entity, in which case equity accounting will apply.</td></tr>
</table>

Threshold rules

As per Regulation 38(5), investments are aggregated as part of threshold deductions (significant investments, mortgage servicing rights and deferred tax assets 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 than 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 (2017: R795 million net asset value) and FirstRand Insurance Services Company Limited (FRISCOL) (2017: R343 million net asset value).

MAPPING OF FINANCIAL STATEMENT CATEGORIES TO 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. The amount included under regulatory scope excludes balances related to insurance entities. The amounts from different balance sheet line items included in the risk frameworks are described in the following table.

LIA: Explanation of difference between accounting and regulatory exposure amounts

RISK FRAMEWORK	DESCRIPTION
Credit risk	Cash and cash equivalents, derivative financial assets and liabilities in the banking book, commodity-related loans and advances, and debt investment securities. Other assets including accounts receivable, current tax assets, property and equipment, investment properties and deferred tax assets related to temporary differences are included in the credit risk framework. Advances net of impairments are included in the balance sheet while impairments are not used to reduce advances when determining the regulatory 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.
No capital/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 18. 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

	As at 30 June 2017							
	Carrying values							
			Items under regulatory frameworks					
R million	Statement of financial position	Regulatory scope	Credit risk	Counter-party credit risk	Securiti-sation	Market risk	Equity investment risk	No capital/ deducted from capital
Assets								
Cash and cash equivalents	68 483	68 354	68 354	2 205	1 860	–	–	–
Derivative financial instruments	35 459	35 549	–	35 549	812	35 549	–	–
Commodities	14 380	14 380	14 380	–	–	14 380	–	–
Investment securities	167 427	162 400	139 375	–	20 700	79 130	17 687	–
Advances*	893 106	893 106	864 095	29 011	28 753	–	–	–
Accounts receivable	8 878	8 755	8 755	–	–	–	–	–
Current tax asset	147	114	114	–	–	–	–	–
Non-current assets and disposal groups held for sale	580	580	–	–	–	–	580	–
Reinsurance assets	89	–	–	–	–	–	–	–
Investments in associates	5 924	5 924	–	–	–	–	5 924	–
Investments in joint ventures	1 430	1 430	–	–	–	–	1 430	–
Property and equipment	17 512	17 510	17 510	–	–	–	–	–
Intangible assets	1 686	1 494	–	–	–	–	–	1 494
Investment properties	399	399	399	–	–	–	–	–
Defined benefit post-employment asset	5	5	–	–	–	–	–	5
Deferred income tax asset	2 202	2 198	2 025	–	–	–	–	173
Investment in subsidiaries	–	399	–	–	–	–	399	–
Total assets	**1 217 707**	**1 212 597**	**1 115 007**	**66 765**	**52 125**	**129 059**	**26 020**	**1 672**

* *Advances net of impairments.*

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

- cash included under the credit risk, counterparty credit risk and securitisation framework;
- derivative financial instruments subject to regulatory capital for both counterparty credit risk, securitisations and market risk;
- commodities subject to regulatory capital for both credit risk related to gold loans, and market risk;
- advances subject to regulatory capital under the credit 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 2017							
	Carrying values							
			Items under regulatory frameworks					
R million	Statement of financial position	Regulatory scope	Credit risk	Counter-party credit risk	Securiti-sation	Market risk	Equity investment risk	No capital/ deducted from capital
Liabilities								
Short trading positions	15 276	15 276	–	–	–	15 276	–	–
Derivative financial instruments	44 403	44 403	–	44 403	812	44 403	–	–
Creditors, accruals and provisions	17 014	16 950	–	–	–	–	–	16 950
Current tax liability	277	267	–	–	–	–	–	267
Liabilities directly associated with disposal groups held for sale	195	195	–	–	–	–	–	195
Deposits	983 529	983 493	–	15 230	25 076	–	–	943 187
Employee liabilities	9 884	9 839	–	–	–	–	–	9 839
Other liabilities	6 385	6 385	–	–	–	–	–	6 385
Policyholder liabilities	3 795	–	–	–	–	–	–	–
Tier 2 liabilities	18 933	14 948	–	–	–	–	–	14 948
Deferred income tax liability	832	749	–	–	–	–	–	749
Amounts due to holding company and fellow subsidiary companies	–	313	–	–	–	–	–	313
Total liabilities	1 100 523	1 092 818	–	59 633	25 888	59 679	–	992 833

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, securitisation 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

R million	Credit risk	Counterparty credit risk	Securitisation	Market risk	Equity investment risk
	As at 30 June 2017				
	Items subject to regulatory frameworks				
Assets carrying value per regulatory scope of consolidation	1 115 007	66 765	52 125	129 059	26 020
Liabilities carrying value per regulatory scope of consolidation	–	(59 633)	(25 888)	(59 679)	–
Total net amount under regulatory scope of consolidation	1 115 007	7 132	26 237	69 380	26 020
Off-balance sheet amounts	271 504	–	2 147	–	224
Differences in valuations	770 553	7 341	–	–	–
Difference due to potential future exposure for CCR		7 850			
Differences due to netting rules and credit risk mitigation	(990 184)	–	–	–	–
Differences due to provisions	16 540	–	–	–	–
Differences due to prudential filters	(59 221)	–	(1 510)	–	(16 488)
Exposure amounts considered for regulatory purposes	**1 124 199**	**22 323**	**26 874**	**69 380**	**9 756**
Reconciliation to regulatory amounts in Pillar 3 tables					
CR6: Exposure post-credit conversion factors and credit risk mitigation AIRB for FirstRand Bank (SA)	956 575				
CR4: Standardised approach on- and off-balance sheet amount	148 821				
CR10: Specialised lending exposures under slotting on- and off-balance sheet amount	18 803				
CCR1: Exposure at default post credit risk mitigation		20 274			
CCR3: Standardised approach for derivatives for subsidiaries in the rest of Africa and foreign branches		2 049			
SEC1: Total securitisation exposures in the banking book			26 874		
Carrying value of investments*					9 756
Total	**1 124 199**	**22 323**	**26 874**	**69 380**	**9 756**

* *For the carrying value of investments refer to page 162 of this report.*

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, OTC 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 OTC 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 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 include expansion initiatives, corporate transactions, as well as ongoing regulatory, accounting and tax developments. The group aims to back all economic risk with loss-absorbing capital and remains well capitalised in the current environment. FirstRand's internal targets have been aligned to the SARB end-state minimum capital requirements and are subject to ongoing review and consideration of various stakeholder expectations.

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

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

Key focus areas and considerations

<table>
<tr><th colspan="2">OPTIMAL LEVEL AND COMPOSITION OF CAPITAL IS DETERMINED AFTER TAKING INTO ACCOUNT:</th></tr>
<tr><td>• Prudential requirements
• Rating agencies' considerations
• Investor expectations
• The board's risk appetite
• Peer comparison</td><td>• Strategic and organic growth
• Economic and regulatory capital requirements
• Proposed regulatory, tax and accounting changes
• Macro environment and stress test impacts
• Issuance of additional capital instruments</td></tr>
<tr><th colspan="2">DIVIDEND POLICY INCLUDED IN OVERALL CAPITAL PLAN</th></tr>
<tr><td>• Sustainable dividend cover based on normalised earnings.
• 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.</td><td>• Annual assessment of appropriate level of payout considers the following inputs:
– actual performance;
– forward-looking macros;
– demand for capital; and
– potential regulatory, accounting and tax changes.</td></tr>
<tr><th colspan="2">EFFECTIVE ALLOCATION OF RESOURCES (INCLUDING CAPITAL AND RISK CAPACITY)</th></tr>
<tr><td colspan="2">• Aligned to risk appetite to maximise value for shareholders.</td></tr>
</table>

CAPITAL ADEQUACY AND PLANNING

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

Qualifying capital and leverage components

TOTAL QUALIFYING CAPITAL AND RESERVES =

TIER 1 CAPITAL

CET1 CAPITAL

- share capital and premium;
- retained earnings (appropriated);
- other reserves; and
- non-controlling interests.

Deductions

- goodwill and intangibles;
- deferred tax assets (other than temporary differences);
- investment in own shares;
- shortfall of expected losses over provisions;
- cash flow hedging reserve;
- investments in financial, banking and insurance institutions*; and
- other.

AT1 CAPITAL

- NCNR preference shares; and
- instruments issued out of consolidated subsidiaries to third parties.

Deductions

- investments in financial, banking and insurance institutions (AT1 instruments)*; and
- surplus third-party capital.

+

TIER 2 CAPITAL

- subordinated debt instruments;
- general provisions under standardised approach;
- surplus of provisions over expected losses; and
- instruments issued out of consolidated subsidiaries to third parties.

Deductions

- investments in financial, banking and insurance institutions (Tier 2 instruments)*; and
- surplus third-party capital.

LEVERAGE =

CAPITAL MEASURE

TIER 1 CAPITAL

÷

TOTAL EXPOSURE

- accounting value for on-balance sheet, non-derivative exposures (net of provisions):
  – no netting of loans and deposits;
- derivative exposures using the replacement cost and potential future exposure;
- securities financing transaction exposures including a measure of counterparty credit risk;
- adjusted off-balance sheet exposures; and
- regulatory adjustments.

* *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 group comfortably operated above its capital and leverage targets during the year. No changes were made to current internal targets. The table below summarises the group's capital and leverage ratios at 30 June 2017.

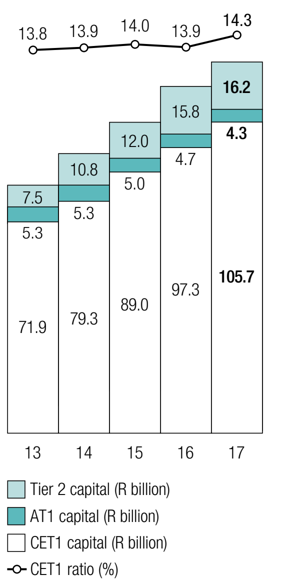
Capital adequacy and leverage position

	Capital			Leverage
%	CET1	Tier 1	Total	Total
Regulatory minimum*	7.3	8.5	10.8	4.0
Internal target	10.0 – 11.0	>12.0	>14.0	>5.0
Actual				
– Including unappropriated profits	**14.3**	**14.9**	**17.1**	**8.6**
– Excluding unappropriated profits	12.5	13.1	15.3	7.6

* *Excludes the bank-specific individual capital requirement and D-SIB add-on.*

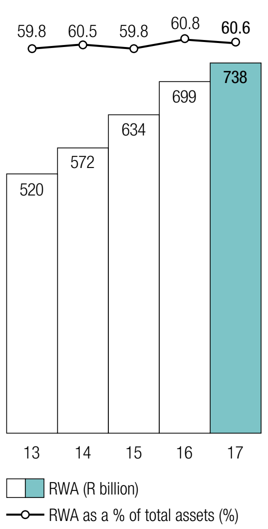
The graphs below show the historical overview of capital adequacy, RWA and leverage for FirstRand.

*Capital adequacy**

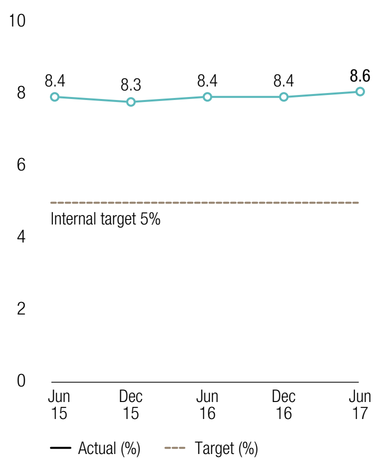


* *Includes unappropriated profits.*

RWA history



*Leverage**



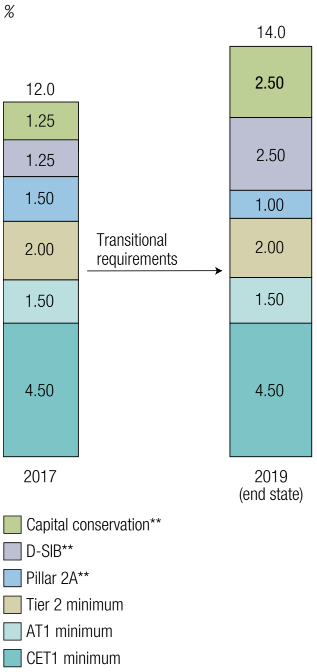
* *Includes unappropriated profits.*

Regulatory update

South Africa

The group is currently subject to the SARB transitional capital requirements, which include a 50% phased-in requirement for both the capital conservation and D-SIB buffer add-ons. The SARB has not implemented any countercyclical buffer requirement for South African exposures. The transitional requirements are summarised below.

*Transitional minimum requirements**



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

** *Pillar 2A and D-SIB met with all capital types; capital conservation met solely with CET1 capital.*

BCBS

The BCBS issued various consultative documents that 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 consultative documents.

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

Summary of consultative documents

	OBJECTIVES	IMPACT ASSESSMENT
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.	• Final designs and calibrations will be informed by a comprehensive quantitative impact study.
Identification and management of step-in risk	• Identify a bank's connection to unconsolidated entities. • Identify situations where step-in risks exists and needs to be anticipated.	• Impact assessment not yet quantified.
Regulatory treatment of accounting provisions – interim and transitional arrangements	• Considerations for retaining the current regulatory treatment of accounting provisions. • Transitional arrangements for the impact of expected credit loss accounting on regulatory capital.	• Not yet finalised.

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 following, subject to supporting governance structures:

- links business strategy, risk introduced and capital required to support strategy;
- embedding a responsible risk culture across all levels of the group;
- development of recognised stress tests to provide useful information, which serve as early warnings/triggers, so that contingency plans can be implemented;
- 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
- 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 tables below summarise FirstRand's qualifying capital components and related year-on-year movements.

Composition of capital analysis

	Year ended 30 June	
R million	2017	2016
Including unappropriated profits		
CET1	**105 737**	97 283
Tier 1	**110 035**	101 970
Total qualifying capital	**126 191**	117 811
Excluding unappropriated profits		
CET1	**92 490**	86 954
Tier 1	**96 788**	91 641
Total qualifying capital	**112 944**	107 482

KEY DRIVERS		
CET1 capital	↑	• Ongoing internal capital generation through earnings coupled with sustainable dividend payout.
AT1 capital	↓	• Additional 10% haircut on NCNR preference shares not compliant with Basel III, partly offset by movement in third-party capital.
Tier 2 capital	↑	• Issuance of Basel III-compliant instruments totalling R2.3 billion during the current financial year. • Redemption of the FRB10 (R1 billion) and FRB09 (R100 million) in January 2017 and June 2017, respectively. • Tier 2 mix comprises instruments compliant with Basel III of R13.5 billion and Basel II old-style instruments of R4.7 billion.

Risk weighted assets

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

OV1: Overview of RWA

		RWA		Minimum capital requirements†
R million		As at 30 June 2017	As at 30 June 2016	As at 30 June 2017
1.	**Credit risk (excluding counterparty credit risk)***	**489 712**	462 235	**52 644**
2.	– Standardised approach	**113 930**	106 563	**12 247**
3.	– AIRB	**375 782**	355 672	**40 397**
12.	**Securitisation exposures in banking book**	**24 071**	17 496	**2 588**
13.	– IRB ratings-based approach	**17**	57	**2**
14.	– IRB supervisory formula approach	**1 525**	2 333	**164**
15.	– Standardised approach/simplified supervisory formula approach	**22 529**	15 106	**2 422**
	Total credit risk	**513 783**	479 731	**55 232**
4.	**Counterparty credit risk*,****	**15 718**	21 378	**1 690**
5.	– Standardised approach	**15 718**	21 378	**1 690**
11.	**Settlement risk**	**–**	–	**–**
7.	**Equity positions in banking book under market-based approach#**	**26 624**	27 993	**2 862**
16.	**Market risk**	**21 459**	17 402	**2 307**
17.	– Standardised approach	**11 263**	4 269	**1 211**
18.	– Internal model approach	**10 196**	13 133	**1 096**
19.	**Operational risk**	**108 440**	110 143	**11 657**
20.	– Basic indicator approach	**7 547**	8 754	**811**
21.	– Standardised approach	**21 531**	19 611	**2 315**
22.	– Advanced measurement approach	**79 362**	81 778	**8 531**
23.	**Amounts below the thresholds for deduction (subject to 250% risk weight)**	**14 240**	12 683	**1 531**
24.	**Floor adjustment**	**9 047**	–	**973**
	Other assets	**29 075**	29 402	**3 126**
25.	**Total**	**738 386**	698 732	**79 378**

* *Restated due to refinement of calculation methodology.*

** *The current exposure and standardised methods are applied to counterparty credit risk. The group does not apply the internal model method to counterparty credit risk (row 6 of OV1 template). The standardised approach for counterparty credit risk (SA-CCR) has been delayed to a date later than 1 September 2017.*

\# *The simple risk weighted method approach is applied to equity investment risk. The BCBS standard on equity investment in funds has not yet been implemented, rows 8 – 10 of OV1 template have, therefore, been excluded from this table. The standard on equity investment risk in funds has been delayed to a date later than 1 September 2017.*

† *Capital requirement calculated at 10.75% of RWA (2016: 10.375%). The minimum requirement excludes the add-ons for the D-SIB and bank-specific individual capital requirement (Pillar 2B). The difference to the BCBS base minimum (8%) relates to the buffer add-ons for Pillar 2A and capital conservation buffer as prescribed in the regulations.*

The following table analyses RWA movements.

RWA analysis

KEY DRIVERS		
Credit	↑	Organic growth, model recalibrations and regulatory refinement.
Counterparty credit	↓	Volumes, mark-to-market and exchange rate movements.
Operational	↑	Recalibration of portfolios subject to the advanced measurement approach. Increase in gross income for entities on the standardised approach.
Market	↑	Volume and mark-to-market movements. Incorporates the impact of sovereign downgrade.
Equity investment	↓	Disposal of investments.
Threshold items*	↑	Movement in deferred tax assets and investments in financial, banking and insurance entities.

* *Risk weighted at 250%.*

Further detailed analysis on credit risk RWA for the year is provided in the following table.

Overview of credit RWA

	RWA			Minimum capital requirement*
R million	Advanced approach	Standardised approach	Total	
– Corporate, banks and sovereigns	169 436	43 067	212 503	22 844
– Small and medium enterprises (SMEs)	48 666	25 530	74 196	7 976
– Residential mortgages	58 197	7 336	65 533	7 045
– Qualifying revolving retail	27 530	7 079	34 609	3 720
– Other retail	71 953	30 918	102 871	11 059
– Securitisation exposure	1 542	22 529	24 071	2 588
Total credit risk	377 324	136 459	513 783	55 232

* *Capital requirement calculated at 10.75% of RWA (2016: 10.375%). The minimum requirement excludes the add-ons for the D-SIB and bank-specific individual capital requirement (Pillar 2B). The difference to the BCBS base minimum (8%) relates to the buffer add-ons for Pillar 2A and capital conservation buffer as prescribed in the regulations.*

CAPITAL ADEQUACY POSITION 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 at 30 June are set out below.

RWA and capital adequacy positions of FirstRand, its regulated subsidiaries and the bank's foreign branches

	As at 30 June			
	2017			2016
	RWA R million	Tier 1 %	Total capital adequacy %	Total capital adequacy %
Basel III (SARB regulations)				
FirstRand*	**738 386**	**14.9**	**17.1**	16.9
FirstRand Bank*,**	**591 174**	**14.3**	**17.3**	17.1
FirstRand Bank South Africa*	**550 648**	**14.5**	**17.2**	16.9
FirstRand Bank London	**38 385**	**10.9**	**17.8**	17.4
FirstRand Bank India	**1 965**	**31.1**	**31.7**	24.3
FirstRand Bank Guernsey#	**114**	**37.9**	**37.9**	43.9
Basel II (local regulations)				
FNB Namibia	**27 423**	**14.7**	**17.2**	17.8
FNB Mozambique	**2 246**	**15.0**	**15.6**	14.6
RMB Nigeria	**2 400**	**43.4**	**43.4**	91.7
FNB Botswana	**20 629**	**14.2**	**17.7**	16.4
Basel I (local regulations)				
FNB Swaziland	**2 835**	**27.1**	**28.3**	25.0
FNB Lesotho	**918**	**14.1**	**17.6**	16.9
FNB Zambia	**4 813**	**16.5**	**21.2**	19.2
FNB Tanzania	**1 245**	**41.8**	**41.9**	66.1
First National Bank Ghana	**304**	**>100**	**>100**	>100

* *Includes unappropriated profits.*

** *Includes foreign branches.*

Trading as FNB Channel Islands.

COMMON DISCLOSURES

BASEL 3 CAPITAL AND LEVERAGE COMPONENTS

In terms of Regulation 43 of the *Regulations relating to Banks*, the following additional common disclosures are required:

- composition of capital;
- reconciliation of IFRS financial statements to regulatory capital and reserves;
- main features of capital instruments; and
- leverage common disclosure templates.

BASEL 3 LCR DISCLOSURE

The BCBS' *Liquidity coverage ratio disclosure standards* propose consistent and transparent disclosure of banks' liquidity positions as measured by Basel 3 regulations. Regulation 43 requires banks to provide its LCR disclosure in a standardised template.

Refer to www.firstrand.co.za 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 requirements. The objective is to maintain natural market share and 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 liquidity ratios 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.

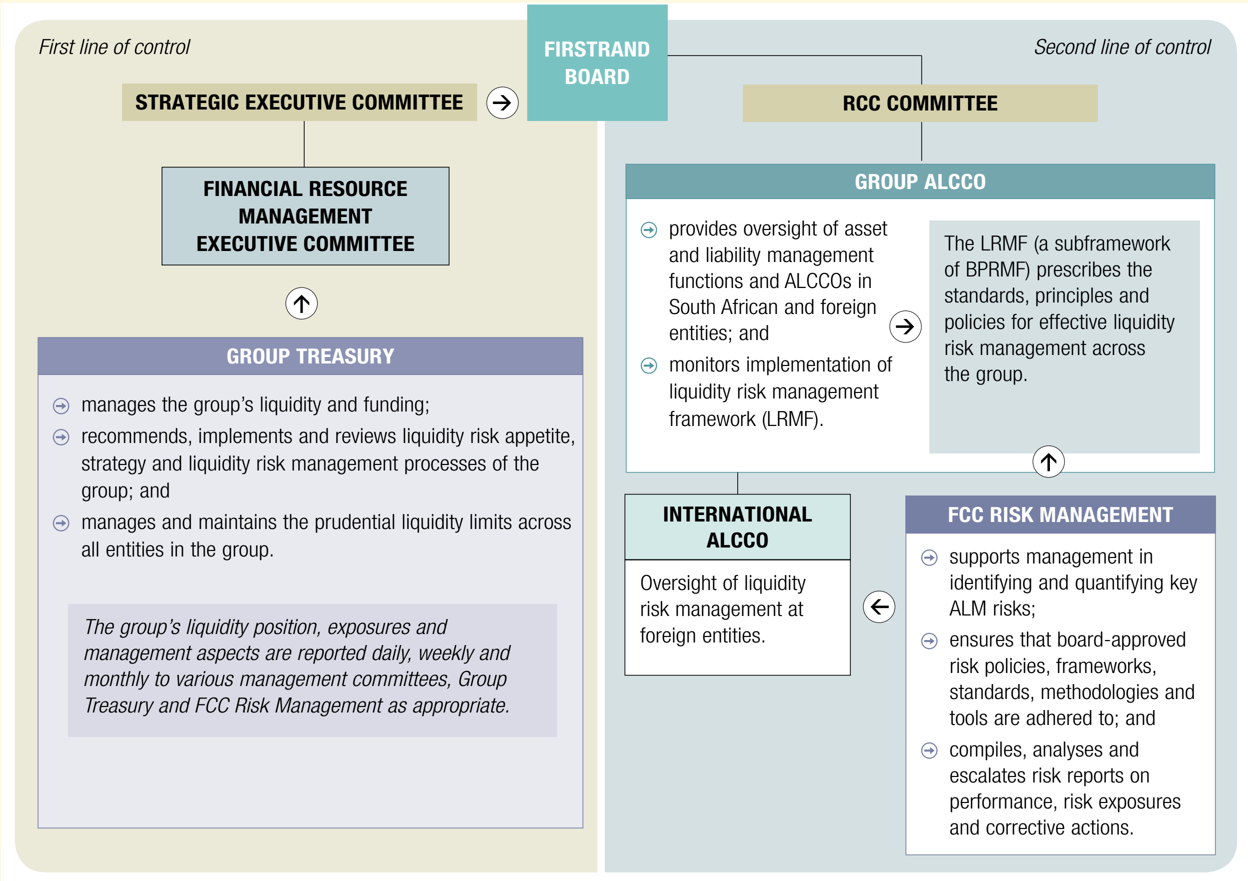
Given market conditions and the regulatory environment, the group increased its holdings of available liquidity over the year in line with appetite. The group utilised new market structures, platforms and the SARB committed liquidity facility to efficiently increase available liquidity holdings.

At 30 June 2017, the group exceeded the 80% minimum LCR requirement with a LCR measurement of 97% (2016: 96%). The bank's LCR was 105% (2016: 102%).

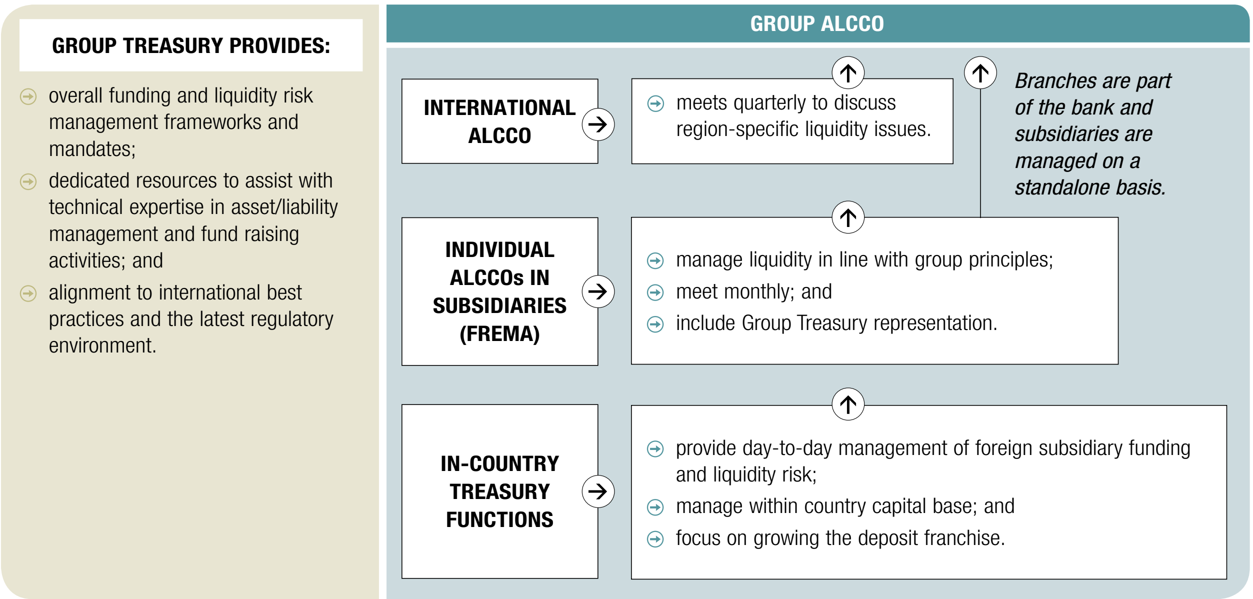
At 30 June 2017, the group's available HQLA sources of liquidity per the LCR amounted to R167 billion, with an additional R18 billion of management liquidity available. This represents an increase from 2016 of R10 billion in HQLA and R1 billion in total management liquidity available.

ORGANISATIONAL STRUCTURE AND GOVERNANCE

Group and bank



Foreign operations

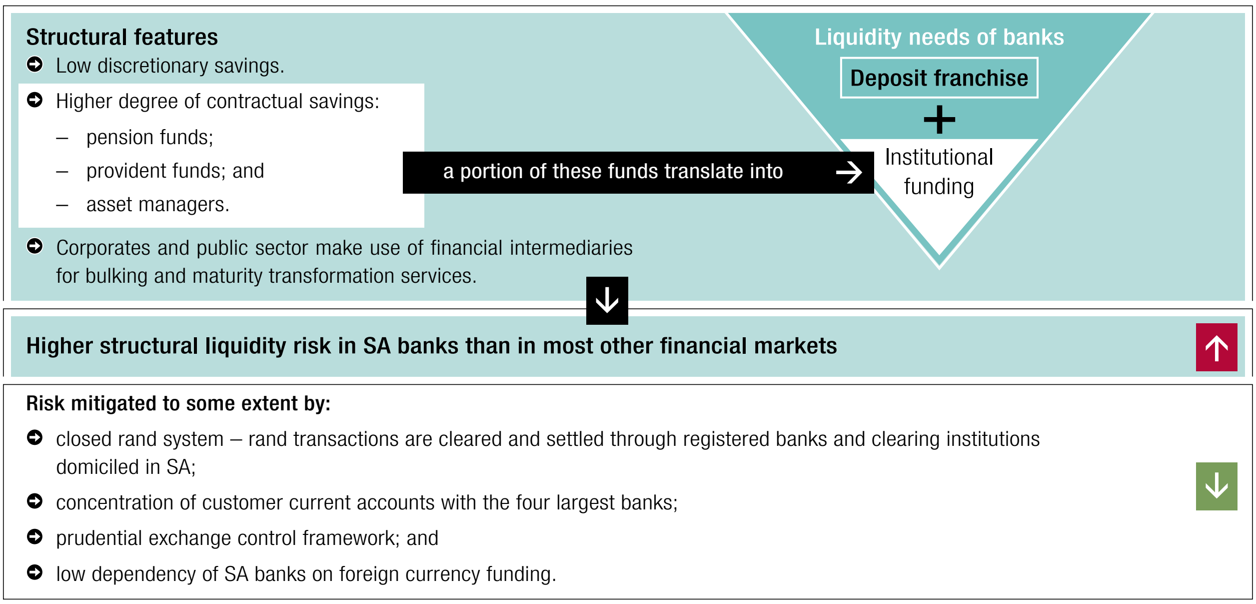


FirstRand Bank's London branch is categorised in the UK as a non-EEA branch. FRB is authorised by the Prudential Regulation Authority (PRA) and subject to regulation by the Financial Conduct Authority and limited regulation by the PRA.

The PRA places reliance on the Home State Supervisor of FirstRand (i.e. SARB through its Bank Supervision Department) for all reporting and monitoring of capital adequacy, trading and investment risk and liquidity risk. Up until the December 2016 reporting period, the PRA required six-monthly updates on the liquidity position of FirstRand Bank Limited reported to it in the PRA's standardised format. Going forward, the PRA requires non-EEA branches to submit liquidity information at the whole-firm level (FirstRand Bank Limited including foreign branches), based on data reported to the Home State Supervisor, including LCR-related data and, in particular, the completed LCR template and any other additional liquidity reports submitted to the Home State Supervisor. The reporting cycle will remain six monthly.

FUNDING MANAGEMENT

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



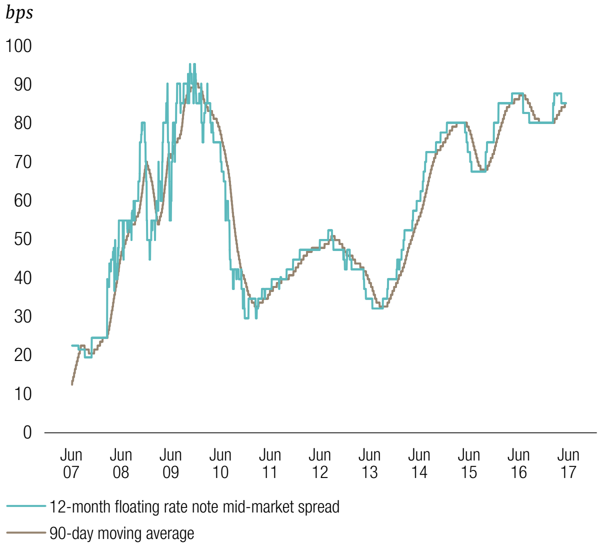
Liquidity demanded by banks as a consequence of money supply constraints introduced by the LCR, as well as the central bank's open market operations without a commensurate increase in savings flows, has resulted in higher liquidity costs. In light of the structural features discussed above, focus remains on achieving a better risk-adjusted diversified funding profile, which also supports compliance with 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 agencies requirements.

To ensure maximum efficiency and flexibility in accessing funding opportunities, a range of debt programmes have been established. The group's strategy for domestic vanilla public issuances 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 issued by banks, namely 12-month NCDs. The graph shows that liquidity spreads remain elevated.

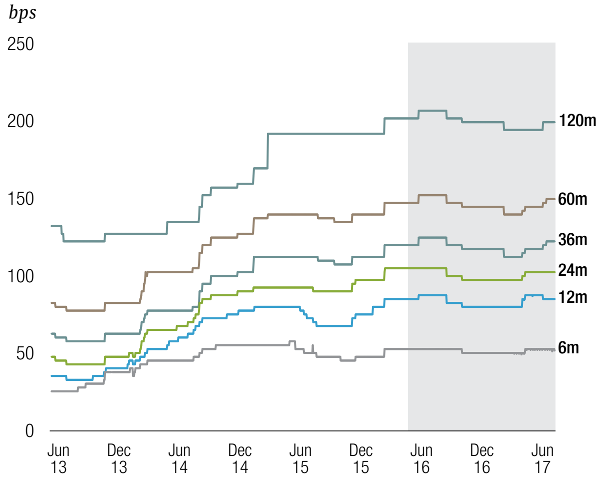
12-month floating rate note mid-market spread



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 still high.

Long-term funding spreads



Source: Bloomberg (RMBP screen) and Reuters.

Funding measurement and activity

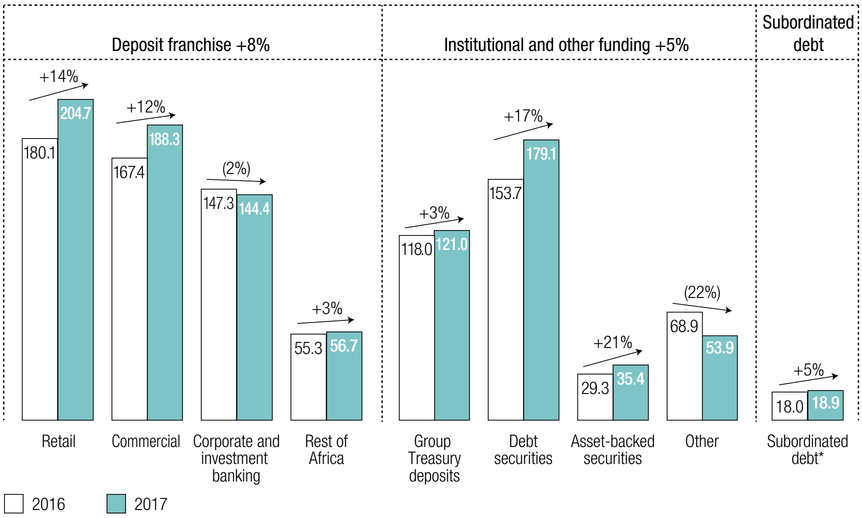
FirstRand Bank, FirstRand's wholly-owned subsidiary and debt issuer, generates a larger proportion of its funding from deposits compared to the South African aggregate, however, its funding profile also reflects the structural features described previously.

The group manages its funding structure by source, counterparty type, product, currency and market. The deposit franchise is the most efficient source of funding and represented 59% of total group funding liabilities as at 30 June 2017 (2016: 59%). The group 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 for source and behaviour. To fund operations, the group accesses the domestic money markets daily and, from time to time, capital markets. The group issues 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.

The following graph provides a segmental analysis of the group's funding base and illustrates the success of its deposits franchise focus, as well as the diversification of the group's funding from a counterparty perspective.

Funding portfolio growth

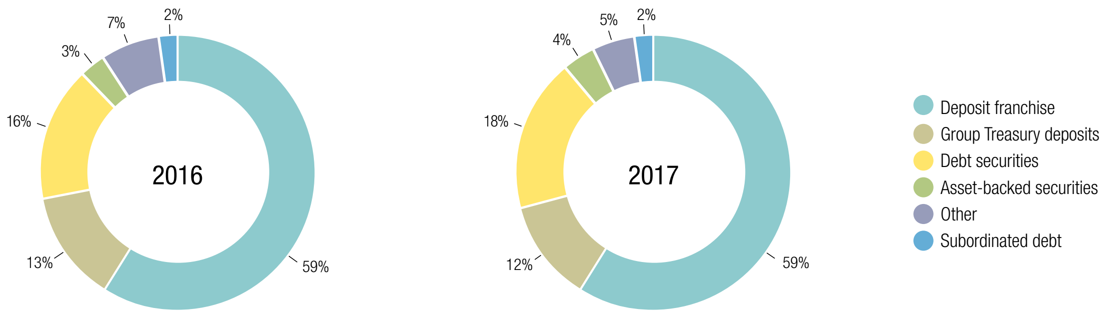
R billion



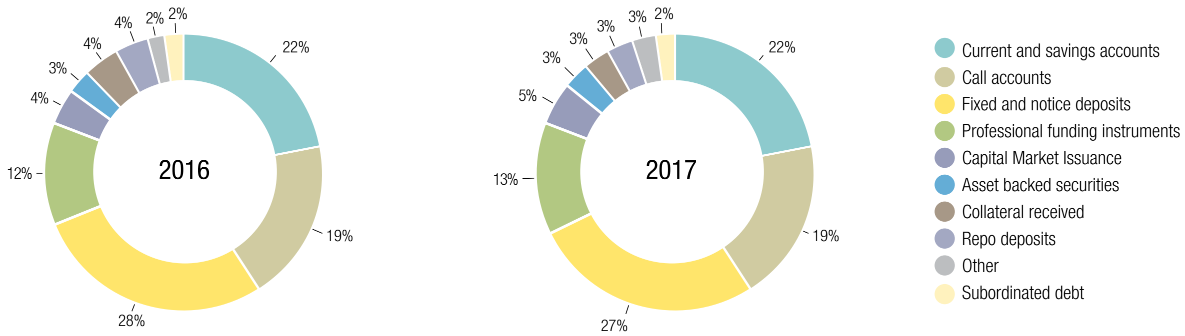
* *2016 number restated due to refinement of calculation methodology.*

The graphs below show that the group's funding mix has remained stable over the last 12 months.

Group's funding mix



Group's funding analysis by instrument type



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.

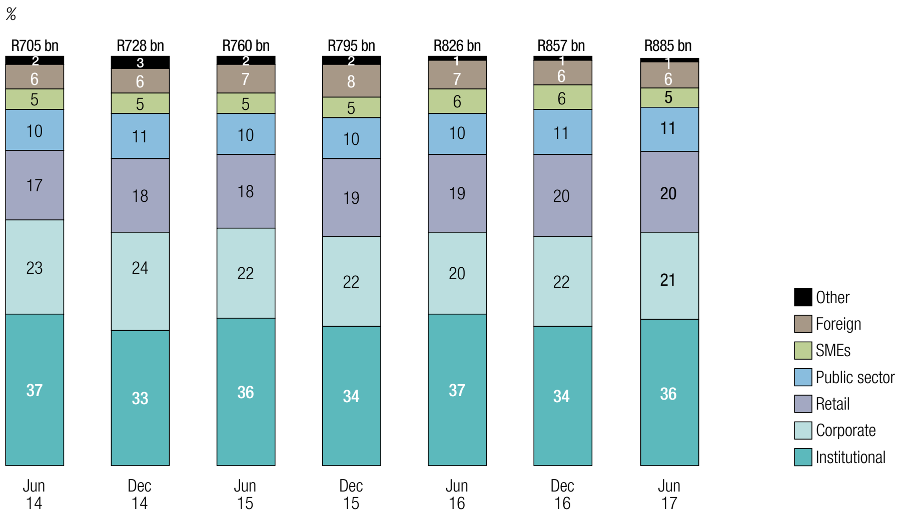
The table below provides an analysis of the bank's funding sources (excluding foreign branches) per counterparty type as opposed to the FirstRand segment view.

Funding sources of FirstRand Bank (excluding foreign branches)

	As at 30 June 2017				As at 30 June 2016
% of funding liabilities	Total	Short term	Medium term	Long term	Total
Institutional funding	**35.9**	**11.5**	**4.1**	**20.3**	37.0
Deposit franchise	**64.1**	**49.2**	**8.7**	**6.2**	63.0
Corporate	**20.5**	**17.5**	**2.3**	**0.7**	20.1
Retail	**20.0**	**15.2**	**3.4**	**1.4**	19.2
SME	**5.4**	**4.5**	**0.6**	**0.3**	5.5
Governments and parastatals	**10.7**	**8.7**	**0.9**	**1.1**	10.2
Foreign	**6.2**	**3.2**	**1.5**	**1.5**	6.9
Other	**1.3**	**0.1**	**–**	**1.2**	1.1
Total	**100.0**	**60.7**	**12.8**	**26.5**	100.0

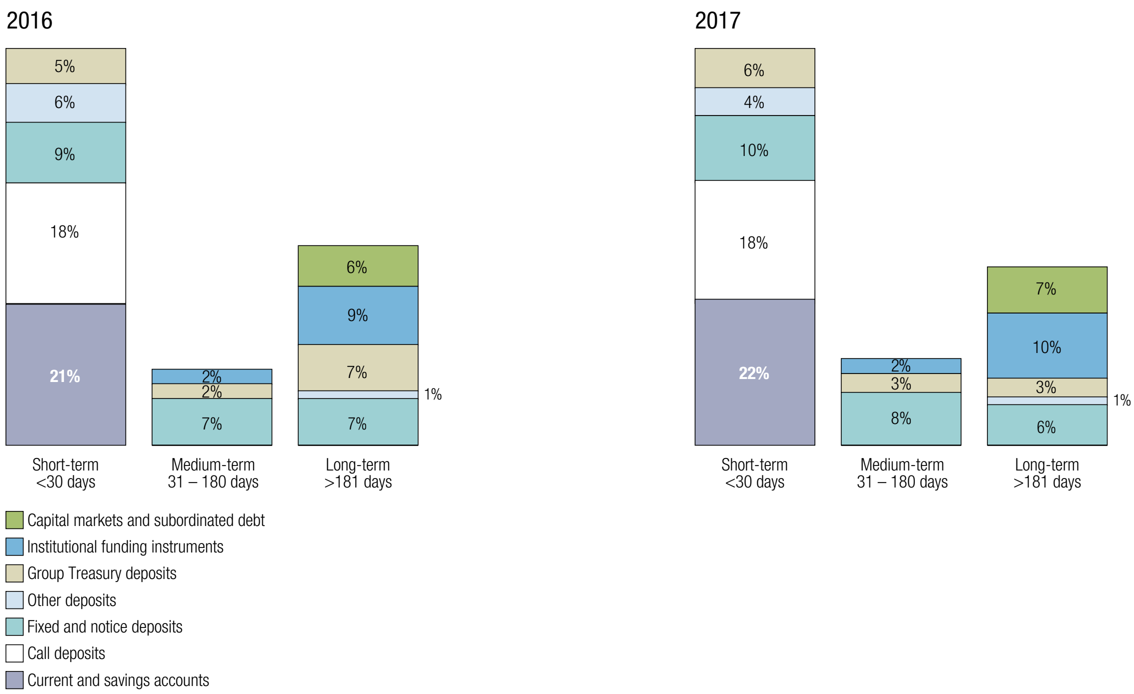
The following graph provides an analysis of the bank's funding by source.

Funding analysis by source of FirstRand Bank (excluding foreign branches)



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

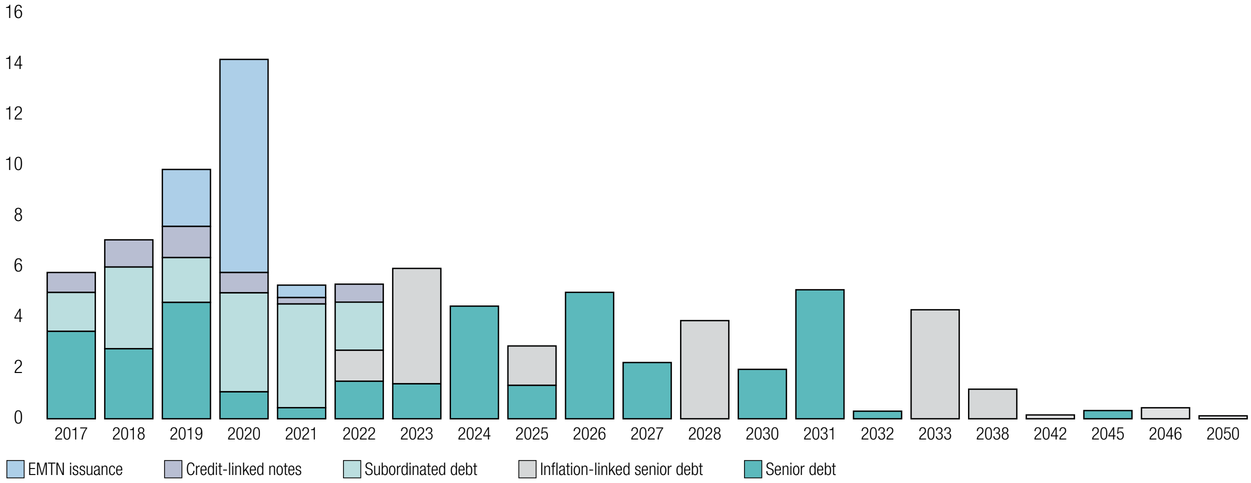
Group's funding liabilities by instrument type and term



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 (including 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 in-country. 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 relevant 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

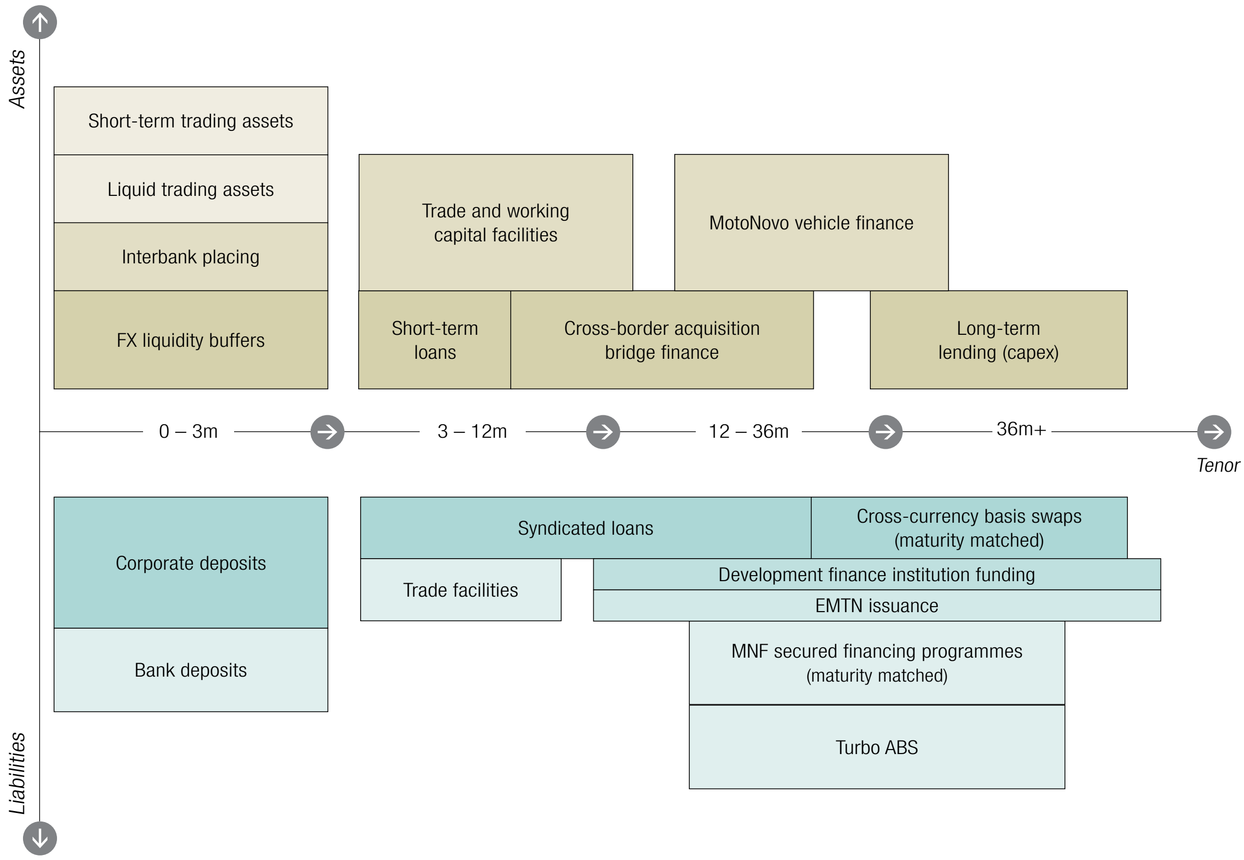
Given that the group continues to grow its businesses in the rest of Africa, and given the size of MotoNovo, the active management of foreign currency liquidity risk continues to be a strategic focus. The group seeks to avoid exposing itself to undue liquidity risk and to maintain liquidity risk within 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. This philosophy has translated into a resilient and sustainable foreign currency balance sheet. Following the sovereign credit rating downgrade to sub-investment grade, the group experienced a limited impact.

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.
• setting liquidity risk tolerance; • setting liquidity strategy; • ensuring substantial diversification over different funding sources; • assessing the impact of future funding and liquidity needs taking into account expected liquidity shortfalls or excesses; • setting the approach to liquidity management in different currencies and from country to country; • ensuring adequate liquidity ratios; • ensuring an appropriate structural liquidity gap; and • maintaining a funds transfer pricing methodology and process.	• managing intraday liquidity positions; • managing daily payment queue; • monitoring net funding requirements; • forecasting cash flows; • performing short-term cash flow analysis for all currencies (individually and in aggregate); • managing intragroup liquidity; • managing central bank clearing; • managing net daily cash positions; • managing and maintaining market access; and • managing and maintaining collateral.	• managing early warning and key risk indicators; • performing stress testing including sensitivity analysis and scenario testing; • maintaining product behaviour and optionality assumptions; • ensuring that an adequate and diversified portfolio of liquid assets and buffers are in place; and • maintaining the contingency funding plan.

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 RATIOS

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.

LIQUIDITY COVERAGE RATIO

The LCR has been fully adopted by the SARB with the inclusion of a committed liquidity facility. Phasing in of the LCR commenced in 2015 and banks are required to be fully compliant by 2019. The minimum LCR requirement is currently 80%, with 10% incremental step-ups each calendar year to 100% on 1 January 2019.

The group remains focused on building a diversified pool of available HQLA, which is constrained by the limited availability of these assets in the South African market.

DISCLOSURE REQUIREMENTS

The BCBS published the liquidity coverage ratio disclosure standards in March 2014 with the objective to reduce market uncertainty around liquidity positions. The standardised templates are completed semi-annually and the group publishes quarterly disclosure templates on its website.

These disclosures reveal industry reporting inconsistencies which are being addressed via the Banking Association South Africa with SARB and the South African Institute of Chartered Accountants.

NET STABLE FUNDING RATIO

The NSFR is a structural balance sheet ratio focusing on promoting a more resilient banking sector. The ratio calculates the amount of available stable funding relative to the amount of required stable funding. The industry continues to await communication from the SARB in terms of prudential requirements in relation to NSFR prudential requirements at a consolidated group level.

In line with *Directive 4/2016*, banks have been submitting a monthly NSFR monitoring template since August 2016 to enable the SARB to assess the readiness of banks to comply with the 100% NSFR requirement from 1 January 2018 per the Bank of International Settlements timelines. Banks have been engaging on a bilateral basis on interpretive matters relating to this form.

The SARB has applied its discretion on the treatment of deposits with maturities of up to six months placed by financial institutions. The NSFR framework assigns a 0% available stable funding factor to these funds, whereas the SARB has elected to apply a 35% factor. Additionally, industry is awaiting clarity on treatment of assets eligible for the committed liquidity facility. It is expected that the SARB will follow the route of the Australian regulator by differentiating these assets for required stable funding purposes. Both changes are anticipated to significantly assist the South African banking sector in meeting NSFR requirements.

RESOLUTION FRAMEWORK

In September 2015, 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 Resolution Authority (proposed new unit in SARB), will be responsible for bank resolution. The exact details of the legislative framework that will support the resolution regime and the Resolution Authority's respective powers are still being finalised and should be disclosed when the Special Resolution Bill is released. Resolution plans will allow the Resolution Authority to plan for an event from which a bank's recovery action has failed or is deemed likely to fail. Bank resolution plans will be owned and maintained by the Resolution Authority, but will require a significant amount of bilateral engagement and input from individual banks to enable it to develop a customised plan that is most appropriate to each bank. As part of the Resolution Framework and powers of the Resolution Authority, a Deposit Insurance Scheme (DIS) is proposed to protect depositors and enhance financial stability. A discussion paper on designing a DIS was issued in May 2017. Given the significant impact on the banks of funding the DIS, banks continue to actively engage with the SARB on the size of the fund and the funding mechanics.

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.

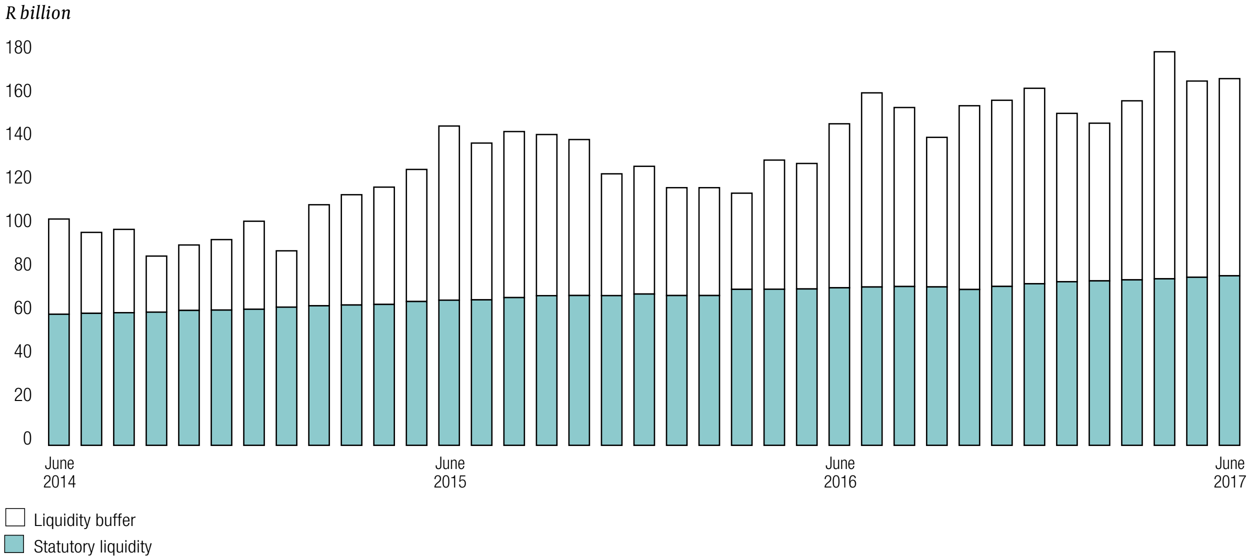
Group's composition of liquid assets

	As at 30 June 2017						
	Marketable assets	HQLA Basel III view after haircut*				Management view after haircuts	
R billion	Total June 2017*	Level 1	Level 2	Total June 2017	Total June 2016	Total June 2017	Total June 2016
Cash and deposits with central banks	**37**	**35**	**–**	**35**	32	**35**	32
Government bonds and bills	**107**	**98**	**–**	**98**	83	**107**	89
Other liquid assets	**59**		**34**	**34**	42	**43**	53
Total	**203**	**133**	**34**	**167**	157	**185**	174

* *The surplus HQLA holdings by subsidiaries and foreign branches in excess of the minimum required LCR of 80% (2016: 70%), 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

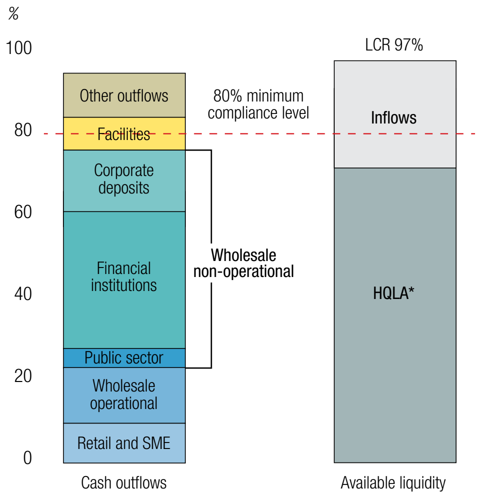


The group's LCR increased from 96% to 97% in the current financial year due to an increase in HQLA holdings of R10 billion, offsetting an increase in the net cash outflows of R9 billion, driven by increases in wholesale non-operational deposits.

The following graph illustrates the group's LCR position and demonstrates the group's compliance with the 80% (2016: 70%) minimum requirement. FirstRand Bank's LCR was 105% at 30 June 2017 (2016: 102%).

Funding from institutional clients is a significant contributor to the group's net cash outflows as measured under the LCR. 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 less efficient institutional funding sources, as well as to offer facilities more efficiently.

Group LCR



* *HQLA held by subsidiaries and foreign branches in excess of the required LCR minimum of 80% have been excluded on consolidation as per Directive 11 of 2014.*

The BCBS' *Liquidity coverage ratio disclosure standards* propose consistent and transparent disclosure of banks' liquidity positions as measured by Basel 3 regulations. Regulation 43 requires banks to provide its LCR disclosure in a standardised template.

Refer to www.firstrand.co.za 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.

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;
- 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 a diversified group-wide basis.

Formulated, business unit-level credit risk appetite statements are annually reviewed and approved, and risk limits are reported quarterly 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 CROs, 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

YEAR UNDER REVIEW	RISK MANAGEMENT FOCUS AREAS
• Aligned credit origination strategies to the group's macroeconomic outlook with particular reference to low economic growth and lack of employment growth. • Reviewed counterparty ratings impacted by the sovereign downgrade and re-assessed associated origination strategies. • Continued roll-out of the group's IFRS 9 programme, focusing on model development and validation against established group frameworks. • Implemented model risk management software to enhance model risk management practices across the credit value chain. • Continued to roll-out minimum requirements and data architecture refinements related to BCBS 239. • Continued to focus on and strengthen credit risk management disciplines across the subsidiaries in the rest of Africa.	• Ongoing review of risk appetite and credit origination strategies, as macroeconomic prospects unfold. • Continue to monitor sovereign rating prospects, and the ratings of associated entities, with proactive revisions where required. • Complete validation of IFRS 9 credit models and implement in production and complete end-to-end parallel runs. • Continue to invest in people, systems and processes related to credit model risk management to ensure appropriate governance with increasing model complexity. • Continue to roll-out data architecture refinements related to BCBS 239.

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.

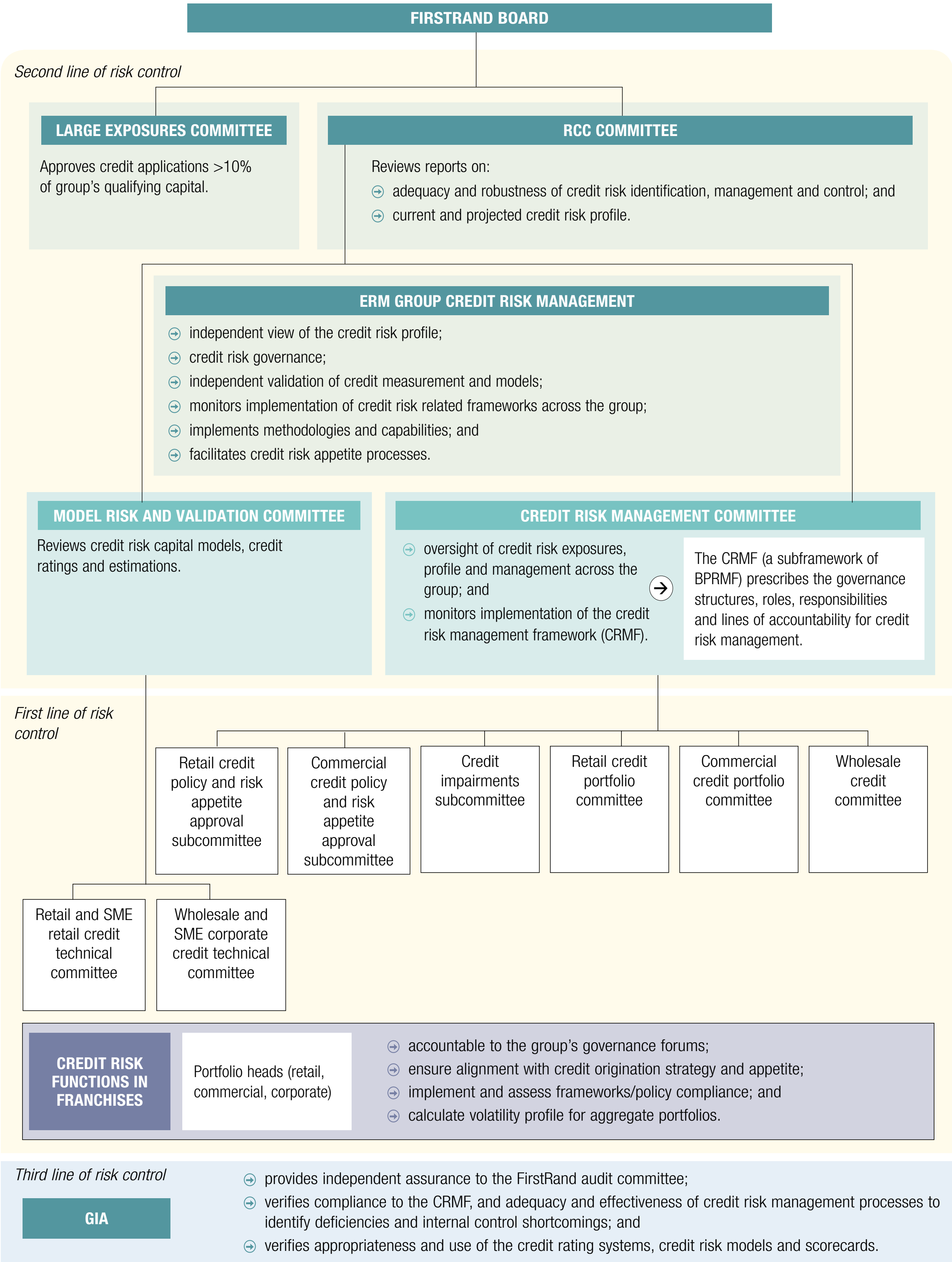
ERM quarterly provides an aggregated credit risk profile report of each portfolio to the RCC committee with inputs from credit portfolio reports and franchise CRO reports and include:

- 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				
	2017				2016
		AIRB approach	Standardised approach subsidiaries		
R million	Total	FirstRand Bank (SA)	Regulated bank entities in the rest of Africa	Other subsidiaries	Total
On-balance sheet exposures	**1 092 294**	**918 052**	**82 595**	**91 647**	1015 004
Cash and short-term funds	**59 813**	**46 441**	**9 532**	**3 840**	55 785
– Money at call and short notice	**34 015**	**25 117**	**5 187**	**3 711**	31 768
– Balances with central banks	**25 798**	**21 324**	**4 345**	**129**	24 017
Gross advances*	**909 646**	**773 327**	**59 567**	**76 752**	867 562
Less: impairments	**16 540**	**14 095**	**1 584**	**861**	16 157
Net advances	**893 106**	**759 232**	**57 983**	**75 891**	851 405
Debt investment securities (excluding non-recourse investments)**	**139 375**	**112 379**	**15 080**	**11 916**	107 814
Off-balance sheet exposures	**164 209**	**149 110**	**12 974**	**2 125**	149 718
Total contingencies	**40 737**	**34 905**	**4 936**	**896**	42 072
– Guarantees	**34 006**	**29 105**	**4 115**	**786**	34 733
– Letters of credit#	**6 731**	**5 800**	**821**	**110**	7 339
Irrevocable commitments	**119 325**	**110 058**	**8 038**	**1 229**	101 392
Credit derivatives	**4 147**	**4 147**	**–**	**–**	6 254
Total	**1 256 503**	**1 067 162**	**95 569**	**93 772**	1 164 722

* *The franchise split of gross advances is provided in the following table.*

** *Debt investment securities are net of allowances and impairments.*

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 2017						
	Gross exposures*						
		Non-defaulted exposures					
R million	Net defaulted exposures (NPLs)	Neither past due nor impaired	One instalment past due	Two instalments past due	Total	Allowances/ Impairments	Net value
1. **Gross advances**	**21 905**	**869 432**	**11 749**	**6 560**	**909 646**	**16 540**	**893 106**
FNB	**12 228**	**354 550**	**6 743**	**4 048**	**377 569**	**7 905**	**369 664**
– Retail	**7 571**	**235 014**	**4 008**	**2 506**	**249 099**	**4 982**	**244 117**
– Commercial	**2 280**	**80 625**	**175**	**500**	**83 580**	**1 558**	**82 022**
– Rest of Africa	**2 377**	**38 911**	**2 560**	**1 042**	**44 890**	**1 365**	**43 525**
WesBank	**7 931**	**193 086**	**4 944**	**2 509**	**208 470**	**4 329**	**204 141**
RMB investment banking	**1 706**	**238 962**	**37**	**3**	**240 708**	**2 966**	**237 742**
RMB corporate banking	**40**	**42 171**	**25**	**–**	**42 236**	**935**	**41 301**
FCC (including Group Treasury)	**–**	**40 663**	**–**	**–**	**40 663**	**405**	**40 258**
2. **Debt investment securities**	**–**	**139 375**	**–**	**–**	**139 375**	**–**	**139 375**
3. **Off-balance sheet exposures**	**1**	**164 209**	**–**	**–**	**164 210**	**1**	**164 209**
4. **Total**	**21 906**	**1 173 016**	**11 749**	**6 560**	**1 213 231**	**16 541**	**1 196 690**

* *Gross exposures exclude recoverable loan commitments.*

	As at 30 June 2016						
	Gross exposures**						
		Non-defaulted exposures					
R million	Net defaulted exposures (NPLs)	Neither past due nor impaired	One instalment past due	Two instalments past due	Total	Allowances/ Impairments	Net value
1. **Gross advances**	21 282	829 379	11 472	5 429	867 562	16 577	850 985
FNB	10 973	341 721	5 951	3 129	361 774	7 000	354 774
– Retail	7 269	226 658	3 988	2 293	240 208	4 575	235 633
– Commercial	1 941	75 785	129	102	77 957	1 436	76 521
– Rest of Africa	1 763	39 278	1 834	734	43 609	989	42 620
WesBank	6 739	184 915	5 483	2 160	199 297	3 847	195 450
RMB investment banking*	3 440	225 195	38	140	228 813	4 127	224 686
RMB corporate banking	130	36 040	–	–	36 170	849	35 321
FCC (including Group Treasury)	–	41 508	–	–	41 508	754	40 754
2. **Debt investment securities**	–	107 842	–	–	107 842	28	107 814
3. **Off-balance sheet exposures**	84	149 660	–	–	149 744	26	149 718
Total	21 366	1 086 881	11 472	5 429	1 125 148	16 631	1 108 517

* *Impaired advances for RMB investment banking include cumulative credit fair value adjustments on the non-performing book.*

** *Gross exposures exclude recoverable loan commitments.*

CR2: Changes in stock of defaulted advances, debt securities and off-balance sheet exposures

R million	Total
1. **Defaulted credit exposures at 30 June 2016**	**21 366**
2. Advances defaulted	**23 673**
3. Return to not defaulted status	**(11 122)**
4. Amounts written off	**(8 939)**
5. Other changes	**(3 072)**
6. **Defaulted credit exposures at 30 June 2017**	**21 906**

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 2017 exposures to technical and partial arrears of R20.9 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.

Age analysis of credit exposures

	As at 30 June 2017				
		Past due but not specifically impaired			
R million/%	Neither past due nor impaired	One full instalment past due	Two full instalments past due	Impaired (NPLs)	Total
FNB	**354 550**	**6 743**	**4 048**	**12 228**	**377 569**
– Retail	**235 014**	**4 008**	**2 506**	**7 571**	**249 099**
– Commercial*	**80 625**	**175**	**500**	**2 280**	**83 580**
– Rest of Africa**	**38 911**	**2 560**	**1 042**	**2 377**	**44 890**
WesBank	**193 086**	**4 944**	**2 509**	**7 931**	**208 470**
RMB investment banking	**238 962**	**37**	**3**	**1 706**	**240 708**
RMB corporate banking	**42 171**	**25**	**–**	**40**	**42 236**
FCC (including Group Treasury)	**40 663**	**–**	**–**	**–**	**40 663**
Total	**869 432**	**11 749**	**6 560**	**21 905**	**909 646**
Percentage of total book	**95.6**	**1.3**	**0.7**	**2.4**	**100.0**

* *Includes public sector.*

** *Includes FNB's activities in India.*

	As at 30 June 2016				
		Past due but not specifically impaired			
R million/%	Neither past due nor impaired	One full instalment past due	Two full instalments past due	Impaired (NPLs)	Total
FNB	341 721	5 951	3 129	10 973	361 774
– Retail	226 658	3 988	2 293	7 269	240 208
– Commercial*	75 785	129	102	1 941	77 957
– Rest of Africa**	39 278	1 834	734	1 763	43 609
WesBank	184 915	5 483	2 160	6 739	199 297
RMB investment banking	225 195	38	140	3 440	228 813
RMB corporate banking	36 040	–	–	130	36 170
FCC (including Group Treasury)	41 508	–	–	–	41 508
Total	829 379	11 472	5 429	21 282	867 562
Percentage of total book	95.6	1.3	0.6	2.5	100.0

* *Includes public sector.*

** *Includes FNB's activities in India.*

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.

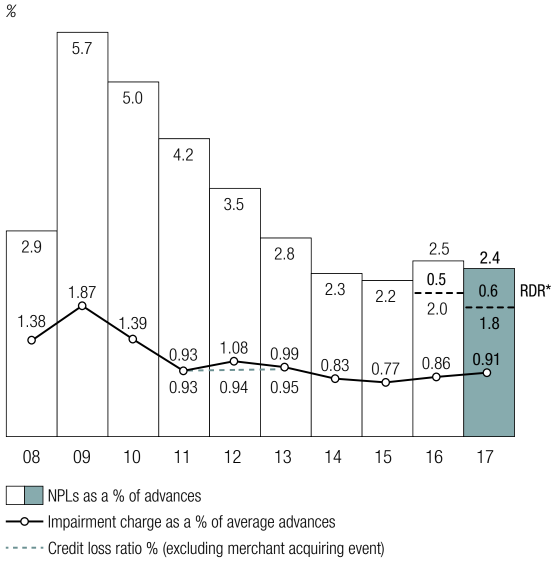
Impairment assessment

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 on a normalised basis



* *Restructured debt-review.*

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 June 2017			
R million	Defaulted advances before write-offs	Less: write-offs excluding interest in suspense	Defaulted advances net of write-offs	Specific impairments
Agriculture	**803**	**15**	**788**	**169**
Banks	**3**	**–**	**3**	**3**
Financial institutions	**141**	**28**	**113**	**53**
Building and property development	**1 674**	**278**	**1 396**	**697**
Government, Land Bank and public authorities	**33**	**5**	**28**	**20**
Individuals	**22 516**	**7 345**	**15 171**	**5 440**
Manufacturing and commerce	**2 799**	**383**	**2 416**	**1 077**
Mining	**873**	**596**	**277**	**116**
Transport and communication	**341**	**31**	**310**	**141**
Other services	**1 661**	**258**	**1 403**	**772**
Total	**30 844**	**8 939**	**21 905**	**8 488**

	As at 30 June 2016			
R million	Defaulted advances before write-offs	Less: 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	736
Government, Land Bank and public authorities	14	2	12	7
Individuals	19 639	5 968	13 671	4 927
Manufacturing and commerce	1 739	185	1 554	827
Mining	2 064	40	2 024	720
Transport and communication	352	64	288	167
Other services	1 814	246	1 568	666
Total	28 152	6 870	21 282	8 218

*Geographic defaulted advances**

R million	Defaulted advances before write-offs	Less: write-offs excluding interest in suspense	Defaulted advances net of write-offs	Specific impairments
	As at 30 June 2017			
South Africa	**26 414**	**7 724**	**18 690**	**7 075**
Rest of Africa	**3 273**	**592**	**2 681**	**1 143**
UK	**883**	**589**	**294**	**172**
Other Europe	**103**	**–**	**103**	**53**
North America	**121**	**33**	**88**	**25**
Australasia	**1**	**1**	**–**	**–**
Asia	**49**	**–**	**49**	**20**
Total	**30 844**	**8 939**	**21 905**	**8 488**

* *There were no exposures in South America in the current and prior year.*

R million	Defaulted advances before write-offs	Less: write-offs excluding interest in suspense	Defaulted advances net of write-offs	Specific impairments
	As at 30 June 2016			
South Africa	23 492	6 381	17 111	6 674
Rest of Africa	3 650	81	3 569	1 187
UK	625	378	247	150
Other Europe	113	–	113	58
North America	129	30	99	52
Australasia	1	–	1	1
Asia	142	–	142	96
Total	28 152	6 870	21 282	8 218

* *There were no exposures in South America in the current and prior year.*

*Sector and geographic defaulted debt investment securities and off-balance sheet exposures**

	As at 30 June 2017		
R million	**Defaulted advances before write-offs**	**Less: write-offs excluding interest in suspense**	**Defaulted exposures net of write-offs**
Off-balance sheet items			
Sector	**1**	**–**	**1**
– Manufacturing and commerce	**1**	**–**	**1**
Geography – South Africa	**1**	**–**	**1**

* *There were no defaulted debt investment securities during the year.*

	As at 30 June 2016		
R million	Defaulted advances before write-offs	Less: 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;
- 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 R6.2 billion. Restructured exposures are classified as impaired once the group determines it is probable that it will be unable to collect all principle and interest due according to the new terms and conditions of the restructured agreement. Unimpaired restructures include those that are considered performing and not distressed.

Restructured exposures split between impaired and not impaired

	As at 30 June 2017		
R million	Impaired	Not impaired	Total
Advances	**6 203**	**8 989**	**15 192**

	As at 30 June 2016		
R million	Impaired	Not impaired	Total
Advances	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 is monitored based on information from internal sources, credit bureau, 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, and debt investment securities (excluding non-recourse investments and off-balance sheet exposures).

Breakdown of exposures across geographical areas

	As at 30 June 2017		As at 30 June 2016	
R million	Gross advances and debt investment securities*	Off-balance sheet exposures**	Gross advances and debt investment securities*	Off-balance sheet exposures**
South Africa	**865 237**	**136 911**	795 292	120 023
Rest of Africa	**101 579**	**15 321**	95 742	16 567
United Kingdom	**61 214**	**4 813**	54 228	7 451
Other Europe	**6 728**	**3 450**	7 284	2 789
North America	**3 518**	**439**	9 973	452
South America	**434**	**–**	952	–
Australasia	**1 474**	**129**	2 411	140
Asia	**8 837**	**3 146**	9 494	2 296
Total	**1 049 021**	**164 209**	975 376	149 718

* *Debt investment securities exclude non-recourse investments.*

** *Significant off-balance sheet exposures.*

Breakdown of exposures across industries

	As at 30 June 2017		As at 30 June 2016	
R million	Gross advances and debt investment securities*	Off-balance sheet exposures**	Gross advances and debt investment securities*	Off-balance sheet exposures**
Agriculture	**33 147**	**2 542**	31 351	858
Banks and financial services	**151 094**	**32 286**	137 379	25 303
Building and property development	**48 744**	**5 605**	54 666	2 861
Government, Land Bank and public authorities	**145 815**	**10 171**	120 699	8 104
Individuals	**434 188**	**41 818**	417 638	50 000
Manufacturing and commerce	**105 607**	**19 128**	100 515	17 381
Mining	**19 018**	**26 453**	19 823	17 483
Transport and communication	**20 467**	**10 713**	21 447	4 658
Other services	**90 941**	**15 493**	71 858	23 070
Total	**1 049 021**	**164 209**	975 376	149 718

* *Debt investment securities exclude non-recourse investments.*

** *Significant off-balance sheet exposures.*

Breakdown of exposures per residual maturity

	As at 30 June 2017		As at 30 June 2016	
R million	Gross advances and debt investment securities*	Off-balance sheet exposures**	Gross advances and debt investment securities*	Off-balance sheet exposures**
Less than one year (including call)	**388 916**	**160 762**	362 010	144 613
Between 1 year and 5 years	**358 963**	**2 375**	346 460	1 766
Over 5 years	**280 856**	**1 072**	242 582	3 339
Non-contractual amounts	**20 286**	**–**	24 324	–
Total	**1 049 021**	**164 209**	975 376	149 718

* *Debt investment securities exclude non-recourse investments.*

** *Significant off-balance sheet exposures.*

CREDIT RISK MITIGATION

The group's credit risk mitigation approach is described on page 20.

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 2017				
	Exposures*				
	Unsecured	Secured by collateral		Secured by financial guarantees	
R million	carrying value	Carrying value	Secured amount	Carrying value	Secured amount
Advances	**164 041**	**729 065**	**729 065**	**4 398**	**4 398**
Debt securities	**27 010**	**112 365**	**112 365**	**–**	**–**
Total advances and debt securities	**191 051**	**841 430**	**841 430**	**4 398**	**4 398**
Of which defaulted:	**3 137**	**10 279**	**10 279**	**–**	**–**

* *No exposures were secured by credit derivatives during the year.*

	As at 30 June 2016				
	Exposures*				
	Unsecured	Secured by collateral		Secured by financial guarantees	
R million	carrying value	Carrying value	Secured amount	Carrying value	Secured amount
Advances	152 249	656 450	781 078	5 532	5 532
Debt securities	25 892	124 628	–	–	–
Total advances and debt securities	178 141	781 078	781 078	5 532	5 532
Of which defaulted:	2 417	11 713	11 713	–	–

* *No exposures were secured by credit derivatives during the year.*

CREDIT RISK UNDER AIRB

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 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 EAD.

EAD% per portfolio	AIRB	Standardised approach
Retail	**83**	**17**
Commercial	**77**	**23**
Corporate	**84**	**16**

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 DEFAULT	
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 PD measures reflect long-term, average default expectations over the course of the economic cycle. Through-the-cycle PDs are inputs in economic and regulatory capital calculations. • Point-in-time PD measures reflect default expectations in the current economic environment and thus tend to be more volatile than through-the-cycle PDs. Point-in-time 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 Standard & Poor's 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
15 – 25	0.29%	BBB
26 – 32	0.77%	BB+, BB
33 – 39	1.44%	BB-
40 – 53	2.52%	B+
54 – 83	6.18%	B
84 – 90	13.68%	B-
91 – 99	59.11%	Below B-
100	100%	D (defaulted)

- FR1 is the lowest PD and FR100 the highest.
- External ratings have also been mapped to the master rating scale for reporting purposes.

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 may be drawn over the period under consideration (i.e. off-balance sheet exposures). It is 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	• Type, quality and level of subordination. • Value of collateral held compared to the size of overall exposure. • Effectiveness of the recovery process and timing of cash flows received during the workout or restructuring process.
Application	• All credit portfolios. • Recognition of NPLs for accounting.
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, through-the-cycle 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 – sets the framework against which the model will be validated and performs 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 and 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 portfolio 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 time lapse between default event and closure of exposure depends on the type of collateral (if any) of the underlying exposure. For secured portfolios, a subjective process is followed which takes a look at a case by case scenario basis for collateral perfection to occur. For unsecured portfolios a write-off policy is used and for most cases a six-month write-off policy is applied.

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 DESCRIPTION
Large corporate portfolios (RMB and WesBank) Private sector counterparties including corporates and securities firms, and public sector counterparties. Products include loan facilities, structured finance facilities, contingent products and derivative instruments.	14	**PD**	• Internally developed statistical rating models using internal and external data covering full economic cycles are used and results supplemented with qualitative assessments based on international rating agency methodologies. • All ratings (and associated PDs) are reviewed by the wholesale credit committee and, if necessary, final adjustments made to ratings to reflect information not captured by the models.
		LGD	• LGD estimates are based on modelling a combination of internal 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 exposure.
		EAD	• 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**	• 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. • All ratings (and associated PDs) are reviewed by the wholesale credit committee and, if necessary, final adjustments made to ratings to reflect information not captured by the models.
		LGD	• LGD estimates are based on modelling a combination of internal and suitably adjusted international data which are reviewed by the same committee process responsible for reviewing and approving PDs. The LGD models consider the type of collateral underlying the exposure.
		EAD	• Estimation is based on regulatory guidelines with credit conversion factors used, as appropriate. External data and expert judgement are used due to the low default nature of the exposures.
Specialised lending portfolios (RMB, FNB commercial) Exposures to private-sector counterparties for the financing of project finance, high volatility commercial real estate, and income-producing real estate.	4	**PD**	• 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. • All ratings (and associated PDs) are reviewed by the wholesale credit committee and, if necessary, final adjustments 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.

PORTFOLIO	NUMBER OF MODELS	MODEL TYPE	MODEL DESCRIPTION
Commercial portfolios (FNB commercial) Exposures to SME corporate and retail clients. Products include loan facilities, contingent products and term lending products.	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. • **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 Clients)) Exposures to individuals for financing of residential properties.	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 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.
Qualifying revolving retail exposures (FNB card, FNB value banking solutions and wealth (RMB Private Bank and FNB Private Clients)) 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 versus 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.

Use of credit risk management actions and measures in the credit life cycle

	CORPORATE	RETAIL
Determination of portfolio and client acquisition strategy	• Assessment of overall portfolio credit risk determined by PD, EAD and LGD. • Acquisition and overall strategy set in terms of appropriate limits and group risk appetite.	• Same measures as for corporate. • Credit models determine loss thresholds used in setting of credit risk appetite.
Determination of individual and portfolio limits	• Industry and geographical concentrations. • Ratings. • Risk-related limits on the composition of portfolio. • Group credit risk appetite.	• Same measures as for corporate. • Modelled versus actual experience is evaluated in setting of risk appetite.
Profitability analysis and pricing decisions	• PD, EAD and LGD used to determine pricing. • Economic profit used for profitability.	• Same measures as for corporate.
Credit approval	• Consideration of application's ratings. • Credit risk appetite limits. • Projected risk-adjusted return on economic capital (PD, EAD and LGD are key inputs in these measures).	• Automated based on application scorecards (scorecards are reflective of PD, EAD and LGD). • Assessment of client's affordability.
Credit monitoring and risk management	• Risk assessment based on PD, EAD and LGD. • Counterparty FR grades updated based on risk assessment. • Additional capital for large transactions that will increase concentration risk.	• Same measures as for corporate. • Monthly analysis of portfolio and risk movements used in portfolio management and credit strategy decisions.
Impairments	• PD and LGD used in assessment of impairments and provisioning. • Judgemental assessment to determine adequacy of provisions.	• 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	• Portfolio reports discussed at franchise and business unit risk committee meetings. • Quarterly portfolio reports submitted to credit risk management and RCC committees.	• Portfolio reports discussed at franchise and business unit risk committee meetings. • Quarterly portfolio reports submitted to credit risk management and RCC committees.

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 AIRB models are applied. The information in the different columns is explained as follows:

- regulatory supplied credit conversion factors (CCF) are used;
- credit risk mitigation (CRM) measures applied are described on page 20;
- number of obligors corresponds to the number of counterparties in the PD band;
- average PD and LGD are weighted by EAD;
- 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.

CR6: AIRB – FirstRand Bank (SA) credit risk exposures by portfolio and PD range

	Total FirstRand Bank (SA)					
	As at 30 June 2017					
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	153 312	28 845	39.70	149 364	0.02	205 679
0.15 to < 0.25	86 617	50 355	49.46	101 192	0.18	114 571
0.25 to < 0.50	158 064	66 025	43.12	174 022	0.36	327 244
0.50 to < 0.75	73 797	24 050	49.44	84 033	0.66	444 836
0.75 to < 2.50	249 161	51 953	53.04	256 941	1.54	1 683 646
2.50 to < 10.00	128 314	21 462	28.95	139 951	4.79	2 776 791
10.00 to < 100.00	31 065	2 279	49.51	32 220	26.89	991 481
100.00 (default)	18 354	33	18.20	18 847	100.00	1 166 850
Total	898 684	245 002	45.56	956 570	4.14	7 711 098

	Total FirstRand Bank (SA)					
	As at 30 June 2017					
PD scale	Average LGD %	Average maturity Years	RWA R million*	RWA density %	Expected loss R million	Provisions R million
0.00 to < 0.15	30.37	2.11	8 382	5.61	11	
0.15 to < 0.25	31.41	1.62	25 691	25.39	56	
0.25 to < 0.50	27.67	1.35	55 042	31.63	178	
0.50 to < 0.75	26.29	0.97	27 409	32.62	151	
0.75 to < 2.50	26.15	0.74	107 171	41.71	1 086	
2.50 to < 10.00	35.57	0.53	94 328	67.40	2 468	
10.00 to < 100.00	40.00	0.39	36 621	113.66	3 495	
100.00 (default)	40.69	0.51	16 191	85.90	6 524	
Total	29.79	1.13	370 835	38.77	13 969	13 239

* *The difference between the OV1: Overview of RWA and CR6 templates' RWA is due to slotting.*

CR6: AIRB – FirstRand Bank (SA) credit risk exposures by portfolio and PD range continued

	Total FirstRand Bank (SA)					
	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	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	100.00	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

CR6: AIRB – FirstRand Bank (SA) credit risk exposures by portfolio and PD scale continued

	Corporate					
	As at 30 June 2017					
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	2 312	988	54.08	2 716	0.09	8
0.15 to < 0.25	50 411	35 113	52.80	63 850	0.17	68
0.25 to < 0.50	43 696	28 070	51.13	53 738	0.37	118
0.50 to < 0.75	19 809	8 850	53.35	23 116	0.74	107
0.75 to < 2.50	27 047	12 114	54.47	32 962	1.82	182
2.50 to < 10.00	2 567	1 834	51.20	3 533	4.08	74
10.00 to < 100.00	1 764	187	50.04	1 855	10.46	50
100.00 (default)	572	1	49.90	570	100.00	6
Total	148 178	87 157	52.52	182 340	1.09	613

	Corporate					
	As at 30 June 2017					
PD scale	Average LGD %	Average maturity Years	RWA R million	RWA density %	Expected loss R million	Provisions R million
0.00 to < 0.15	32.26	1.66	467	17.21	1	
0.15 to < 0.25	33.24	1.66	17 418	27.28	36	
0.25 to < 0.50	33.46	1.85	23 969	44.60	68	
0.50 to < 0.75	31.33	1.65	12 038	52.08	54	
0.75 to < 2.50	34.13	1.98	27 102	82.22	201	
2.50 to < 10.00	32.59	1.97	3 570	101.04	47	
10.00 to < 100.00	40.01	2.07	3 306	178.23	77	
100.00 (default)	47.00	2.24	–	–	285	
Total	33.31	1.79	87 870	48.19	769	3 115

CR6: AIRB – FirstRand Bank (SA) credit risk exposures by portfolio and PD scale continued

	Corporate					
	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	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 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	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

CR6: AIRB – FirstRand Bank (SA) credit risk exposures by portfolio and PD range continued

	Specialised lending					
	As at 30 June 2017					
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	156	–	–	156	0.07	8
0.15 to < 0.25	8 108	1 210	58.00	8 131	0.17	24
0.25 to < 0.50	23 403	3 805	49.77	24 302	0.34	67
0.50 to < 0.75	6 925	552	56.97	7 226	0.73	73
0.75 to < 2.50	12 662	1 311	57.66	13 279	1.33	667
2.50 to < 10.00	2 895	580	58.00	3 185	5.10	236
10.00 to < 100.00	286	–	–	286	25.66	57
100.00 (default)	779	–	–	779	100.00	28
Total	55 214	7 458	53.67	57 344	2.34	1 160

	Specialised lending					
	As at 30 June 2017					
PD scale	Average LGD %	Average maturity Years	RWA R million	RWA density %	Expected loss R million	Provisions R million
0.00 to < 0.15	21.95	0.80	37	23.41	–	
0.15 to < 0.25	18.45	3.10	1 652	20.32	3	
0.25 to < 0.50	17.40	2.09	5 596	23.03	15	
0.50 to < 0.75	26.58	2.01	3 539	48.97	14	
0.75 to < 2.50	24.39	1.01	8 069	60.76	76	
2.50 to < 10.00	30.52	1.81	3 718	116.74	49	
10.00 to < 100.00	23.04	0.18	391	136.74	16	
100.00 (default)	48.55	4.99	–	–	362	
Total	21.52	1.98	23 002	40.11	535	392

CR6: AIRB – FirstRand Bank (SA) credit risk exposures by portfolio and PD range continued

	Specialised lending					
	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	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 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	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

CR6: AIRB – FirstRand Bank (SA) credit risk exposures by portfolio and PD range continued

	Sovereign					
	As at 30 June 2017					
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	102 397	–	–	87 060	0.01	2
0.15 to < 0.25	1 190	10	57.97	594	0.17	19
0.25 to < 0.50	12 891	5 238	51.39	15 120	0.33	26
0.50 to < 0.75	2 234	3 955	49.31	3 888	0.73	33
0.75 to < 2.50	3 835	298	35.71	2 989	1.51	46
2.50 to < 10.00	482	81	10.27	526	3.90	203
10.00 to < 100.00	134	23	–	147	21.40	6
100.00 (default)	–	–	–	–	–	–
Total	**123 163**	**9 605**	**49.59**	**110 324**	**0.17**	**335**

	Sovereign					
	As at 30 June 2017					
PD scale	Average LGD %	Average maturity Years	RWA R million	RWA density %	Expected loss R million	Provisions R million*
0.00 to < 0.15	30.20	2.90	5 387	6.19	3	
0.15 to < 0.25	26.22	4.00	194	32.65	–	
0.25 to < 0.50	29.24	2.65	6 291	41.61	15	
0.50 to < 0.75	23.39	3.70	2 072	53.29	7	
0.75 to < 2.50	20.10	2.57	1 483	49.60	9	
2.50 to < 10.00	49.05	1.74	783	148.79	10	
10.00 to < 100.00	37.40	2.44	306	207.87	15	
100.00 (default)	–	–	–	–	–	
Total	**29.63**	**2.89**	**16 516**	**14.97**	**59**	**–**

* *There were no provisions for sovereign during the year.*

CR6: AIRB – FirstRand Bank (SA) credit risk exposures by portfolio and PD range continued

	Sovereign					
	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	82 696	–	–	68 676	0.01	4
0.15 to < 0.25	626	60	91.78	767	0.18	25
0.25 to < 0.50	189	–	71.43	196	0.34	5
0.50 to < 0.75	68	59	78.32	109	0.56	12
0.75 to < 2.50	338	129	30.51	413	0.99	42
2.50 to < 10.00	217	37	88.29	245	5.79	63
10.00 to < 100.00	–	–	–	–	–	–
100.00 (default)	–	–	–	–	–	–
Total	84 134	285	60.81	70 406	0.04	151

	Sovereign					
	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	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	–

* *There were no provisions for sovereign during the year.*

CR6: AIRB – FirstRand Bank (SA) credit risk exposures by portfolio and PD range continued

	Banks and securities firms					
	As at 30 June 2017					
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	37 691	9 281	52.59	41 705	0.02	52
0.15 to < 0.25	11 870	7 238	52.66	10 756	0.17	65
0.25 to < 0.50	41 093	2 404	46.99	31 250	0.35	69
0.50 to < 0.75	1 455	314	26.05	468	0.74	28
0.75 to < 2.50	24 694	142	23.47	939	1.66	60
2.50 to < 10.00	2 859	731	20.40	2 654	4.43	47
10.00 to < 100.00	298	183	39.24	112	18.18	37
100.00 (default)	–	–	–	–	–	–
Total	119 960	20 293	50.05	87 884	0.33	358

	Banks and securities firms					
	As at 30 June 2017					
PD scale	Average LGD %	Average maturity Years	RWA R million	RWA density %	Expected loss R million	Provisions R million*
0.00 to < 0.15	28.80	1.38	1 839	4.41	2	
0.15 to < 0.25	28.98	1.63	3 044	28.30	5	
0.25 to < 0.50	28.67	0.70	10 983	35.15	32	
0.50 to < 0.75	29.19	1.67	269	57.45	1	
0.75 to < 2.50	56.25	0.99	1 351	143.83	10	
2.50 to < 10.00	26.60	0.90	2 034	76.62	29	
10.00 to < 100.00	44.13	0.98	223	198.81	10	
100.00 (default)	–	–	–	–	–	
Total	29.02	1.15	19 743	22.46	89	–

* *There were no provisions for banks and securities firms during the year.*

CR6: AIRB – FirstRand Bank (SA) credit risk exposures by portfolio and PD range continued

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
	Banks and securities firms					
	As at 30 June 2016					
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

PD scale	Average LGD %	Average maturity Years	RWA R million	RWA density %	Expected loss R million	Provisions R million
	Banks and securities firms					
	As at 30 June 2016					
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

CR6: AIRB – FirstRand Bank (SA) credit risk exposures by portfolio and PD range continued

	SME corporate					
	As at 30 June 2017					
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	1	5	54.52	4	0.09	47
0.15 to < 0.25	10 379	361	5.81	10 400	0.20	532
0.25 to < 0.50	7 764	5 435	0.43	9 890	0.43	7 288
0.50 to < 0.75	4 592	1 992	0.38	5 454	0.62	3 869
0.75 to < 2.50	31 720	10 394	1.82	36 051	1.48	17 925
2.50 to < 10.00	12 787	3 163	21.43	14 542	4.40	6 100
10.00 to < 100.00	1 996	416	0.81	2 225	20.49	1 138
100.00 (default)	487	26	–	1 002	100.00	2 482
Total	69 726	21 792	4.24	79 568	3.43	39 381

	SME corporate					
	As at 30 June 2017					
PD scale	Average LGD %	Average maturity Years	RWA R million	RWA density %	Expected loss R million	Provisions R million
0.00 to < 0.15	74.87	1.53	1	29.23	–	
0.15 to < 0.25	26.96	1.17	2 667	25.64	5	
0.25 to < 0.50	26.23	2.30	3 473	35.12	11	
0.50 to < 0.75	22.38	2.45	2 025	37.13	8	
0.75 to < 2.50	21.46	2.09	16 881	46.83	111	
2.50 to < 10.00	22.48	2.04	8 879	61.06	133	
10.00 to < 100.00	20.03	1.66	2 081	93.56	96	
100.00 (default)	43.42	2.92	65	6.46	484	
Total	23.26	2.01	36 072	45.34	848	1 007

CR6: AIRB – FirstRand Bank (SA) credit risk exposures by portfolio and PD range continued

	SME corporate					
	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	0.83	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	1.46	8 809	0.51	8 632
0.50 to < 0.75	7 986	4 016	0.41	9 779	0.66	6 176
0.75 to < 2.50	31 007	10 512	1.15	36 386	1.53	21 816
2.50 to < 10.00	11 452	2 598	11.62	12 634	5.21	11 962
10.00 to < 100.00	1 880	570	1.18	2 175	25.59	1 276
100.00 (default)	762	1	–	762	100.00	2 478
Total	68 753	21 643	2.40	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

CR6: AIRB – FirstRand Bank (SA) credit risk exposures by portfolio and PD range continued

	SME retail					
	As at 30 June 2017					
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	624	1 139	0.34	1 562	0.08	8 058
0.15 to < 0.25	562	1 134	–	1 536	0.25	17 592
0.25 to < 0.50	2 667	3 521	1.38	4 842	0.33	38 650
0.50 to < 0.75	1 538	538	11.00	1 881	0.60	11 501
0.75 to < 2.50	21 512	2 699	2.12	23 214	1.74	111 456
2.50 to < 10.00	19 455	5 204	0.22	24 150	4.60	1 024 285
10.00 to < 100.00	3 076	107	1.10	3 126	28.76	21 759
100.00 (default)	2 208	–	–	2 183	100.00	23 207
Total	51 642	14 342	1.26	62 494	7.41	1 256 508

	SME retail					
	As at 30 June 2017					
PD scale	Average LGD %	Average maturity Years	RWA R million	RWA density %	Expected loss R million	Provisions R million
0.00 to < 0.15	39.10	0.10	139	8.87	1	
0.15 to < 0.25	40.02	0.04	302	19.63	2	
0.25 to < 0.50	30.90	0.01	888	18.35	5	
0.50 to < 0.75	27.61	0.06	441	23.43	3	
0.75 to < 2.50	27.44	1.14	8 201	35.33	114	
2.50 to < 10.00	40.58	1.20	15 309	63.39	504	
10.00 to < 100.00	37.36	1.45	2 688	85.97	332	
100.00 (default)	55.71	0.71	1 982	90.78	864	
Total	34.87	0.99	29 950	47.93	1 825	877

CR6: AIRB – FirstRand Bank (SA) credit risk exposures by portfolio and PD range continued

	SME 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

CR6: AIRB – FirstRand Bank (SA) credit risk exposures by portfolio and PD range continued

PD scale	Retail mortgages As at 30 June 2017					
	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	8 718	9 377	16.74	10 288	0.08	21 580
0.15 to < 0.25	3 054	2 138	8.41	3 234	0.19	7 439
0.25 to < 0.50	21 915	11 840	43.25	27 036	0.38	34 295
0.50 to < 0.75	32 492	2 574	39.50	33 509	0.61	56 512
0.75 to < 2.50	73 423	15 672	84.22	86 622	1.38	146 358
2.50 to < 10.00	34 737	4 984	10.43	35 257	5.06	60 145
10.00 to < 100.00	6 952	351	35.54	7 076	26.49	16 853
100.00 (default)	5 987	6	100.00	5 992	100.00	16 302
Total	**187 278**	**46 942**	**46.30**	**209 014**	**5.34**	**359 484**

PD scale	Retail mortgages As at 30 June 2017					
	Average LGD %	Average maturity Years*	RWA R million	RWA density %	Expected loss R million	Provisions R million
0.00 to < 0.15	13.74	–	305	2.97	1	
0.15 to < 0.25	15.10	–	201	6.21	1	
0.25 to < 0.50	14.39	–	2 724	10.08	15	
0.50 to < 0.75	15.81	–	5 209	15.55	34	
0.75 to < 2.50	15.96	–	22 602	26.09	192	
2.50 to < 10.00	15.60	–	19 029	53.97	279	
10.00 to < 100.00	16.00	–	6 183	87.38	310	
100.00 (default)	18.85	–	1 943	32.43	1 074	
Total	**15.64**	**–**	**58 196**	**27.84**	**1 906**	**1 489**

* *Average maturity not applied for the retail mortgages RWA calculation.*

CR6: AIRB – FirstRand Bank (SA) credit risk exposures by portfolio and PD range continued

	Retail mortgages					
	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

* *Average maturity not applied for the retail mortgages RWA calculation.*

CR6: AIRB – FirstRand Bank (SA) credit risk exposures by portfolio and PD range continued

	Retail revolving					
	As at 30 June 2017					
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	1 412	8 049	55.37	5 869	0.08	175 781
0.15 to < 0.25	1 042	3 144	52.31	2 686	0.20	88 230
0.25 to < 0.50	2 538	5 532	56.10	5 642	0.35	225 289
0.50 to < 0.75	2 362	4 810	72.06	5 828	0.62	352 778
0.75 to < 2.50	10 841	8 934	70.75	17 161	1.48	1 003 598
2.50 to < 10.00	9 964	4 386	71.48	13 099	4.85	1 084 300
10.00 to < 100.00	3 531	1 008	70.77	4 244	24.98	659 114
100.00 (default)	1 367	–	–	1 367	100.00	1 008 183
Total	33 057	35 863	63.69	55 896	6.05	4 597 273

	Retail revolving					
	As at 30 June 2017					
PD scale	Average LGD %	Average maturity Years*	RWA R million	RWA density %	Expected loss R million	Provisions R million
0.00 to < 0.15	70.14	–	206	3.51	3	
0.15 to < 0.25	69.77	–	211	7.87	4	
0.25 to < 0.50	70.97	–	709	12.57	14	
0.50 to < 0.75	69.22	–	1 130	19.38	25	
0.75 to < 2.50	69.15	–	6 389	37.23	175	
2.50 to < 10.00	68.91	–	11 085	84.62	437	
10.00 to < 100.00	69.38	–	7 398	174.29	733	
100.00 (default)	68.39	–	403	29.44	964	
Total	69.42	–	27 531	49.25	2 355	1 643

* *Average maturity not applied for the retail revolving RWA calculation.*

CR6: AIRB – FirstRand Bank (SA) credit risk exposures by portfolio and PD range continued

	Retail revolving					
	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	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

* *Average maturity not applied for the retail revolving RWA calculation.*

CR6: AIRB – FirstRand Bank (SA) credit risk exposures by portfolio and PD range continued

	Other retail					
	As at 30 June 2017					
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	1	6	57.28	4	0.07	143
0.15 to < 0.25	1	7	62.20	5	0.20	602
0.25 to < 0.50	2 097	180	58.31	2 202	0.43	21 442
0.50 to < 0.75	2 390	465	58.48	2 663	0.60	19 935
0.75 to < 2.50	43 427	389	76.57	43 724	1.67	403 354
2.50 to < 10.00	42 568	499	87.52	43 005	4.85	601 401
10.00 to < 100.00	13 028	4	2 720.28	13 149	30.85	292 467
100.00 (default)	6 954	–	–	6 954	100.00	116 642
Total	110 466	1 550	80.01	111 706	12.40	1 455 986

	Other retail					
	As at 30 June 2017					
PD scale	Average LGD %	Average maturity Years*	RWA R million	RWA density %	Expected loss R million	Provisions R million
0.00 to < 0.15	68.00	–	1	13.68	–	
0.15 to < 0.25	73.81	–	2	31.72	–	
0.25 to < 0.50	26.59	–	409	18.59	3	
0.50 to < 0.75	30.57	–	686	25.75	5	
0.75 to < 2.50	26.92	–	15 093	34.52	198	
2.50 to < 10.00	44.43	–	29 921	69.58	980	
10.00 to < 100.00	47.80	–	14 045	106.82	1 906	
100.00 (default)	47.55	–	11 798	169.66	2 491	
Total	37.49	–	71 955	64.42	5 583	4 716

* *Average maturity not applied for other retail RWA calculation.*

CR6: AIRB – FirstRand Bank (SA) credit risk exposures by portfolio and PD range continued

	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	–	1	3.45	–	
0.15 to < 0.25	28.32	–	3	11.54	–	
0.25 to < 0.50	26.50	–	405	18.59	2	
0.50 to < 0.75	31.10	–	605	26.09	4	
0.75 to < 2.50	26.70	–	16 276	34.23	214	
2.50 to < 10.00	42.51	–	28 452	66.64	936	
10.00 to < 100.00	48.37	–	16 101	110.07	2 134	
100.00 (default)	48.34	–	9 725	156.78	2 325	
Total	36.52	–	71 568	61.89	5 615	4 812

* *Average maturity not applied for other retail RWA calculation.*

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 under the AIRB approach. As the group does not apply the foundation internal ratings-based approach, the rows related to this approach have been excluded from the CR7 table. 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. No credit derivatives were applied as credit risk mitigation during the year.

CR7: AIRB – Effect on RWA of credit derivatives used as credit risk mitigation techniques

	Pre-credit derivatives RWA	
R million	As at 30 June 2017	As at 30 June 2016
2. Sovereign	**16 516**	3 617
4. Banks and securities firms	**19 743**	16 619
6. Corporate	**87 871**	95 362
8. Specialised lending	**36 072**	20 928
SME corporate	**27 951**	37 142
9. Retail revolving	**27 530**	24 709
10. Retail mortgages	**58 197**	56 311
11. SME retail	**29 949**	24 031
12. Other retail	**71 953**	71 568
14. Equity	**–**	–
16. Purchased receivables	**–**	–
17. **Total**	**375 782**	350 287

RWA flow statement of credit risk exposure under AIRB

The calculation of credit RWA for FRB's domestic operations is based on internally-developed, quantitative models in line with the AIRB approach. The three credit risk measures, namely PD, EAD and LGD, are 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.

The following table presents a flow statement explaining variations in the credit RWA determined under the AIRB approach.

CR8: RWA flow statement of credit risk exposures under AIRB

R million	RWA
1. **RWA at 31 March 2017**	**367 383**
2. Asset size	**4 461**
3. Asset quality	**3 938**
4. Model updates	**–**
5. Methodology and policy	**–**
6. Acquisitions and disposals	**–**
7. Foreign exchange movements	**–**
8. Other	**–**
9. **RWA at 30 June 2017**	**375 782**

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 using a minimum five-year average annual default rate to allow for stable quantities to be compared.

CR9: AIRB – Backtesting of PD per portfolio

	Corporate							
	As at 30 June 2017							
				Number of obligors		Defaulted obligors		
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	Average historical annual default rate %
0.00 to < 0.12	AAA, AA, A	**0.09**	**0.09**	**15**	**8**	**–**	**–**	**–**
0.12 to < 0.45	BBB	**0.23**	**0.05**	**163**	**128**	**–**	**–**	**–**
0.45 to < 1.08	BB+, BB	**0.63**	**0.17**	**179**	**165**	**–**	**–**	**–**
1.08 to < 1.80	BB-	**1.12**	**0.15**	**87**	**81**	**–**	**–**	**–**
1.80 to < 3.23	B+	**2.45**	**0.40**	**103**	**101**	**–**	**–**	**–**
3.23 to < 9.12	B	**4.08**	**0.49**	**63**	**74**	**–**	**–**	**–**
9.12 to < 18.23	B-	**10.07**	**0.77**	**45**	**47**	**–**	**–**	**–**
18.23 to < 99.99	Below B-	**35.96**	**0.18**	**7**	**3**	**–**	**–**	**–**
100 (default)	Defaulted	**100.00**	**100.00**	**9**	**6**	**6**	**1**	**0.35**
Total		**1.09**	**0.29**	**671**	**613**	**6**	**1**	**0.35**

* *The overprediction in the corporate portfolio is due to the conservative SME corporate PD as well as the large corporate PD model.*

	Corporate							
	As at 30 June 2016							
				Number of obligors		Defaulted obligors		
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	Average historical 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	B	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		1.52	2.86	675	671	9	3	–

CR9: AIRB – Backtesting of PD per portfolio continued

	Specialised lending							
	As at 30 June 2017							
				Number of obligors		Defaulted obligors		
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	Average historical annual default rate %
0.00 to < 0.12	AAA, AA, A	**0.07**	**0.04**	**14**	**8**	**–**	**–**	**–**
0.12 to < 0.45	BBB	**0.29**	**0.25**	**50**	**76**	**–**	**–**	**–**
0.45 to < 1.08	BB+, BB	**0.71**	**0.74**	**457**	**516**	**–**	**–**	**–**
1.08 to < 1.80	BB-	**1.16**	**1.14**	**239**	**212**	**–**	**–**	**–**
1.80 to < 3.23	B+	**2.46**	**2.18**	**141**	**117**	**–**	**–**	**–**
3.23 to < 9.12	B	**5.48**	**5.09**	**208**	**146**	**–**	**–**	**–**
9.12 to < 18.23	B-	**10.98**	**10.98**	**7**	**7**	**–**	**–**	**–**
18.23 to < 99.99	Below B-	**29.43**	**28.81**	**36**	**50**	**–**	**–**	**–**
100 (default)	Defaulted	**100.00**	**100.00**	**48**	**28**	**33**	**6**	**100.00**
Total		**2.34**	**6.15**	**1 200**	**1 160**	**33**	**6**	**5.81**

* *The overprediction evident in this portfolio is due to the conservative income-producing real estate model.*

	Specialised lending							
	As at 30 June 2016							
				Number of obligors		Defaulted obligors		
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	Average 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	50	–	–	–
0.45 to < 1.08	BB+, BB	0.78	0.90	40	457	–	–	–
1.08 to < 1.80	BB-	1.11	1.41	23	239	–	–	–
1.80 to < 3.23	B+	2.92	2.69	31	141	–	–	–
3.23 to < 9.12	B	4.72	5.64	19	208	–	–	–
9.12 to < 18.23	B-	10.24	10.24	4	7	–	–	–
18.23 to < 99.99	Below B-	–	–	1	36	–	–	–
100 (default)	Defaulted	100.00	100.00	41	48	74	33	100.00
Total		2.89	2.25	1 191	1 200	74	33	0.26

CR9: AIRB – Backtesting of PD per portfolio continued

PD scale	Sovereign							
	As at 30 June 2017							
				Number of obligors		Defaulted obligors*		
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	Average historical annual default rate %*
0.00 to < 0.12	AAA, AA, A	**0.01**	**0.01**	**4**	**2**	**–**	**–**	**–**
0.12 to < 0.45	BBB	**0.32**	**0.19**	**30**	**41**	**–**	**–**	**–**
0.45 to < 1.08	BB+, BB	**0.70**	**0.51**	**34**	**48**	**–**	**–**	**–**
1.08 to < 1.80	BB-	**1.13**	**1.10**	**26**	**27**	**–**	**–**	**–**
1.80 to < 3.23	B+	**2.46**	**1.97**	**22**	**27**	**–**	**–**	**–**
3.23 to < 9.12	B	**4.02**	**6.49**	**57**	**184**	**–**	**–**	**–**
9.12 to < 18.23	B-	**10.07**	**10.07**	**165**	**1**	**–**	**–**	**–**
18.23 to < 99.99	Below B-	**35.20**	**32.18**	**–**	**5**	**–**	**–**	**–**
100 (default)	Defaulted	**–**	**–**	**–**	**–**	**–**	**–**	**–**
Total		**0.17**	**6.57**	**338**	**335**	**–**	**–**	**–**

* *There were no defaults experienced in this portfolio during the year, therefore, the PD will be greater than the actual default rate.*

	Sovereign							
	As at 30 June 2016							
				Number of obligors		Defaulted obligors		
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	Average 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	30	–	–	–
0.45 to < 1.08	BB+, BB	0.73	0.63	10	34	–	–	–
1.08 to < 1.80	BB-	1.23	1.23	1	26	–	–	–
1.80 to < 3.23	B+	2.57	2.53	5	22	–	–	–
3.23 to < 9.12	B	5.64	6.59	25	57	–	–	–
9.12 to < 18.23	B-	10.24	10.24	2	165	–	–	–
18.23 to < 99.99	Below B-	–	–	1	–	–	–	–
100 (default)	Defaulted	–	–	–	–	–	–	–
Total		0.04	0.18	78	338	–	–	–

CR9: AIRB – Backtesting of PD per portfolio continued

PD scale	External rating equivalent	Weighted average PD %	Arithmetic average PD by obligors %*	Number of obligors: End of prior year	Number of obligors: End of current year	Defaulted obligors*: During current year	Defaulted obligors*: New during current year	Average historical annual default rate %*
	Banks and securities firms							
	As at 30 June 2017							
0.00 to < 0.12	AAA, AA, A	**0.02**	**0.02**	**74**	**52**	**–**	**–**	**–**
0.12 to < 0.45	BBB	**0.28**	**0.28**	**96**	**109**	**–**	**–**	**–**
0.45 to < 1.08	BB+, BB	**0.50**	**0.50**	**43**	**53**	**–**	**–**	**–**
1.08 to < 1.80	BB-	**1.12**	**1.12**	**30**	**26**	**–**	**–**	**–**
1.80 to < 3.23	B+	**2.45**	**2.45**	**48**	**34**	**–**	**–**	**–**
3.23 to < 9.12	B	**4.43**	**4.43**	**37**	**47**	**–**	**–**	**–**
9.12 to < 18.23	B-	**10.07**	**10.07**	**18**	**31**	**–**	**–**	**–**
18.23 to < 99.99	Below B-	**35.96**	**35.96**	**11**	**6**	**–**	**–**	**–**
100 (default)	Defaulted	**–**	**–**	**1**	**–**	**–**	**–**	**–**
Total		**0.33**	**6.85**	**358**	**358**	**–**	**–**	**–**

* There were no defaults experienced in this portfolio during the year, therefore, the PD will be greater than the actual default rate.

PD scale	External rating equivalent	Weighted average PD %	Arithmetic average PD by obligors %	Number of obligors: End of prior year	Number of obligors: End of current year	Defaulted obligors: During current year	Defaulted obligors: New during current year	Average historical annual default rate %
	Banks and securities firms							
	As at 30 June 2016							
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	B	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		0.49	0.81	349	358	1	1	0.10

CR9: AIRB – Backtesting of PD per portfolio continued

	SME corporate							
	As at 30 June 2017							
				Number of obligors		Defaulted obligors*		
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	Average historical annual default rate %*
0.00 to < 0.12	AAA, AA, A	**0.07**	**0.07**	**34**	**36**	**–**	**–**	**0.85**
0.12 to < 0.45	BBB	**0.31**	**0.39**	**7 186**	**7 515**	**11**	**7**	**0.85**
0.45 to < 1.08	BB+, BB	**0.78**	**0.76**	**8 647**	**9 017**	**9**	**6**	**1.46**
1.08 to < 1.80	BB-	**1.37**	**1.41**	**6 037**	**9 683**	**3**	**-**	**2.25**
1.80 to < 3.23	B+	**2.31**	**2.35**	**8 456**	**5 459**	**4**	**1**	**3.79**
3.23 to < 9.12	B	**4.97**	**4.51**	**7 308**	**3 930**	**9**	**–**	**1.58**
9.12 to < 18.23	B-	**13.53**	**12.44**	**397**	**679**	**19**	**3**	**5.55**
18.23 to < 99.99	Below B-	**26.89**	**30.68**	**358**	**443**	**29**	**13**	**31.49**
100 (default)	Defaulted	**100.00**	**100.00**	**2 449**	**2 619**	**315**	**164**	**100.00**
Total		**3.43**	**6.57**	**40 872**	**39 381**	**399**	**194**	**2.11**

* *The weighted average PD has been consistently in line with actual default rates.*

	SME corporate							
	As at 30 June 2016							
				Number of obligors		Defaulted obligors		
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	Average 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	7 186	10	1	1.06
0.45 to < 1.08	BB+, BB	0.78	0.75	13 064	8 647	1	1	0.31
1.08 to < 1.80	BB-	1.38	1.35	9 918	6 037	55	17	0.74
1.80 to < 3.23	B+	2.35	2.31	6 501	8 456	17	10	0.64
3.23 to < 9.12	B	4.85	4.87	6 553	7 308	53	10	1.57
9.12 to < 18.23	B-	12.82	12.37	540	397	11	2	1.15
18.23 to < 99.99	Below B-	31.24	33.54	596	358	48	11	1.88
100 (default)	Defaulted	100.00	100.00	2 491	2 449	301	106	100.00
Total		3.36	3.12	41 648	40 872	496	158	1.55

CR9: AIRB – Backtesting of PD per portfolio continued

	SME retail							
	As at 30 June 2017							
				Number of obligors		Defaulted obligors		
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	Average historical annual default rate %
0.00 to < 0.12	AAA, AA, A	**0.08**	**0.08**	**7 027**	**7 826**	**19**	**19**	**0.76**
0.12 to < 0.45	BBB	**0.31**	**0.32**	**52 166**	**55 733**	**406**	**406**	**0.36**
0.45 to < 1.08	BB+, BB	**0.75**	**0.73**	**318 288**	**24 865**	**15 625**	**15 623**	**0.70**
1.08 to < 1.80	BB-	**1.37**	**1.41**	**239 558**	**27 207**	**34 935**	**34 933**	**2.08**
1.80 to < 3.23	B+	**2.46**	**2.42**	**450 218**	**108 299**	**41 841**	**41 782**	**4.17**
3.23 to < 9.12	B	**5.64**	**6.40**	**36 256**	**983 281**	**2 616**	**2 517**	**9.22**
9.12 to < 18.23	B-	**12.61**	**12.46**	**8 177**	**14 666**	**1 510**	**1 374**	**30.55**
18.23 to < 99.99	Below B-	**39.82**	**38.31**	**9 846**	**11 424**	**3 265**	**2 420**	**69.44**
100 (default)	Defaulted	**100.00**	**100.00**	**10 783**	**23 207**	**13 045**	**3 334**	**100.00**
Total		**7.41**	**7.77**	**1 132 319**	**1 256 508**	**113 262**	**102 408**	**4.29**

* *The overprediction evident in this portfolio is due to the conservative buffers included in the SME retail PD model.*

	SME retail							
	As at 30 June 2016							
				Number of obligors		Defaulted obligors		
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	Average 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	318 288	929	895	0.44
1.08 to < 1.80	BB-	1.36	1.32	236 201	239 558	2 048	2 005	1.56
1.80 to < 3.23	B+	2.44	2.28	346 103	450 218	4 575	4 321	2.63
3.23 to < 9.12	B	4.66	4.95	32 002	36 256	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		6.25	6.39	977 994	1 132 319	21 704	17 193	6.76

CR9: AIRB – Backtesting of PD per portfolio continued

	Retail mortgages							
	As at 30 June 2017							
				Number of obligors		Defaulted obligors		
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	Average historical annual default rate %
0.00 to < 0.12	AAA, AA, A	**0.07**	**0.07**	**1 751**	**18 139**	**1**	**–**	**0.18**
0.12 to < 0.45	BBB	**0.33**	**0.30**	**24 038**	**38 630**	**3**	**–**	**0.13**
0.45 to < 1.08	BB+, BB	**0.71**	**0.71**	**76 050**	**97 716**	**19**	**1**	**0.28**
1.08 to < 1.80	BB-	**1.36**	**1.37**	**104 646**	**77 990**	**44**	**1**	**1.50**
1.80 to < 3.23	B+	**2.36**	**2.38**	**63 626**	**48 248**	**157**	**–**	**2.58**
3.23 to < 9.12	B	**5.29**	**5.01**	**38 204**	**42 837**	**374**	**2**	**5.03**
9.12 to < 18.23	B-	**12.39**	**12.09**	**28 474**	**10 690**	**313**	**–**	**10.49**
18.23 to < 99.99	Below B-	**39.69**	**41.00**	**11 398**	**8 932**	**908**	**22**	**41.99**
100 (default)	Defaulted	**100.00**	**100.00**	**11 066**	**16 302**	**10 518**	**66**	**–**
Total		**5.34**	**7.87**	**359 253**	**359 484**	**12 337**	**92**	**6.91**

* *The overprediction evident in this portfolio is due to the conservative wealth HomeLoans PD model.*

	Retail mortgages							
	As at 30 June 2016							
				Number of obligors		Defaulted obligors		
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	Average 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	B	5.26	5.04	31 859	38 204	566	5	1.68
9.12 to < 18.23	B-	14.60	12.12	27 496	28 474	658	3	5.86
18.23 to < 99.99	Below B-	41.43	42.38	10 610	11 398	2 124	19	26.29
100 (default)	Defaulted	100.00	100.00	10 942	11 066	5 439	73	100.00
Total		4.97	4.89	324 285	359 253	9 281	102	1.25

* *Restated due to refinement in calculation.*

CR9: AIRB – Backtesting of PD per portfolio continued

	Retail revolving							
	As at 30 June 2017							
				Number of obligors		Defaulted obligors		
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	Average historical annual default rate %
0.00 to < 0.12	AAA, AA, A	**0.07**	**0.07**	**102 662**	**144 474**	**5**	**–**	**0.56**
0.12 to < 0.45	BBB	**0.27**	**0.28**	**258 559**	**324 566**	**24**	**2**	**0.68**
0.45 to < 1.08	BB+, BB	**0.73**	**0.73**	**644 102**	**617 915**	**2 967**	**3**	**0.76**
1.08 to < 1.80	BB-	**1.41**	**1.41**	**477 975**	**447 601**	**2 948**	**5**	**1.20**
1.80 to < 3.23	B+	**2.43**	**2.45**	**581 493**	**561 769**	**5 258**	**25**	**1.75**
3.23 to < 9.12	B	**5.36**	**5.48**	**846 054**	**780 759**	**14 456**	**305**	**3.05**
9.12 to < 18.23	B-	**12.16**	**12.58**	**396 007**	**341 198**	**10 605**	**843**	**5.66**
18.23 to < 99.99	Below B-	**38.07**	**40.58**	**448 664**	**370 808**	**18 830**	**2 159**	**19.06**
100 (default)	Defaulted	**100.00**	**100.00**	**935 100**	**1 008 183**	**117 426**	**12 859**	**100.00**
Total		**6.05**	**7.95**	**4 690 616**	**4 597 273**	**172 519**	**16 201**	**3.84**

* *The overprediction evident in this portfolio is due to the conservative consumer overdraft PD model.*

	Retail revolving							
	As at 30 June 2016							
				Number of obligors		Defaulted obligors		
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	Average 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	B+	2.47	2.46	520 444	581 493	1 965	21	1.94
3.23 to < 9.12	B	5.27	5.51	760 017	846 054	6 604	117	3.22
9.12 to < 18.23	B-	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

* *Restated due to refinement in calculation.*

CR9: AIRB – Backtesting of PD per portfolio continued

	Other retail							
	As at 30 June 2017							
				Number of obligors		Defaulted obligors		
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	Average historical annual default rate %
0.00 to < 0.12	AAA, AA, A	**0.05**	**0.07**	**198**	**141**	**2**	**–**	**2.27**
0.12 to < 0.45	BBB	**0.42**	**0.41**	**17 808**	**18 223**	**23**	**–**	**0.83**
0.45 to < 1.08	BB+, BB	**0.85**	**0.84**	**80 867**	**76 469**	**114**	**8**	**1.17**
1.08 to < 1.80	BB-	**1.50**	**1.48**	**187 378**	**177 144**	**234**	**18**	**1.58**
1.80 to < 3.23	B+	**2.32**	**2.34**	**276 304**	**266 633**	**550**	**32**	**3.30**
3.23 to < 9.12	B	**5.27**	**5.50**	**472 736**	**480 287**	**1 850**	**89**	**7.23**
9.12 to < 18.23	B-	**12.13**	**12.53**	**173 410**	**151 629**	**2 043**	**135**	**13.54**
18.23 to < 99.99	Below B-	**41.69**	**39.90**	**231 310**	**168 818**	**12 973**	**885**	**32.48**
100 (default)	Defaulted	**100.00**	**100.00**	**114 251**	**116 642**	**71 992**	**15 343**	**100.00**
Total		**12.40**	**7.88**	**1 554 262**	**1 455 986**	**89 781**	**16 510**	**11.22**

* *The weighted average PD has been consistently in line with the actual default rate.*

	Other retail							
	As at 30 June 2016							
				Number of obligors		Defaulted obligors		
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	Average 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	B	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		11.76	11.73	1 297 922	1 554 262	156 196	46 282	10.61

* *Restated due to refinement in calculation.*

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 small 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 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 grades (refer to the table *mapping of FirstRand (FR) grades to rating agency scales* on page 73).

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

- borrower's issuer assessment;
- borrower's specific assessment on issued debt;
- ranking of the unassessed claim; and
- 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 2017					
	Exposures before CCF and CRM		Exposure post-CCF and CRM		RWA and RWA density	
R million	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	**20 777**	**13**	**19 187**	**3**	**11 426**	**59.54**
2. Non-central government public sector entities	**4 482**	**1 837**	**3 294**	**912**	**2 358**	**56.06**
3. Multilateral development banks	**1**	**21**	**1**	**4**	**3**	**51.43**
4. Banks	**9 292**	**341**	**9 328**	**187**	**3 854**	**40.51**
5. Securities firms	**345**	**–**	**345**	**–**	**217**	**62.80**
6. Corporates	**20 523**	**8 376**	**22 889**	**3 902**	**30 732**	**114.71**
7. Regulatory retail portfolios	**55 727**	**10 505**	**54 835**	**4 544**	**46 056**	**77.56**
8. Secured by residential property	**18 474**	**2 136**	**18 471**	**1 126**	**7 421**	**37.87**
9. Secured by commercial real estate	**5 461**	**–**	**5 461**	**–**	**–**	**–**
10. Equity	**–**	**–**	**–**	**–**	**–**	**–**
11. Past due advances	**449**	**–**	**449**	**–**	**155**	**34.60**
12. Higher-risk categories	**–**	**–**	**–**	**–**	**–**	**–**
13. Other assets	**–**	**–**	**–**	**–**	**–**	**–**
14. **Total**	**135 531**	**23 229**	**134 260**	**10 678**	**102 222**	**70.53**

	As at 30 June 2016					
	Exposures before CCF and CRM		Exposure post-CCF and CRM		RWA and RWA density	
R million	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 June 2017									
	Risk weight									Total credit exposures amount (post-CCF and post-CRM)
R million	0%	10%	20%	35%	50%	75%	100%	150%	Others	
Asset classes										
1. Sovereigns and their central banks	1 626	–	–	–	7 300	9 951	313	–	–	19 190
2. Non-central government public sector entities	–	–	–	–	3 186	1 020	–	–	–	4 206
3. Multilateral development banks	–	–	–	–	5	–	–	–	–	5
4. Banks	2 540	–	491	–	4 466	1 949	69	–	–	9 515
5. Securities firms	–	–	–	–	1	–	344	–	–	345
6. Corporates	–	–	1 060	–	2 279	–	10 965	12 487	–	26 791
7. Regulatory retail portfolios	–	–	–	–	1	53 391	5 988	–	–	59 380
8. Secured by residential property	–	–	–	15 852	3 745	–	–	–	–	19 597
9. Secured by commercial real estate	5 461	–	–	–	–	–	–	–	–	5 461
10. Equity	–	–	–	–	–	–	–	–	–	–
11. Past due advances	–	–	–	–	359	–	15	74	–	448
12. Higher-risk categories	–	–	–	–	–	–	–	–	–	–
13. Other assets*	–	–	–	–	–	–	–	–	–	–
14. **Total**	9 627	–	1 551	15 852	21 342	66 311	17 694	12 561	–	144 938

* *Exposures in the other asset category in the prior year were included in the regulatory retail portfolio category in the current year due to a refinement in methodology.*

CR5: Standardised approach – exposures by asset classes and risk weights continued

R million	As at 30 June 2016									
	Risk weight									Total credit exposures amount (post-CCF and post-CRM)
	0%	10%	20%	35%	50%	75%	100%	150%	Others	
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	–	–	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

R million		As at 30 June 2017							
		Other than high-volatility commercial real estate*							
					Exposure amount				
Regulatory categories	Remaining maturity	On-balance sheet amount	Off-balance sheet amount	Risk weight	Project finance	Income-producing real estate	Total	RWA	Expected losses
Strong	Less than 2.5 years	–	–	50%	–	–	–	–	–
	Equal to or more than 2.5 years	9 825	46	70%	9 712	20	9 732	7 465	44
Good	Less than 2.5 years	–	–	70%	–	–	–	–	–
	Equal to or more than 2.5 years	6 341	659	90%	6 582	280	6 862	6 419	52
Satisfactory		1 388	215	115%	1 332	208	1 540	1 544	20
Weak		326	3	250%	2	326	328	869	30
Total		**17 880**	**923**		**17 628**	**834**	**18 462**	**16 297**	**146**

* *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.*

R million		As at 30 June 2016							
		Other than high-volatility commercial real estate*							
					Exposure amount				
Regulatory categories	Remaining maturity	On-balance sheet amount	Off-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

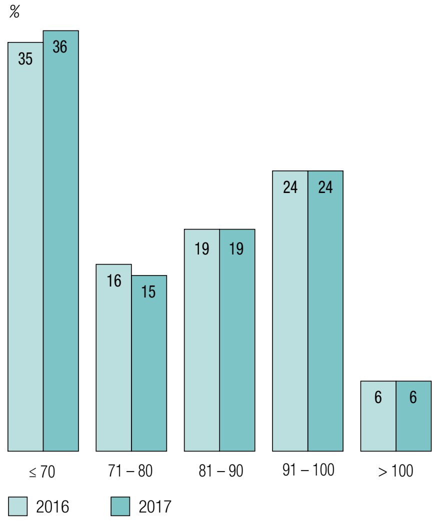
* *There were no high-volatility commercial real estate exposures during the year. For specialised lending exposures other than high-volatility commercial real estate, there were no exposures to object finance or commodities asset classes during the year.*

SELECTED RISK ANALYSES

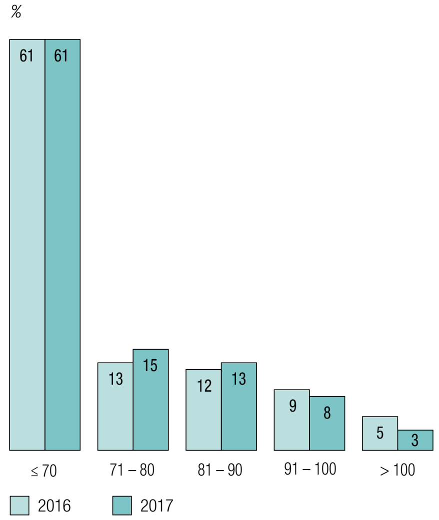
The graphs below provide loan balance-to-value ratios and age distributions of residential mortgages.

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.

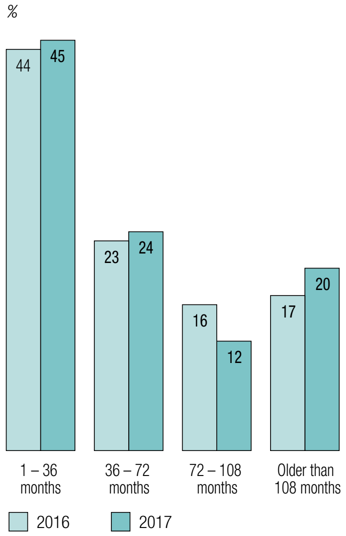
Residential mortgages balance-to-original value



Residential mortgages balance-to-market value



Residential mortgages age distribution



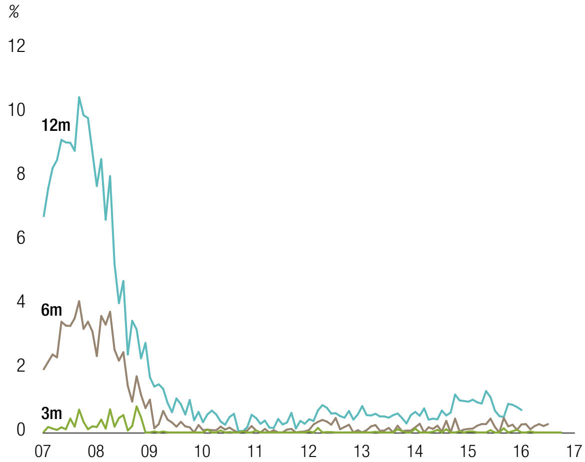
The following graph shows arrears in the FNB HomeLoans portfolio. It includes accounts where more than one full payment is in arrears expressed as a percentage of total advances. The increase over the previous 12 month period reflects the reclassification of restructured debt-review accounts to arrears status.

FNB HomeLoans arrears

The following graphs provide the vintage analyses for FNB HomeLoans, retail SA VAF, FNB card, FNB loans and WesBank personal 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 FNB HomeLoans have trended lower due to strong collections, despite a tough macroeconomic environment. Lower volumes of new HomeLoans business kept book growth muted as credit appetite remained conservative.

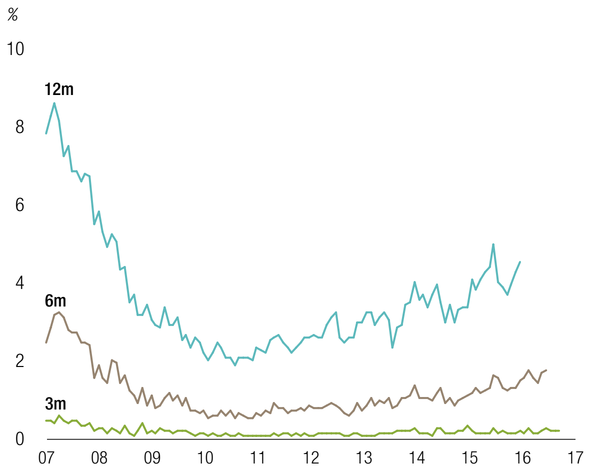
FNB HomeLoans vintage analysis



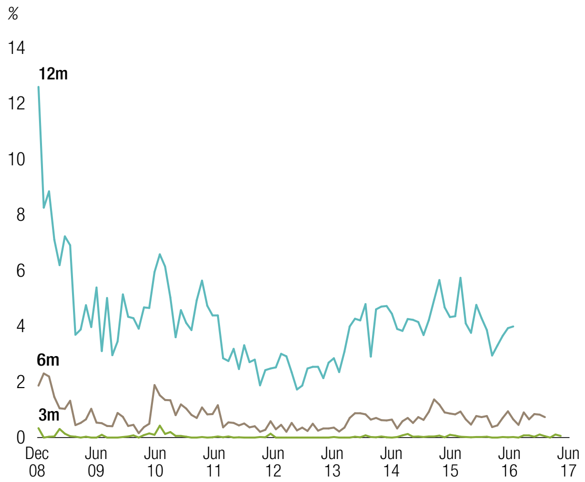
The retail SA VAF cumulative vintage analysis remained well below 2007 levels. More recently, vintages are reflecting continued increases, as expected given the challenging macroeconomic environment as well as the increasing proportion of debt-review NPLs. Risk appetite has been adjusted, with a continued 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.

FNB card has seen modest advances growth, however, this was concentrated towards higher income segment customers. The book contracted in the lower income bands given the conservative credit appetite in this segment. This, together with good collections, kept default rates within expectations.

WesBank retail SA VAF vintage analysis

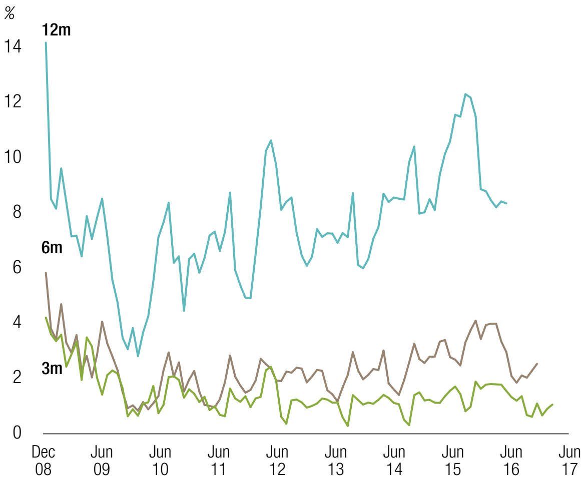


FNB card vintage analysis



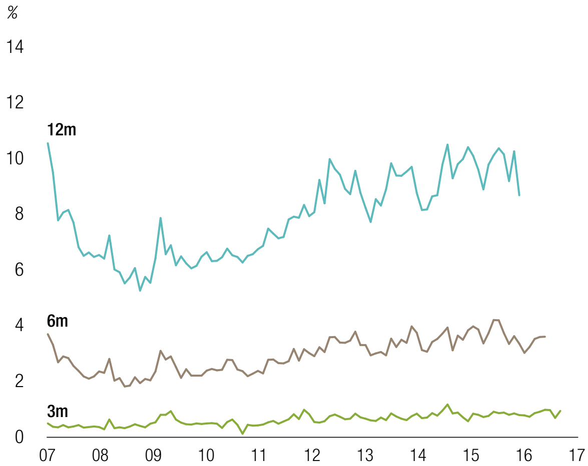
The FNB personal loans portfolio default experience has remained within risk appetite. Risk cuts, conservative origination, especially in the lower income segments, and focused collections ensured that book performance remained within expectations.

FNB personal loans vintage analysis



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 remains 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	RISK MANAGEMENT FOCUS AREAS
• Focused on integrated assessment of credit, legal, liquidity and market risks of complex counterparty derivative portfolios. • Performed impact assessment of upcoming liquidity, margin and capital regulations on derivative portfolios.	• Improve the group's internal counterparty credit risk exposure assessment methodology. • Prepare for the regulatory implementation of the standardised approach to measuring counterparty credit risk exposures (SA-CCR). The implementation of the proposed amendment to the regulations in South Africa has been delayed to a date later than 1 September 2017. • Prepare for the implementation of Basel margin requirements for non-cleared derivatives. • Refine internal derivative credit portfolio reporting. • Build economic capital capability for counterparty credit risk exposure.

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

QUANTIFICATION OF EXPOSURE

Quantification methodologies:

- over the life of a product;
- under distressed market conditions; and
- used to determine risk limits.

Individual counterparty risk limits

Overall limits allocated to products

ASSESSMENT AND APPROVAL

Relevant technical committees

Derivative counterparty risk management committee

BUSINESS AND RISK MANAGEMENT RESPONSIBILITIES

- quantify exposure and risk;
- manage facility utilisation within approved credit limits;
- monitor counterparty creditworthiness to ensure early identification of high-risk exposures;
- review facilities at certain intervals;
- manage collateral;
- manage high-risk (watch list) exposures;
- manage collections and workout process for defaulted assets; and
- report counterparty credit risk.

RISK FUNCTIONS

- review limits annually;
- monitor exposures daily; and
- prepare desk level reports to ensure sufficient limit available prior to additional trades.

The ETL 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 because 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 ISMA agreements for the purpose of netting derivative transactions and repurchase transactions, respectively. These master agreements as well as associated 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 Markets 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 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 movements in the underlying traded instruments and netting of existing positions.

COUNTERPARTY CREDIT EXPOSURE

The *CCR1: Analysis of counterparty credit risk* table on the next page 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) has not been implemented yet. The information provided in row 1 (SA-CCR), therefore corresponds to the requirements of the standardised method as applied by FirstRand Bank (SA). The group calculates counterparty credit risk exposures under the standardised method for FirstRand Bank (SA) and uses the current exposure method for the rest of the group entities. 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 the current exposure method. This approach is typically applied to 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 was 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.

CCR1 provides a comprehensive view of the methods used to calculate counterparty credit risk regulatory requirement, and the main parameters used within each method. The exposures reported exclude CVA requirements and exposures cleared through a central counterparty. The June 2016 numbers were restated to exclude central counterparty exposures. The changes in counterparty exposures numbers year-on-year is attributable to factors which include changes in market prices, decrease in trade volumes, expiry of trades and hedges.

CCR1: Analysis of counterparty credit risk by approach for FirstRand Bank (SA)

	As at June 2017					
R million	Replacement cost	Potential future exposure	EEPE	Alpha used for computing regulatory EAD	EAD post-CRM	RWA
1. Standardised approach (for derivatives)*	**5 336**	**7 850**	**–**	**1.4**	**18 461**	**6 881**
4. Comprehensive approach for credit risk mitigation for security financing transactions**	**–**	**–**	**–**	**–**	**1 813**	**1 120**
5. VaR for security financing transactions#	**–**	**–**	**–**	**–**	**–**	**–**
6. **Total**	**5 336**	**7 850**	**–**		**20 274**	**8 001**

* *EEPE is not calculated under the SA-CCR (for derivatives).*

** *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.*

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 June 2016					
R million	Replacement cost	Potential future exposure	EEPE	Alpha used for computing regulatory EAD	EAD post-CRM	RWA
1. Standardised approach (for derivatives)*	7 136	9 253	–	1.4	22 945	8 993
4. Comprehensive approach for credit risk mitigation for security financing transactions**	–	–	–	–	2 772	2 484
5. VaR for security financing transactions#	–	–	–	–	–	–
6. **Total**	7 136	9 253	–		25 717	11 477

* *EEPE is not calculated under the SA-CCR (for derivatives).*

** *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.*

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. As 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 June 2017		As at 30 June 2016*	
R million	EAD post-CRM	RWA	EAD post-CRM	RWA
3. All portfolios subject to the standardised CVA capital charge	**18 461**	**6 573**	22 945	7 247
4. **Total subject to the CVA capital charge**	**18 461**	**6 573**	22 945	7 247

* *The 2016 numbers were restated to exclude central counterparty exposures.*

*CCR3: Standardised approach – exposures by regulatory portfolio and risk weights**

	As at 30 June 2017				
	Risk weight#				
R million	0%	20%	50%	100%	Total credit exposure
Asset classes**					
Sovereigns	**–**	**–**	**–**	**118**	**118**
Non-central government public sector entities	**–**	**–**	**2**	**–**	**2**
Multilateral development banks	**–**	**–**	**84**	**–**	**84**
Banks	**903**	**20**	**53**	**3**	**979**
Securities firms	**–**	**–**	**20**	**–**	**20**
Corporates	**–**	**–**	**–**	**846**	**846**
Total	**903**	**20**	**159**	**967**	**2 049**

* *These exposures are for the subsidiaries in the rest of Africa and foreign branches.*

** *There were no exposures in the regulatory retail and other asset classes at 30 June 2017.*

\# *There were no exposures in the 10%, 35%, 75% and 150% risk weight buckets at 30 June 2017.*

	As at 30 June 2016				
	Risk weight#				
R million	0%	20%	50%	100%	Total credit exposure
Asset classes**					
Sovereigns	–	446	–	292	738
Non-central government public sector entities	–	–	139	–	139
Multilateral development banks	–	–	–	–	–
Banks	2 348	63	304	7	2 722
Securities firms	–	–	46	7	53
Corporates	–	–	–	600	600
Total	2 348	509	489	906	4 252

* *These exposures are for the subsidiaries in the rest of Africa and foreign branches.*

** *There were no exposures in the multilateral development banks, regulatory retail and other asset classes at 30 June 2016.*

\# *There were no exposures in the 10%, 35%, 75% and 150% risk weight buckets at 30 June 2016.*

The total CCR3 credit exposure is largely driven by the reduction in banking exposures in the London branch over the year. The exposure in the 0% risk weight category reduced from USD143 million to USD60 million year-on-year. Other factors that contribute to the decrease in credit exposure include hedges maturing and reduced trade volumes.

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 is explained as follows:

- EAD post credit risk mitigation, gross of accounting provisions;
- average PD is the obligor grade PD weighted by EAD;
- average LGD is the obligor grade LGD weighted EAD;
- average maturity in years is obligor maturity weighted by EAD; and
- RWA density is total risk weighted assets to EAD post-CRM.

CCR4: AIRB – Counterparty credit risk exposures by portfolio and PD range

	Total FirstRand Bank (SA)						
	As at June 2017						
PD scale	**EAD post-CRM R million**	**Average PD %**	**Number of obligors**	**Average LGD %**	**Average maturity Years**	**RWA R million**	**RWA density %**
0.00 to <0.15	**2 460**	**0.07**	**50**	**23.61**	**1.72**	**371**	**15.08**
0.15 to <0.25	**4 614**	**0.16**	**133**	**18.71**	**1.36**	**763**	**16.53**
0.25 to <0.50	**6 418**	**0.33**	**116**	**28.37**	**2.57**	**2 493**	**38.84**
0.50 to <0.75	**1 248**	**0.74**	**94**	**26.63**	**2.79**	**648**	**51.97**
0.75 to <2.50	**3 265**	**1.51**	**249**	**26.12**	**1.21**	**2 195**	**67.22**
2.50 to <10.00	**429**	**4.62**	**68**	**27.35**	**1.41**	**379**	**88.27**
10.00 to <100.00	**27**	**13.60**	**22**	**23.37**	**1.70**	**32**	**121.31**
100.00 (default)	**–**	**–**	**–**	**–**	**–**	**–**	**–**
Total	**18 461**		**732**			**6 881**	**37.27**

	Total FirstRand Bank (SA)						
	As at June 2016						
PD scale	EAD post-CRM R million	Average PD %	Number of obligors	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	15.79
0.15 to <0.25	9 047	0.16	159	21.57	1.60	1 571	17.37
0.25 to <0.50	2 134	0.35	73	28.23	0.76	720	33.74
0.50 to <0.75	390	0.56	35	49.36	3.42	297	76.08
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	46.46	1.04	2 410	138.41
10.00 to <100.00	44	22.71	37	25.35	1.59	63	141.89
100.00 (default)	–	–	–	–	–	–	–
Total	22 945		762			8 993	39.20

CCR4: AIRB – Counterparty credit risk exposures by portfolio and PD range continued

	Banks						
	As at June 2017						
PD scale	EAD post-CRM R million	Average PD %	Number of obligors	Average LGD %	Average maturity Years	RWA R million	RWA density %
0.00 to <0.15	**2 113**	**0.07**	**39**	**24.90**	**1.74**	**341**	**16.13**
0.15 to <0.25	**329**	**0.16**	**6**	**38.16**	**1.47**	**124**	**37.58**
0.25 to <0.50	**885**	**0.33**	**21**	**22.34**	**1.42**	**287**	**32.47**
0.50 to <0.75	**12**	**0.74**	**1**	**45.00**	**0.74**	**8**	**67.77**
0.75 to <2.50	**16**	**1.34**	**6**	**35.13**	**1.35**	**13**	**80.63**
2.50 to <10.00	**3**	**4.79**	**8**	**48.35**	**0.54**	**5**	**147.68**
10.00 to <100.00	**4**	**32.33**	**4**	**43.41**	**0.39**	**10**	**241.38**
100.00 (default)	**–**	**–**	**–**	**–**	**–**	**–**	**–**
Subtotal	**3 362**		**85**			**788**	**23.44**

	Banks						
	As at June 2016						
PD scale	EAD post-CRM R million	Average PD %	Number of obligors	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	16.47
0.15 to <0.25	706	0.15	10	22.45	1.37	135	19.09
0.25 to <0.50	94	0.35	10	33.04	0.33	41	43.28
0.50 to <0.75	5	0.06	2	39.73	0.08	3	51.87
0.75 to <2.50	195	1.21	3	40.08	0.09	183	93.91
2.50 to <10.00	49	2.94	8	66.70	0.89	101	203.41
10.00 to <100.00	22	32.18	12	29.71	0.62	37	165.22
100.00 (default)	–	–	–	–	–	–	–
Subtotal	6 225		87			1 349	21.64

CCR4: AIRB – Counterparty credit risk exposures portfolio and PD range continued

	Securities						
	As at June 2017						
PD scale	EAD post-CRM R million	Average PD %	Number of obligors	Average LGD %	Average maturity Years	RWA R million	RWA density %
0.00 to <0.15	**291**	**0.07**	**3**	**12.69**	**1.77**	**24**	**8.13**
0.15 to <0.25	**3 315**	**0.16**	**62**	**13.48**	**1.16**	**385**	**11.61**
0.25 to <0.50	**2 649**	**0.33**	**23**	**29.67**	**2.15**	**886**	**33.46**
0.50 to <0.75	**375**	**0.74**	**32**	**7.85**	**0.64**	**55**	**14.74**
0.75 to <2.50	**3 039**	**1.47**	**145**	**23.77**	**1.25**	**1 854**	**60.99**
2.50 to <10.00	**179**	**4.22**	**21**	**18.08**	**2.82**	**114**	**63.75**
10.00 to <100.00	**22**	**10.07**	**11**	**19.60**	**1.94**	**22**	**98.73**
100.00 (default)	**–**	**–**	**–**	**–**	**–**	**–**	**–**
Subtotal	**9 870**		**297**			**3 340**	**33.84**

	Securities						
	As at June 2016						
PD scale	EAD post-CRM R million	Average PD %	Number of obligors	Average LGD %	Average maturity Years	RWA R million	RWA density %
0.00 to <0.15	382	0.06	2	27.79	1.36	48	12.61
0.15 to <0.25	3 970	0.16	49	26.13	0.97	695	17.50
0.25 to <0.50	558	0.35	13	5.92	0.65	39	6.98
0.50 to <0.75	3	0.56	2	21.51	3.52	2	55.27
0.75 to <2.50	2 066	1.18	72	32.99	1.74	1 727	83.62
2.50 to <10.00	1 173	2.62	99	53.66	1.04	1 906	162.47
10.00 to <100.00	19	10.24	10	17.29	2.98	19	98.75
100.00 (default)	–	–	–	–	–	–	–
Subtotal	8 171		247			4 436	54.29

The change in average maturity in the 0.25% to <0.50% PD band from 0.65 to 2.15 was due to an increase in long-dated fixed income transactions dealt with securities companies during the year.

CCR4: AIRB – Counterparty credit risk exposures portfolio and PD range continued

	Corporate						
	As at June 2017						
PD scale	**EAD post-CRM R million**	**Average PD %**	**Number of obligors**	**Average LGD %**	**Average maturity Years**	**RWA R million**	**RWA density %**
0.00 to <0.15	**55**	**0.08**	**7**	**31.84**	**0.75**	**6**	**11.84**
0.15 to <0.25	**762**	**0.17**	**60**	**32.71**	**1.30**	**181**	**23.73**
0.25 to <0.50	**638**	**0.34**	**55**	**37.83**	**1.05**	**251**	**39.36**
0.50 to <0.75	**313**	**0.74**	**56**	**43.37**	**3.73**	**211**	**67.37**
0.75 to <2.50	**208**	**2.10**	**91**	**59.88**	**0.61**	**327**	**157.64**
2.50 to <10.00	**237**	**4.86**	**32**	**33.91**	**0.34**	**250**	**105.08**
10.00 to <100.00	**–**	**10.07**	**7**	**45.00**	**0.01**	**–**	**186.86**
100.00 (default)	**–**	**–**	**–**	**–**	**–**	**–**	**–**
Subtotal	**2 213**		**308**			**1 226**	**55.41**

	Corporate						
	As at June 2016						
PD scale	EAD post-CRM R million	Average PD %	Number of obligors	Average LGD %	Average maturity Years	RWA R million	RWA density %
0.00 to <0.15	306	0.08	8	18.79	0.70	26	8.38
0.15 to <0.25	4 205	0.16	90	16.87	2.15	680	16.18
0.25 to <0.50	928	0.35	41	39.95	0.36	377	40.58
0.50 to <0.75	381	0.56	29	49.76	3.47	292	76.66
0.75 to <2.50	696	1.10	108	35.45	0.81	463	66.44
2.50 to <10.00	496	3.63	98	27.94	0.93	373	75.23
10.00 to <100.00	3	30.23	15	42.7	0.08	7	235.12
100.00 (default)	–	–	–	–	–	–	–
Subtotal	7 015		389			2 218	31.62

The 2016 numbers have been restated. In addition to reclassification of counterparties from corporates to public sector, other factors driving the increase in EAD and the change in average maturity across the PD bands include restructured and new transactions.

CCR4: AIRB – Counterparty credit risk exposures portfolio and PD range continued

	Public sector and local government						
	As at June 2017						
PD scale	EAD post-CRM R million	Average PD %	Number of obligors	Average LGD %	Average maturity Years	RWA R million	RWA density %
0.00 to <0.15	**–**	**–**	**–**	**–**	**–**	**–**	**–**
0.15 to <0.25	**4**	**0.16**	**1**	**20.00**	**8.63**	**2**	**38.06**
0.25 to <0.50	**1 396**	**0.33**	**5**	**30.10**	**4.95**	**819**	**58.71**
0.50 to <0.75	**511**	**0.74**	**2**	**30.06**	**3.78**	**356**	**69.61**
0.75 to <2.50	**–**	**2.45**	**2**	**45.00**	**–**	**–**	**108.84**
2.50 to <10.00	**5**	**4.93**	**2**	**35.00**	**–**	**5**	**108.15**
10.00 to <100.00	**–**	**–**	**–**	**–**	**–**	**–**	**–**
100.00 (default)	**–**	**–**	**–**	**–**	**–**	**–**	**–**
Subtotal	**1 916**		**12**			**1 182**	**61.69**

	Public sector and local government						
	As at June 2016						
PD scale	EAD post-CRM R million	Average PD %	Number of obligors	Average LGD %	Average maturity Years	RWA R million	RWA density %
0.00 to <0.15	–	–	–	–	–	–	–
0.15 to <0.25	141	0.17	6	0.29	3.51	56	39.52
0.25 to <0.50	273	0.35	1	0.45	1.20	205	75.09
0.50 to <0.75	–	0.56	1	0.45	–	–	58.75
0.75 to <2.50	747	0.80	1	0.30	–	613	82.06
2.50 to <10.00	–	–	1	–	–	–	–
10.00 to <100.00	–	–	–	–	–	–	–
100.00 (default)	–	–	–	–	–	–	–
Subtotal	1 161		10	0.00		874	75.25

CCR4: AIRB – Counterparty credit risk exposures portfolio and PD range continued

	Sovereign						
	As at June 2017						
PD scale	EAD post-CRM R million	Average PD %	Number of obligors	Average LGD %	Average maturity Years	RWA R million	RWA density %
0.00 to <0.15	**1**	**0.03**	**1**	**30.00**	**0.02**	**–**	**5.36**
0.15 to <0.25	**152**	**0.17**	**2**	**20.07**	**4.99**	**60**	**39.57**
0.25 to <0.50	**146**	**0.33**	**2**	**45.00**	**1.63**	**113**	**77.18**
0.50 to <0.75	**–**	**–**	**–**	**–**	**–**	**–**	**–**
0.75 to <2.50	**–**	**–**	**–**	**–**	**–**	**–**	**–**
10.00 to <100.00	**–**	**–**	**–**	**–**	**–**	**–**	**–**
100.00 (default)	**–**	**–**	**–**	**–**	**–**	**–**	**–**
Subtotal	**299**		**5**			**173**	**57.92**

	Sovereign						
	As at June 2016						
PD scale	EAD post-CRM R million	Average PD %	Number of obligors	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	–	–	–	–	–	–	–
0.75 to <2.50	–	–	–	–	–	–	–
10.00 to <100.00	–	–	–	–	–	–	–
100.00 (default)	–	–	–	–	–	–	–
Subtotal	0.20		3			–	42.55

CCR4: AIRB – Counterparty credit risk exposures portfolio and PD range continued

	Other						
	As at June 2017						
PD scale	EAD post-CRM R million	Average PD %	Number of obligors	Average LGD %	Average maturity Years	RWA R million	RWA density %
0.00 to <0.15	–	–	–	–	–	–	–
0.15 to <0.25	**52**	**0.17**	**2**	**20.00**	**3.15**	**11**	**21.79**
0.25 to <0.50	**706**	**0.33**	**10**	**15.60**	**2.45**	**136**	**19.31**
0.50 to <0.75	**36**	**0.74**	**3**	**21.72**	**3.60**	**18**	**49.74**
0.75 to <2.50	**3**	**1.19**	**5**	**21.34**	**1.80**	**2**	**44.91**
2.50 to <10.00	**4**	**7.50**	**5**	**28.94**	**2.91**	**5**	**121.25**
10.00 to <100.00	–	–	–	–	–	–	–
100.00 (default)	–	–	–	–	–	–	–
Subtotal	**801**		**25**			**172**	**21.46**

	Other						
	As at June 2016						
PD scale	EAD post-CRM R million	Average PD %	Number of obligors	Average LGD %	Average maturity Years	RWA R million	RWA density %
0.15 to <0.25	22	0.19	2	19.05	3.67	5	24.05
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	1.83	–	23.63
0.75 to <2.50	43	0.97	9	24.38	2.91	23	54.09
2.50 to <10.00	23	5.68	6	34.99	4.07	30	134.04
10.00 to <100.00	–	–	–	–	–	–	–
100.00 (default)	–	–	–	–	–	–	–
Subtotal	370		26			117	31.82

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 June 2017					
	Collateral used in derivative transactions				Collateral used in security finance transactions	
	Fair value of collateral received		Fair value of posted collateral		Fair value of collateral received	Fair value of posted collateral
R million	Segregated	Unsegregated	Segregated	Unsegregated		
Cash – domestic currency	**9 109**	**6 562**	**–**	**2 605**	**–**	**–**
Cash – other currencies	**–**	**1 567**	**–**	**–**	**–**	**–**
Domestic sovereign debt	**–**	**–**	**–**	**8**	**269 723**	**281 029**
Other sovereign debt	**–**	**–**	**–**	**–**	**41**	**41**
Government agency debt	**–**	**–**	**–**	**2 960**	**14 049**	**14 692**
Corporate bonds	**–**	**–**	**–**	**35**	**2 566**	**2 515**
Other collateral	**–**	**–**	**–**	**–**	**–**	**–**
Total	**9 109**	**8 129**	**–**	**5 608**	**286 379**	**298 277**

* *There was no collateral in the equity securities category during the year.*

	As at June 2016					
	Collateral used in derivative transactions				Collateral used in security finance transactions	
	Fair value of collateral received		Fair value of posted collateral		Fair value of collateral received	Fair value of posted collateral
R million	Segregated	Unsegregated	Segregated	Unsegregated		
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	292 766	288 408

* *There was no collateral in the 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 2017	
R million	Protection bought	Protection sold
Notionals*		
– Single-name credit default swaps	**14 592**	**4 147**
Total notionals	**14 592**	**4 147**
Fair values	**45**	**5**
– Positive fair value (asset)	**435**	**920**
– Negative fair value (liability)	**(390)**	**(915)**

	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)

* *There were no credit derivatives in the index credit default swaps, total return swaps, credit options and other credit derivative categories in 2016 and 2017.*

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

CCR8: Exposures to central counterparties

	As at 30 June 2017	
R million	EAD post-CRM	RWA
2. Exposures for trade at qualifying central counterparties (excluding initial margin and default fund contributions); of which:	**3 155**	**63**
3. – OTC derivatives	**718**	**14**
4. – Exchange-traded derivatives	**2 437**	**49**
5. – Securities financing transactions	**–**	**–**
6. – Nettings sets where cross-product netting has been approved	**–**	**–**
7. Segregated initial margin*	**9 109**	
8. Non-segregated initial margin	**–**	**–**
9. Pre-funded default fund contributions	**92**	**1 154**
10. Unfunded default fund contributions	**–**	**–**
1. **Total exposures to qualifying central counterparties****	**12 357**	**1 217**

* *RWA is not determined on segregated initial margin.*

** *There were no exposures to non-qualifying central counterparties (rows 11 – 20 of the CCR8 template) for the year.*

	As at 30 June 2016	
R million	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. – Securities financing transactions	–	–
6. – Nettings sets where cross-product netting has been approved	–	–
7. Segregated initial margin*	11 020	
8. Non-segregated initial margin	–	–
9. Pre-funded default fund contributions	95	1 188
10. Unfunded default fund contributions	–	–
1. **Total exposures to qualifying central counterparties****	16 338	1 292

* *RWA is not determined on segregated initial margin.*

** *There were no exposures to non-qualifying central counterparties (rows 11 – 20 of the CCR8 template) for the year.*

SECURITISATIONS

INTRODUCTION AND OBJECTIVES

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

Objectives of securitisation activities

Securitisation enables the group to access funding markets at ratings that are higher than its own corporate credit rating. This 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 the cost 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 eligible assets, investor appetite for securitisation paper and the comparable price and availability of 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 the necessary internal and external approvals for any proposed transactions.

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.

The group's asset-backed commercial paper conduits occasionally acquire securitisation paper, which is managed as part of the underlying portfolio. This, however, represents a minimal portion of the total portfolio and is disclosed 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 enhancement provider	Swap counterparty
Own securitisations							
FAST	✓	✓	✓	✓			✓
MotoHouse	✓	✓	✓	✓			✓
Nitro 5	✓	✓	✓	✓			✓
Turbo Finance 4	✓	✓	✓	✓			
Turbo Finance 5	✓	✓	✓	✓			
Turbo Finance 6	✓	✓	✓	✓			
Turbo Finance 7	✓	✓	✓	✓			
Conduit structures							
iNdwa*		✓	✓		✓		✓
iVuzi*		✓	✓		✓	✓	✓
iNkotha**			✓				
iNguza**			✓				
Third party							
Homes Obligor Mortgage Enhanced Securities					✓		
Private Residential Mortgages 2					✓		
Superdrive Investments				✓			
Torque Securitisation					✓		
Velocity Finance				✓			✓

* *Conduits incorporated under regulations relating to securitisation scheme.*

** *Conduits incorporated under regulations relating to commercial paper.*

The group 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.

The ultimate responsibility for determining risk limits and appetite for the group vests with the board. Independent oversight and monitoring is provided by the RCC committee, which in turn has delegated the responsibility for securitisation exposures to group ALCCO. ALCCO is also responsible for the allocation of sub-limits and any remedial action in the event of limit breaches. The FirstRand wholesale credit committee approves credit limits for retained securitisation exposures per special purpose vehicle (SPV).

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, RCC committee and the board against approved 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

NITRO 5

Following the sovereign and subsequent FirstRand Bank credit rating downgrades in April 2017, the Nitro 5 account bank trigger (ratings associated with the provider of the SPV's bank account) set at BBB-, was breached.

Consequently, the Nitro 5 class C notes were placed on CreditWatch negative. In May 2017, S&P downgraded the class C notes to BB+(sf) and zaA(sf) (previously BBB-(sf) and zaAAA(sf)).

TURBO FINANCE 4

In August 2016, Fitch Ratings (Fitch) upgraded the Turbo Finance 4 class B notes to AAAsf (previously AA-sf) and the class C notes to A+sf (previously BBB+sf).

In January 2017, Moody's Investor Service (Moody's) upgraded the Turbo Finance 4 class B notes to Aaa(sf) (previously Aa1(sf)).

TURBO FINANCE 5

In August 2016, Fitch upgraded the Turbo Finance 5 class B notes to AA-sf (previously A+sf) and the class C notes to Asf (previously BBBsf).

In January 2017, Moody's upgraded the Turbo Finance 5 class B notes to Aa1(sf) (previously Aa3(sf)).

FAST ISSUER SPV

The FAST Issuer SPV is a private securitisation of rand-denominated vehicle finance loans originated by WesBank. The transaction allowed the group to raise USD funding secured against ZAR assets. FAST incorporates a 12-month revolving period during which capital and prepayment proceeds from the underlying assets are used to purchase additional loans from WesBank and thus maintain the transaction balance.

The following table provides further detail regarding the notes issued:

Tranche	Principal USD million	Principal ZAR million
Class A	350	–
Class B	–	1 256
Class C	–	330
Sub-loan	–	66
Total	**350**	**1 652**

TURBO FINANCE 7

In November 2016, the FirstRand Bank London branch structured and executed a seventh securitisation under the Turbo Finance programme. Turbo Finance 7 (Turbo 7) is a revolving cash securitisation of auto loans extended to obligors by MotoNovo Finance. The note issuance of GBP571.9 million is rated by both S&P and Moody's. The transaction features a six-month revolving period (as opposed to a 12-month revolving period previously) used for the Turbo programme.

Further improvements to Turbo 7 include the introduction of additional loan product types to better reflect the composition of the MotoNovo Finance (UK) balance sheet, as well as the introduction of a EUR-denominated class A tranche. Good demand resulted in the class A1 and A2 notes being oversubscribed.

Tranche	Final ratings (S&P/Moody's)	Tranche size (GBP million)	Spread
Class A1 (GBP)	AAA/Aaa	385	1m Libor + 0.60%
Class A2 (EUR)	AAA/Aaa	106.5 (EUR125m)	1m Libor + 0.76% 1m Euribor + 0.45%
Class B	A/Aa3	58.4	1m Libor + 1.50%
Class C	A-/Ba1	8.5	3.00%
Class D	Unrated	9.7	5.25%
Class E	Unrated	3.8	15.00%
Total		**571.9**	

External credit assessment institutions

The group makes use of several ECAIs to provide public credit ratings for its securitisation and resecuritisation transactions. The ECAIs nominated by the group for this purpose are Moody's, S&P, Fitch and Global Credit Ratings. The following tables show the traditional securitisations currently in issue, the ECAIs that rate the transactions and the value of any exposures retained. Global scale ratings are used for internal risk management purposes and regulatory capital reporting.

*Traditional securitisations transactions**

TRADITIONAL SECURITISATIONS	ASSET TYPE	RATING AGENCY	YEAR INITIATED	EXPECTED CLOSE
FAST Issuer	Retail: Auto loans		2016	2025
MotoHouse	Retail: Auto loans		2015	2023
Nitro 5	Retail: Auto loans	S&P	2015	2023
Turbo Finance 4	Retail: Auto loans	Moody's and Fitch	2013	2021
Turbo Finance 5	Retail: Auto loans	Moody's and Fitch	2014	2021
Turbo Finance 6	Retail: Auto loans	S&P and Moody's	2016	2023
Turbo Finance 7	Retail: Auto loans	S&P and Moody's	2016	2023

		Assets outstanding**		Notes outstanding		Retained exposure	
R million	Assets securitised	2017	2016	2017	2016	2017	2016
Nitro 5	2 400	**640**	1 316	**710**	1 428	**226**	226
FAST Issuer	6 709	**6 293**	–	**6 385**	–	**1 778**	–
Turbo Finance 4	6 095	**562**	2 129	**660**	2 328	**292**	646
Turbo Finance 5	7 790	**1 831**	5 064	**2 012**	5 430	**632**	1 588
Turbo Finance 6	8 839	**5 271**	7 429	**5 532**	7 768	**1 520**	2 414
Turbo Finance 7	9 669	**9 297**	–	**9 727**	–	**602**	–
MotoHouse	5 668	**4 860**	5 561	**5 112**	5 917	**353**	408
Total	47 170	**28 754**	21 499	**30 138**	22 871	**5 403**	5 282

* *Includes transactions structured by the group and excludes third-party transactions.*

** *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: Securitisations exposures in the banking book per portfolio

	As at 30 June 2017				
	Traditional securitisations				
R million	Group acts as originator	Group acts as sponsor	Group acts as investor	Group acts as originator and sponsor	Total
1. **Retail**					
4. – Auto loans	**5 403**	**31**	**19 325**	**–**	**24 759**
6. **Corporate**					
7. – Loans to corporates	**–**	**–**	**–**	**2 995**	**2 995**
Total	**5 403**	**31**	**19 325**	**2 995**	**27 754**

	As at 30 June 2016				
	Traditional securitisations				
R million	Group acts as originator	Group acts as sponsor	Group acts as investor	Group acts as originator and sponsor	Total
1. **Retail**					
4. – Auto loans	5 282	31	14 994	–	20 307
6. **Corporate**					
7. – Loans to corporates	–	–	–	3 088	3 088
Total	5 282	31	14 994	3 088	23 395

There were no residential mortgage, credit card and resecuritisation exposures in the retail portfolio (rows 2, 3 and 5 of the SEC1 template) and no commercial mortgage, lease and receivables, other corporate and resecuritisation exposures in the corporate portfolio (rows 8 – 11 of the SEC1 template).

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

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%.

There were no synthetic securitisations during the year.

SEC3: Traditional securitisation exposures in the banking book and associated regulatory capital requirements – bank acting as originator or as sponsor

	As at 30 June 2017								
	Exposure values by RW bands					**Exposure values by regulatory approach**			
						IRB		**SA**	
R million	**≤20% RW**	**>20% to 50% RW**	**>50% to 100% RW**	**>100% to <1250% RW**	**1250% RW**	**RBA**	**SFA**	**SSFA**	**1250%**
Securitisation									
4. – Retail	**3 033**	**–**	**224**	**686**	**1 490**	**31**	**1 323**	**2 590**	**1 490**
5. – Corporate	**–**	**2 995**	**–**	**–**	**–**	**–**	**–**	**2 995**	**–**
Total	**3 033**	**2 995**	**224**	**686**	**1 490**	**31**	**1 323**	**5 585**	**1 490**

* *There were no resecuritisations or synthetic securitisations (rows 6 – 15 of the SEC3 template) during the year.*

	As at 30 June 2016								
	Exposure values by RW bands					Exposure values by regulatory approach			
						IRB		SA	
R million	≤20% RW	>20% to 50% RW	>50% to 100% RW	>100% 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	–	–	–	–	62	3 026	–
Total	3 527	3 355	–	627	892	31	62	7 416	892

* *There were no resecuritisations or synthetic securitisations (rows 6 – 15 of the SEC3 template) during the year.*

	As at 30 June 2017							
	RWA by regulatory approach				**Capital charge after cap**			
	IRB		SA		IRB		SA	
	RBA	SFA	SSFA	1250%	RBA	SFA	SSFA	1250%
	7	**98**	**2 962**	**18 627**	**1**	**11**	**326**	**2 049**
	–	**–**	**940**	**–**	**–**	**–**	**103**	**–**
	7	**98**	**3 902**	**18 627**	**1**	**11**	**429**	**2 049**

	As at 30 June 2016							
	RWA by regulatory approach				Capital charge after cap			
	IRB		SA		IRB		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

SEC4: Traditional securitisation exposures in the banking book and associated capital requirements – bank acting as investor

	As at 30 June 2017*			As at 30 June 2017*			
	Exposure values by RW bands**	Exposure values by regulatory approach#		RWA by regulatory approach		Capital charge after cap	
		IRB		IRB		IRB	
R million	≤20% RW	RBA	SFA	RBA	SFA	RBA	SFA
Securitisation							
4. – Retail	**19 325**	**101**	**19 224**	**10**	**1 427**	**1**	**157**
5. – Corporate	**–**	**–**	**–**	**–**	**–**	**–**	**–**
Total	**19 325**	**101**	**19 224**	**10**	**1 427**	**1**	**157**

* *There were no resecuritisations or synthetic securitisations (rows 6 – 15 of the SEC4 template) during the year.*
** *There were no exposures in the >20% to 50%, >50% to 100%, >100% to <1250% and 1250% RW bands.*
\# *There were no exposures under the standardised approach or to unrated notes risk weighted at 1250% during the year.*

	As at 30 June 2016*			As at 30 June 2016*			
	Exposure values by RW bands**	Exposure values by regulatory approach		RWA by regulatory approach#		Capital charge after cap	
		IRB		IRB		IRB	
R million	≤20% RW	RBA	SFA	RBA	SFA	RBA	SFA
Securitisation							
4. – Retail	14 994	353	14 641	51	2 328	5	250
5. – Corporate	–	–	–	–	–	–	–
Total	14 994	353	14 641	51	2 328	5	250

* *There were no resecuritisations or synthetic securitisations (rows 6 – 15 of the SEC4 template) during the year.*
** *There were no exposures in the >20% to 50%, >50% to 100%, >100% to <1250% and 1250% RW bands.*
\# *There were no exposures under the standardised approach or to unrated notes risk weighted at 1250% during the year.*

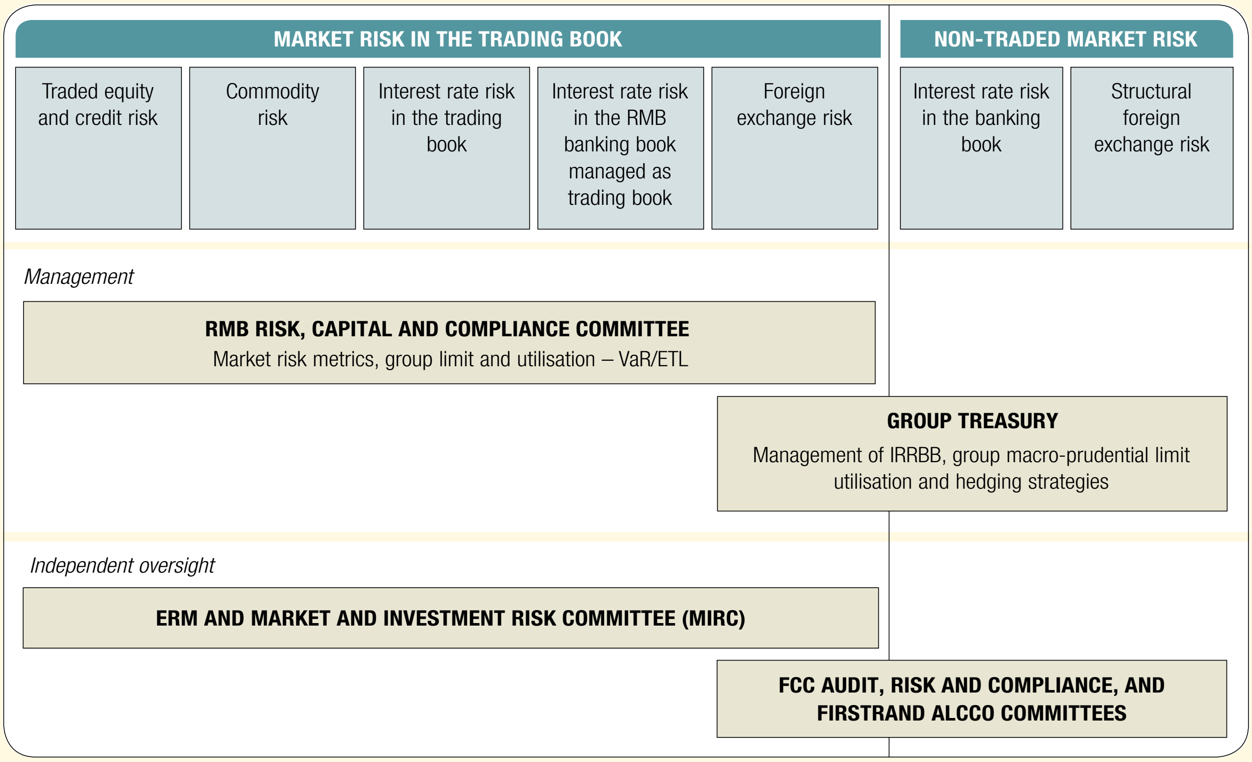
MARKET RISK IN THE TRADING BOOK

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 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 the 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 and industry accepted models and operating platforms to measure 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 in 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 R56.8 million on a 10-day ETL basis at 30 June 2017 (2016: R95.3 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

YEAR UNDER REVIEW	RISK MANAGEMENT FOCUS AREAS
• Overall diversified levels of market risk increased over the year. There are no significant concentrations in the portfolio. • The increase in market risk across the group emanated mainly from the local portfolio.	• Given the impending regulatory changes regarding BCBS's documents, *Fundamental review of the trading book* and BCBS 239, RMB is reviewing the current operating process platform for market risk, considering 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

FIRSTRAND BOARD

Second line of risk control

RCC COMMITTEE

Review reports on:

- adequacy and robustness of market risk identification, management and control; and
- current and projected market risk profile.

ERM

- independent view of the market risk profile;
- oversight of market risk management practices; and
- monitors implementation of the group's market and investment risk framework.

MODEL RISK AND VALIDATION COMMITTEE

- validation and approval of changes to internal VaR models for regulatory and economic capital.

MARKET AND INVESTMENT RISK COMMITTEE

- oversight of market risk exposures, profile and management across the group; and
- monitors implementation of the market risk framework.

The market risk framework (a subframework of BPRMF) prescribes the governance structures, roles, responsibilities and lines of accountability for market risk management.

First line of risk control

MARKET RISK TECHNICAL COMMITTEE

- reviews and approves market risk models and curve changes.

RMB FINANCIAL RESOURCE MANAGEMENT (FRM) BOARD

- defines RMB's portfolio and risk/reward appetite levels;
- allocates limits and ensures that business remains within approved appetite levels; and
- approves strategies for market risk activities across the group.

Global market fund solutions risk oversight committee

Business unit committees

RMB RCC COMMITTEE

- provides independent oversight of all risk types within RMB's operations; and
- receives input from the business unit and in-country risk committees as appropriate.

Third line of control

GIA

- assesses the adequacy and effectiveness of market risk controls; and
- identifies risk control shortcomings and recommends corrective actions.

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, 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 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 on 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 FRM 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 movements;
- 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 utilisation against these limits are monitored continuously, based on the regulatory building block approach.

RWA flow statement for IMA market risk exposures

Regulatory capital for domestic trading units is based on the internal VaR model supplemented with 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 group's 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 and specific market risk using the Basel III standardised duration methodology.

The following flow statement explains the variations in the market RWA determined under IMA.

*MR2: RWA flow statement of market risk exposures under IMA**

R million	VaR	sVaR	Total RWA
1. **RWA at 31 March 2017**	**5 587**	**9 196**	**14 784**
2. Movement in risk levels	**(2 581)**	**(2 007)**	**(4 588)**
3. Model updates/changes	–	–	–
4. Methodology and policy	–	–	–
5. Acquisitions and disposals	–	–	–
6. Foreign exchange movements	–	–	–
7. Other	–	–	–
8. **RWA at 30 June 2017**	**3 006**	**7 189**	**10 196**

* *The group does not use the incremental risk charge and comprehensive risk measure approaches.*

The movement in market RWA for the three months ended 30 June 2017 relates to normal business activities.

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 2017 based on the VaR methodology. 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.

Traded market risk VaR exposure per asset class for the group excluding subsidiaries in the rest of Africa (excluding diversification effects across jurisdictions)

%

IMA values

Total market risk is split between traded and non-traded market risk in the following tables. Traded market risk represents the portfolios that are designated as trading book for regulatory reporting. Non-traded market risk represents the portfolios that are structural in nature and are used to manage banking book risk. The non-traded market risk portfolio is directly influenced by the foreign exchange markets and, therefore, still form part of the group's total market risk and are included in this disclosure.

*MR3: IMA values for traded market risk**

		FirstRand Bank (SA)**	
R million		**As at 30 June 2017**	As at 30 June 2016
	VaR (10-day 99%)		
1.	Maximum value	**489**	241
2.	Average value	**155**	116
3.	Minimum value	**31**	41
4.	Period end	**54**	227
	sVaR (10-day 99%)		
5.	Maximum value	**302**	151
6.	Average value	**113**	103
7.	Minimum value	**57**	64
8.	Period end	**121**	99
	VaR (1-day 99%)		
	Maximum value	**126**	121
	Average value	**41**	43
	Minimum value	**19**	24
	Period end	**30**	85

* *The group does not use the incremental risk charge (rows 9 – 12 of the MR3 template) and comprehensive risk measure (rows 13 – 17 of the MR3 template) approaches.*

** *FirstRand Bank (SA) excludes foreign branches.*

*MR3: IMA values for non-traded market risk**

R million	FirstRand Bank (SA)**	
	As at 30 June 2017	As at 30 June 2016
VaR (10-day 99%)		
1. Maximum value	**199**	137
2. Average value	**88**	68
3. Minimum value	**12**	28
4. Period end	**40**	89
sVaR (10-day 99%)		
5. Maximum value	**280**	224
6. Average value	**135**	153
7. Minimum value	**40**	95
8. Period end	**73**	144
VaR (1-day 99%)		
Maximum value	**99**	77
Average value	**39**	36
Minimum value	**6**	14
Period end	**15**	48

* *The group does not use the incremental risk charge (rows 9 – 12 of the MR3 template) and comprehensive risk measure (rows 13 – 17 of the MR3 template) approaches.*

** *FirstRand Bank (SA) excludes foreign branches.*

*MR3: IMA values for total market risk**

R million	FirstRand		FirstRand Bank (SA)**	
	As at 30 June 2017	As at 30 June 2016	**As at 30 June 2017**	As at 30 June 2016
VaR (10-day 99%)				
1. Maximum value	**387**	199	**377**	170
2. Average value	**160**	108	**149**	85
3. Minimum value	**49**	67	**41**	47
4. Period end	**88**	172	**79**	147
sVaR (10-day 99%)				
5. Maximum value	**348**	222	**319**	222
6. Average value	**172**	145	**169**	145
7. Minimum value	**87**	75	**87**	75
8. Period end	**201**	146	**188**	146
VaR (1-day 99%)				
Maximum value			**104**	114
Average value			**49**	48
Minimum value			**19**	29
Period end			**37**	67

* *The group does not use the incremental risk charge (rows 9 – 12 of the MR3 template) and comprehensive risk measure (rows 13 – 17 of the MR3 template) approaches. FirstRand Limited 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 relates to FirstRand Bank (SA) only.*

** *FirstRand Bank (SA) excludes foreign branches.*

The maximum VaR and sVaR numbers increased from June 2016 to June 2017 as for a small number of days during the year, the group had a higher maximum risk position than during the volatile market period of December 2015. This impacts the reported maximum VaR and sVaR numbers.

The average sVAR numbers, which use scenarios from the 2008/2009 period only, show that actual risk taking throughout the year was comparable between the two periods. If the traded market risk portfolio were measured on a sVAR basis alone, the risk appetite would have remained consistent with the previous periods.

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 bodies.

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

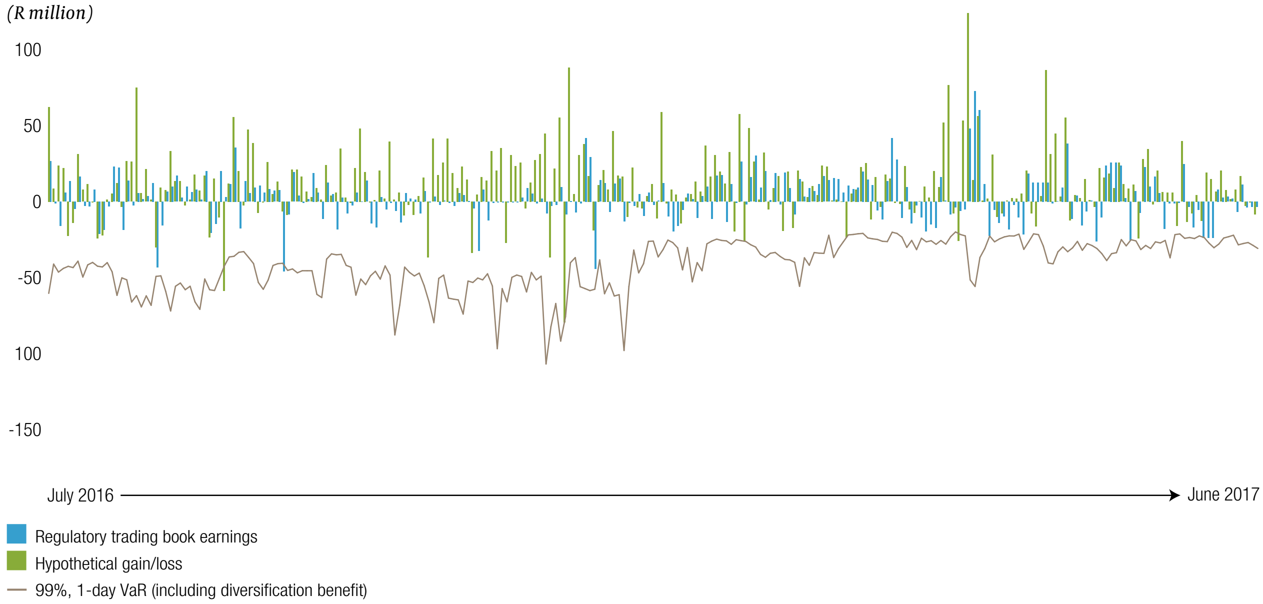
Back testing is performed to verify the predictive ability of the VaR model and ensure ongoing appropriateness. The back testing process is a regulatory requirement and seeks to estimate the performance of the regulatory VaR model. Performance is measured by the number of exceptions to the model, i.e. 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 (1-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.

MR4: Comparison of VaR estimates with gains and losses for FirstRand Bank (SA)

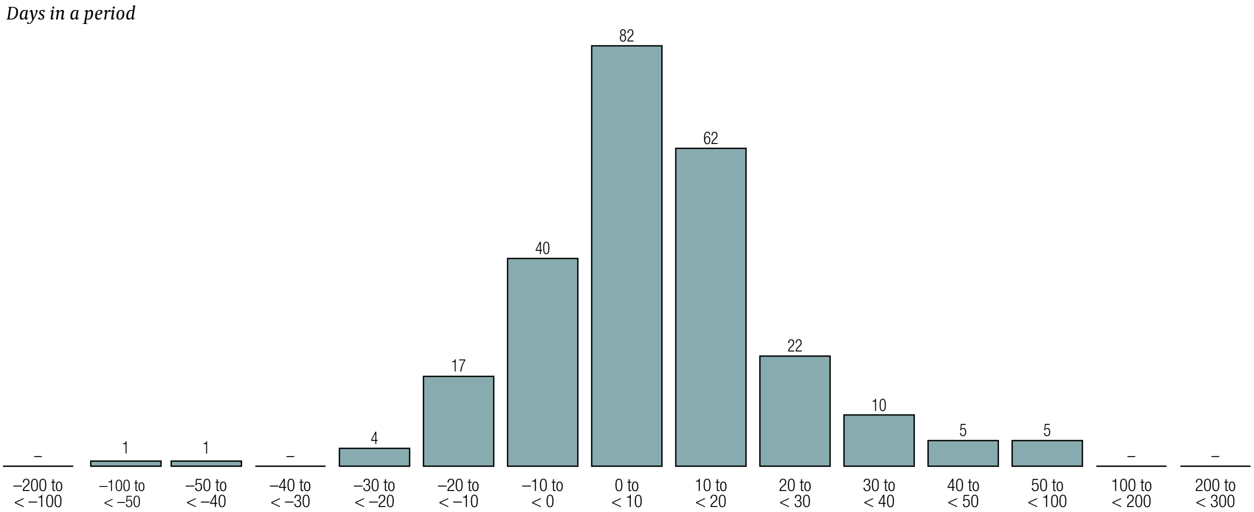


Trading book earnings exceeded 1-day VaR on one occasion during the year. This indicates a good quantification of market risk provided by the group's internal model.

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



STANDARDISED APPROACH: GENERAL AND SPECIFIC RISK

FirstRand Bank's 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 FirstRand Bank (SA) balance sheet is exposed to interest rate specific risk. Equity specific risk relates to listed equity exposures in the RMB Resources portfolio. FirstRand Bank's India and London branches and the group's subsidiaries in the rest of Africa are exposed to interest rate and foreign exchange (general risk).

The following table represents the group's general market risk and specific risk under the standardised approach. The increase in interest rate specific risk emanates from the FirstRand Bank (SA) balance sheet and is mainly a result of additional regulatory capital required for direct exposures to sub-investment grade underlying issuers in the trading book. This, however, does not reflect an increase in risk positioning, but the impact of higher regulatory requirements related to sub-investment grade underlying issuers.

Market risk was contained within acceptable stress loss limits and effectively managed across the subsidiaries during the year under review. Options are capitalised using IMA (rows 5 – 7 of the MR1 template are therefore excluded) (refer to *MR3: IMA values for traded market risk* table on page 146), and securitisations (row 8 of the MR1 template therefore excluded) are capitalised under the securitisation framework (refer to the *securitisation* section).

MR1: Market risk under standardised approach – risk weighted assets

		RWA	
	R million	As at 30 June 2017	As at 30 June 2016
	Outright products		
1.	Interest rate risk	**8 422**	2 388
	– Specific risk*	**7 658**	2 236
	– General risk	**764**	152
2.	Equity risk	**649**	495
	– Specific risk	**643**	452
	– General risk	**6**	43
3.	Foreign exchange risk	**2 192**	1 437
	– Traded market risk	**131**	176
	– Non-traded market risk	**2 061**	1 261
4.	Commodity risk	**–**	–
9.	**Total**	**11 263**	4 320

* *The increase in specific risk is due to additional regulatory capital required on direct exposure in sub-investment grade underlying issuers in the trading book.*

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	• 12-month earnings sensitivity; and • economic sensitivity of open risk position.	Group Treasury	FCC Risk Management Group ALCCO
Subsidiaries in the rest of Africa and international branches	• 12-month earnings sensitivity; and • economic sensitivity of open risk position.	In-country management	Group Treasury FCC Risk Management In-country ALCCOs International ALCCO
STRUCTURAL FOREIGN EXCHANGE			
Group	• total capital in a functional currency other than rand; • impact of translation back to rand reflected in group's income statement; and • foreign currency translation reserve value.	Group Treasury	Group ALCCO

Interest rate risk in the banking book

INTRODUCTION AND OBJECTIVES

Interest rate risk in the banking book relates to the sensitivity of a bank's financial position and earnings to unexpected, adverse movements in interest rates.

IRRBB 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.

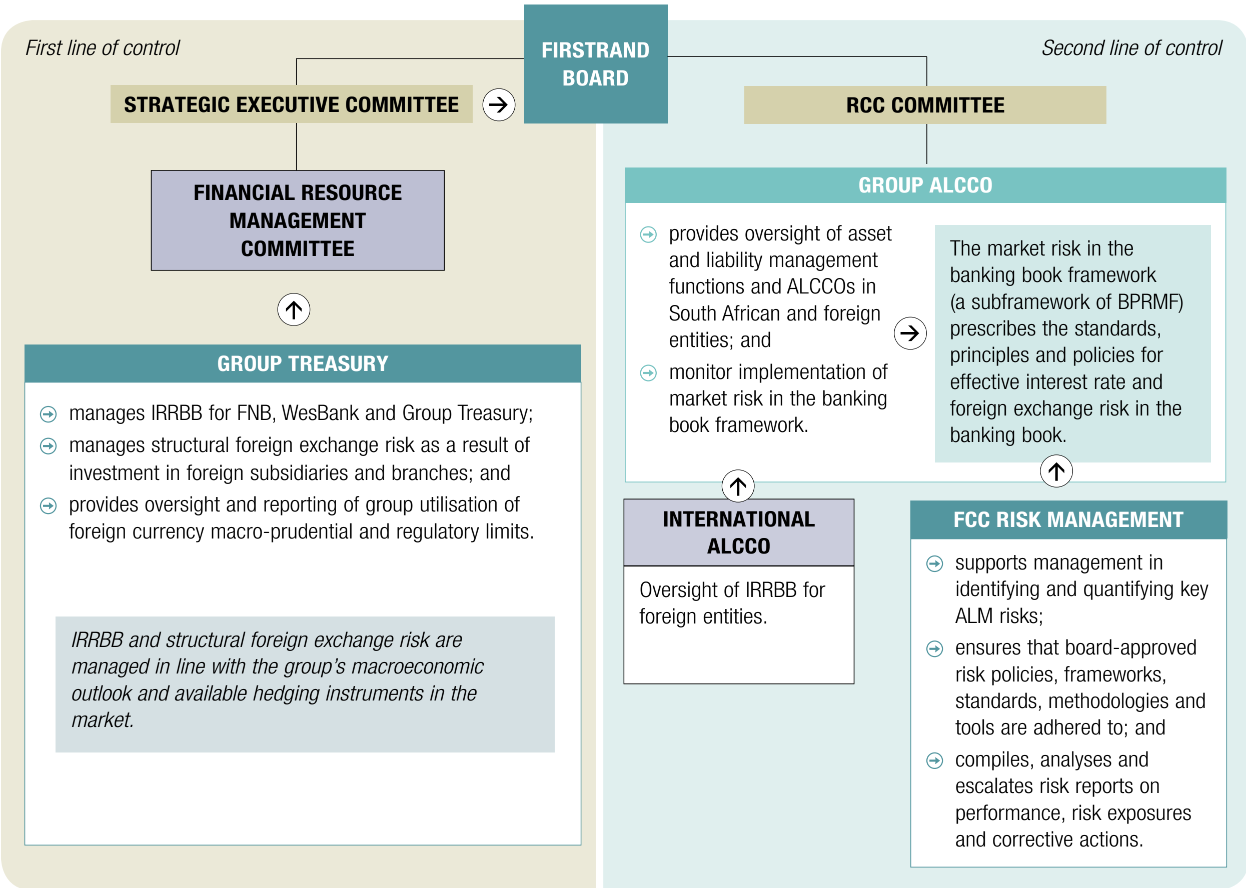
Strategic hedge positions are in place to protect the group's net interest margin. These hedges are actively monitored along with macroeconomic factors impacting rates in the domestic economy, as well as the foreign entities.

Year under review and focus areas

YEAR UNDER REVIEW	RISK MANAGEMENT FOCUS AREAS
• There was no change in the monetary policy rate in the current financial year. The last change in interest rates was in March 2016 when the policy rate was increased by 25 bps.	• The BCBS, through the task force for IRRBB, has published a more robust regulation for IRRBB which is due to be implemented by December 2017. The group is addressing these new requirements. • Given current uncertainty about the level and direction of future interest rates, the endowment book remains actively managed.

ORGANISATIONAL STRUCTURE AND GOVERNANCE

IRRBB governance structure



ASSESSMENT AND MANAGEMENT

FirstRand Bank (South Africa)

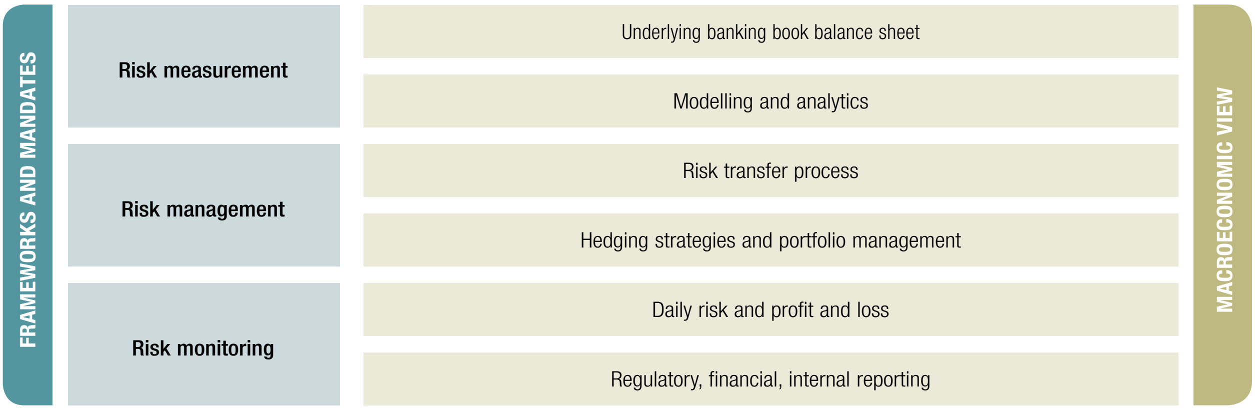
The measurement techniques used to monitor IRRBB include NII sensitivity/earnings risk and NAV/economic value of equity (EVE). A repricing gap is also generated to better understand the repricing characteristics of the balance sheet. In calculating the repricing gap, all banking book assets, liabilities 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 investments/hedges put in place to manage the margin impact of the capital and deposit endowment books through the cycle. Given current uncertainty about the level and direction of future interest rates, the endowment book remains actively managed.

Most of NII sensitivity relates to the endowment book mismatch. The group's average endowment book was R192 billion for the year. Total sensitivity in the group 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 2017		
	Change in projected 12-month NII		
R million	FirstRand Bank	Subsidiaries in the rest of Africa and foreign branches	FirstRand
Downward 200 bps	**(1 498)**	**(568)**	**(2 066)**
Upward 200 bps	**957**	**409**	**1 366**

	As at 30 June 2016		
	Change in projected 12-month NII		
R million	FirstRand Bank	Subsidiaries in the rest of Africa and foreign branches	FirstRand
Downward 200 bps	(1 821)	(498)	(2 319)
Upward 200 bps	1 475	381	1 856

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 066 million. A similar increase in interest rates would result in an increase in projected 12-month NII of R1 366 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

	FirstRand Bank		FirstRand	
%	As at 30 June 2017	As at 30 June 2016	As at 30 June 2017	As at 30 June 2016
Downward 200 bps	**2.53**	0.11	**1.91**	0.08
Upward 200 bps	**(2.26)**	(0.07)	**(1.71)**	(0.05)

The increase in NAV sensitivity in the year is attributable to active management of strategic hedges. The group has increased its endowment book hedge position relative to the prior financial year in line with its view on 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 both investor value through diversified earnings, as well as unwanted volatility as a result of 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

YEAR UNDER REVIEW	RISK MANAGEMENT FOCUS AREAS
• Continued to strengthen principles regarding the management of foreign exchange positions and funding of the group's foreign entities. • Monitored the net open forward position in foreign exchange exposure against limits in each 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.

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. To minimise funding risk across the group, foreign currency transactions are matched where possible, with residual liquidity risk managed centrally by Group Treasury, and usually to low levels (see *funding and liquidity risk* 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 2017		As at 30 June 2016	
R million	Exposure	Impact on equity from 15% currency translation shock	Exposure	Impact on equity from 15% currency translation shock
Functional currency				
Botswana pula	**3 819**	**573**	3 714	557
United States dollar	**3 696**	**554**	4 016	602
Sterling	**3 015**	**452**	2 308	346
Nigerian naira	**1 069**	**160**	1 131	170
Australian dollar	**756**	**113**	1 454	218
Zambian kwacha	**1 004**	**151**	792	119
Mozambican metical	**520**	**78**	652	98
Indian rupee	**634**	**95**	737	111
Ghanaian cedi	**403**	**60**	493	74
Tanzanian shilling	**539**	**81**	774	116
Common Monetary Area (CMA) countries*	**5 876**	**881**	5 345	802
Total	**21 331**	**3 198**	21 416	3 213

* *Currently Namibia, Swaziland and Lesotho are part of the CMA. Unless these countries decide to exit the CMA, rand volatility will not impact these countries' 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 instruments.

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.

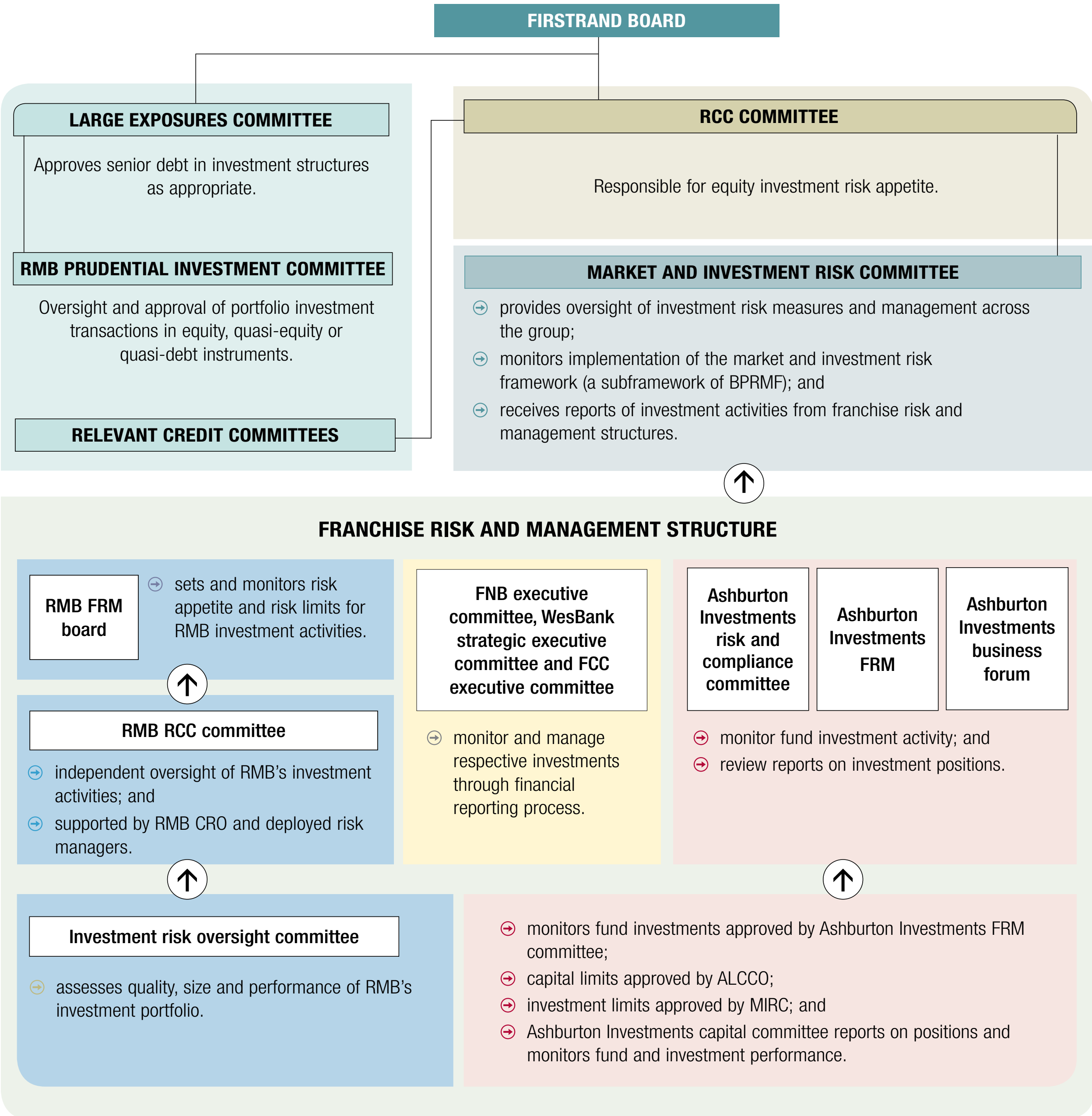
To ensure that banks have appropriate incentives to enhance the management of their exposures, the degree of conservatism increases with each successive approach. The BCBS also incorporated a leverage adjustment to RWAs derived from the above approaches to appropriately reflect a fund's leverage. The date of implementation of this standard in South Africa is still to be confirmed. 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	RISK MANAGEMENT FOCUS AREAS
• Private Equity had a large realisation during the year and made several new investments. • The unrealised value of RMB Private Equity's portfolio declined to R3.7 billion (2016: R4.2 billion) due to the realisations during the year, but remains significant. • Significant progress was made on the winding down of the RMB Resources portfolio, with only one non-performing exposure remaining.	• Focus on the disposal of the last remaining non-performing exposure in the RMB Resources portfolio. • Prepare for the introduction of the new BCBS standard relating to the treatment of investments in funds.

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 of 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 a large realisation and made several new investments. The unrealised value of the private equity investment portfolio at 30 June 2017 was R3.7 billion (2016: R4.2 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	**2017**	2016
Listed investment risk exposure included in the equity investment risk ETL process	**21**	66
ETL on above equity investment risk exposures	**–**	5
Estimated sensitivity of remaining investment balances		
Sensitivity to 10% movement in market value on investment fair value	**238**	367
Cumulative gains realised from sale of positions in the banking book during the year*	**3 117**	1 416

* *The increase in the cumulative gains realised from sale of positions in the banking book is related to the large private equity realisation during the year.*

CR10: Equity positions in the banking book under market-based approach (simple risk-weight method)

	As at 30 June 2017				
R million	On-balance sheet amount	Off-balance sheet amount	Risk weight	Exposure amount	RWA
Categories					
Exchange-traded equity exposures*	**429**	**–**	**300%**	**429**	**1 364**
Private equity exposures*	**5 708**	**250**	**400%**	**5 958**	**25 260**
Subtotal	**6 137**	**250**		**6 387**	**26 624**
Financial and insurance entities	**3 369**	**–**	**250%**	**3 369**	**8 423**
Total	**9 506**	**250**		**9 756**	**35 047**

* *Includes 6% scalar.*

	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*	5 578	578	400%	6 156	26 101
Subtotal	6 173	578		6 751	27 993
Financial and insurance entities	3 293	–	250%	3 293	8 233
Total	9 466	578		10 044	36 226

* *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 2017		
R million	**Publicly quoted investments**	**Privately held investments**	**Total**
Carrying value of investments	**429**	**9 327**	**9 756**
Per risk bucket			
250% – Basel III investments in financial entities	**–**	**3 369**	**3 369**
300% – listed investments	**429**	**–**	**429**
400% – unlisted investments	**–**	**5 958**	**5 958**
Latent revaluation gains not recognised in the balance sheet*	**–**	**5 722**	**5 722**
Fair value	**429**	**15 049**	**15 478**
Total unrealised gains recognised directly in the balance sheet through equity instead of the income statement*	**–**	**170**	**170**
Capital requirement**	**147**	**3 621**	**3 768**

* *These unrealised gains or losses are not included in Tier 1 or Tier 2 capital.*

** *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 2016		
R million	Publicly quoted investments	Privately held investments	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

* *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.*

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

INSURANCE RISK

INTRODUCTION AND OBJECTIVES

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 expectations. 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 currently underwrites funeral policies, risk policies and credit life policies (against FNB credit products). These policies are all originated through the FNB franchise. The health cash plan was launched in October 2016.

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, which are morbidity risks. Credit life policies also cover retrenchment risk. 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, morbidity 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.

Over the past year, policies underwritten by FirstRand Life have become available through all of FNB's distribution channels. Some of these channels introduce the possibility of anti-selection which also impacts the level of insurance risk.

FirstRand Life also writes linked-investment policies distributed by Ashburton Investments. There is, however, no insurance risk associated with these policies as they are not guaranteed.

Year under review and focus areas

YEAR UNDER REVIEW	RISK MANAGEMENT FOCUS AREAS
• Transfer of policies previously underwritten by MMI Holdings Limited and RMB Structured Life onto the FirstRand Life licence. • Initiated sales of all credit life products on the FirstRand Life licence. • Approval of risk appetite statements.	• Continue to monitor incidence rates, claims ratios and business mix of funeral sales. • Enhance IT risk capabilities to support the new policy system. • Operationalisation of risk appetite for insurance risk.

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, asset, liability and capital committee, and remuneration committee. The asset, liability and capital committee is responsible for:

- providing oversight of the product suite;
- approving new products;
- financial resource management; 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 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 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. Where various channels introduce the risk of anti-selection, mix of business by channel is monitored. 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 reviewing 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 build an effective and forward-looking operational risk management programme.

Prioritise operational risk management activities to support execution of strategy and strengthen key controls.

Embed simple, efficient and effective risk management tools.

Provide forward-looking and dynamic operational risk management information used in business decision-making.

Enhance risk management procedures related to critical third parties, third-party outsourcing and key interfranchise insourcing.

Enhance operational risk management awareness and skills within the organisation.

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

OPERATIONAL RISK MANAGEMENT PROGRAMME COMPONENTS

- establishment, review and implementation of operational risk management framework and policies;
- operational risk management tools and processes (including risk identification, assessment and quantification);
- operational risk analytics and capital;
- operational risk management IT system and management information;
- operational risk governance and reporting; and
- operational risk management advisory and support services to business.

Year under review and focus areas

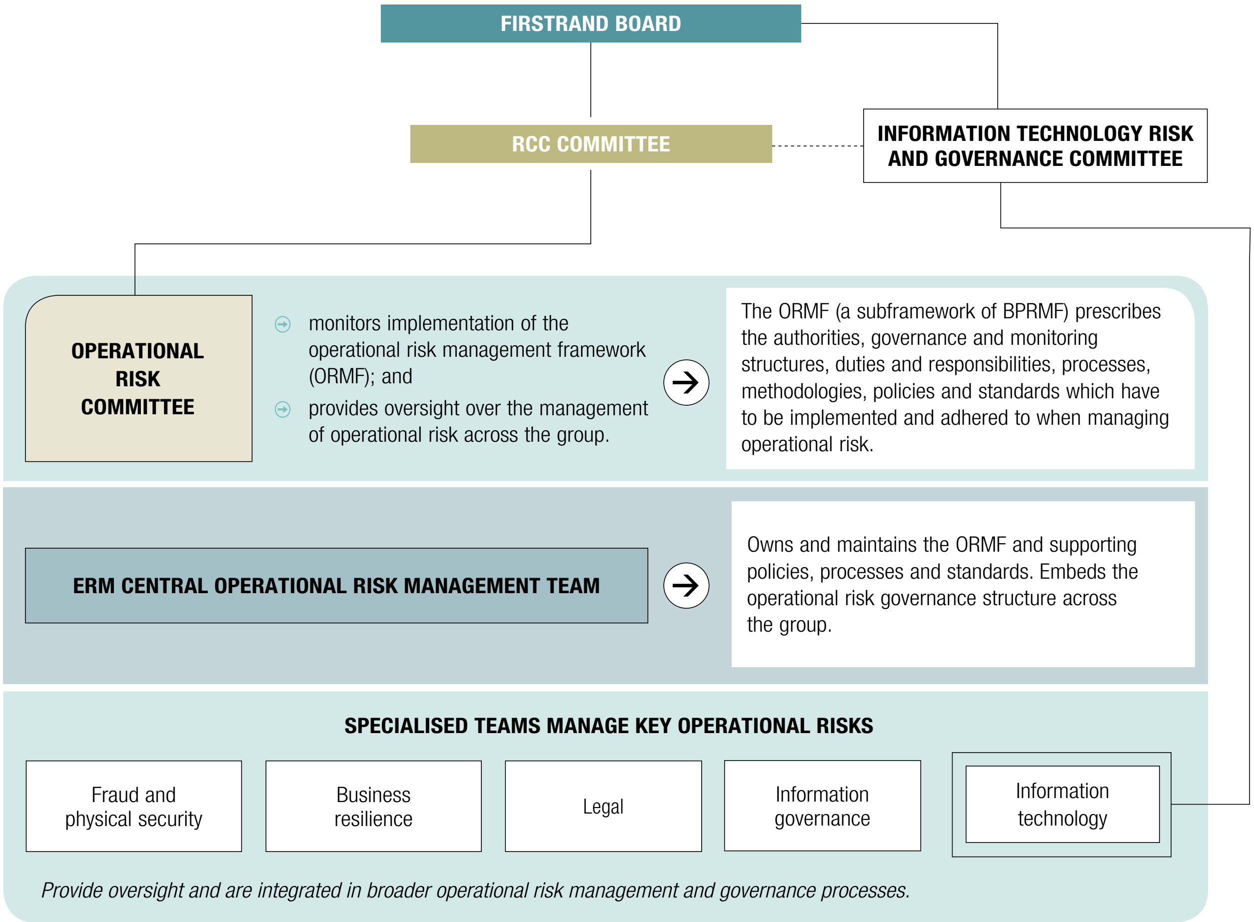
There are ongoing control improvement initiatives aimed at addressing key operational risk themes, mitigating emerging risks and improving operational risk maturity. The progress on these initiatives and their impact on the operational risk profile is tracked and reported on regularly at franchise and group level through the management and risk governance process and are 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** (risk of process weaknesses and control deficiencies) as the business continues to grow and evolve.

YEAR UNDER REVIEW	RISK MANAGEMENT FOCUS AREAS
• Established minimum standards for the risk management treatment of critical third-party service providers and key insourced arrangements. • Formalised risk acceptance through policy implementation. • Automated key risk drivers to assist in the identification of key risks. • Formalised actions with defined timelines for compliance with the Basel principles for risk data aggregation and reporting. • Reviewed contingency plans to manage business resilience risks associated with water supply shortages and mass protest action, given the current external environment. • Internal validation of the application and quality of operational risk management tools within business. • Ongoing review of key outsourcing arrangements. • Process automation projects continued to reduce manual processes and improve controls. • Upgrading key facilities and infrastructure with completion planned for 2018. • Continued to review and align risk mitigation strategies to combat cybercrime and ensure that controls are adequate and effective. • Refined processes, and improved data quality and records management practices. • Information governance now forms an integral part of the group's overall risk management framework.	• Enhance the quality and coverage of process-based risk, and control identification and assessments. • Enhance risk management procedures related to critical third parties, third-party outsourcing and key interfranchise insourcing. • Enhance value and use of operational risk management information and analysis to business. • Address gaps relating BCBS 239. • Embed control testing as part of the responsibilities of the second line of control. • Prioritise operational risk management activities to support execution of strategy and strengthen key controls. • Enhance operational risk management awareness and skills within the organisation. • Assess risk management and measurement impact of changes to the BCBS's operational risk capital approach. • Align IT and related frameworks with changing business models and the technology landscape. • Conduct regular IT risk assessments to ensure improvement of identified gaps. • 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 **AMA** for its domestic operations. Offshore subsidiaries and operations continue to use **TSA** for operational risk and all previously unregulated entities that now form part of FRIHL use the **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 99.9th 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

PROCESS-BASED RISK AND CONTROL IDENTIFICATION AND ASSESSMENT	KEY RISK INDICATORS
• 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 effectiveness of existing controls.	• 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.
INTERNAL/EXTERNAL LOSS DATA	**RISK SCENARIOS**
• 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, and process analysis and corrective action; and • external loss databases are used to learn from the loss experience of other organisations and are also an input into the risk scenario process.	• 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 specialist risk and management processes

	BUSINESS RESILIENCE	LEGAL	IT
Management	• Operations should be resilient to severe disruptions from internal failures or external events. • Business continuity strategies include regular review of business continuity plans (including disaster recovery plans) and testing. • Disruptions or incidents are assessed and reported to the relevant risk stakeholders.	• Creation and ongoing management of contractual relationships. • Management of disputes and/or litigation. • Protection and enforcement of property rights (including intellectual property). • Account for the impact of law or changes in the law as articulated in legislation or decisions by the courts.	• Protection of information systems against unauthorised access, destruction, modification and use. • Ensure confidentiality, availability and integrity of systems that maintain, process and disseminate this information. • Systems are continuously assessed for vulnerabilities and reported to relevant risk and business stakeholders.
Committees and frameworks	• Business resilience steering committee (a subcommittee of the operational risk committee). • Practices are documented in the business resilience policy and standards.	• Compliance with legislation managed by RRM. • Legal risk committee (subcommittee of operational risk committee), and subcommittees of the legal risk committee. • Legal risk management framework and subframeworks and policies.	• Information technology risk and governance committee (board committee). • IT governance framework, IT risk management framework and information security policy.

	INFORMATION GOVERNANCE	FRAUD AND SECURITY	RISK INSURANCE
Management	• Information is a valuable asset. • Focus on quality and protection of information against unauthorised access, destruction, modification, use and disclosure. • Ensure confidentiality, availability, integrity, sensitivity of and accountability for all information.	• Covers internal (staff) and external fraud. • Contain external fraud losses with enhanced controls and introduction of improved real-time detection models. • Mitigate the growing cybercrime threat with measures to improve resilience against cyberattacks.	• Structured insurance risk financing programme in place for material losses from first-party risks. • Insurance refined through risk profile assessment, change in group strategy or markets. • Cover for professional indemnity, directors' and officers' liability, crime, public and general liability, assets, etc.
Committees and frameworks	• Information governance committee (subcommittee of the operational risk committee). • Information governance framework and acceptable use of information resources policy.	• Fraud risk management function reporting to FNB CRO with a group mandate. • Fraud risk management framework.	• Cover through FirstRand Insurance Services Company (FRISCOL) (the group's wholly-owned first-party insurance company).

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 affect shareholder value.

The insurance risk programme is continuously refined through ongoing assessment of changing risk profiles, organisational strategy and growth, and 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 insurers.

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. 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 the 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 well-diversified 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

Primary risk drivers:

- economic environment;
- technological progress;
- behavioural risk;
- assumption risk;
- competitive environment risk;
- new products;
- inability to hedge risk;
- new markets; and
- country risk.

Secondary 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 strategy.

FirstRand has formal governance processes for managing environmental and social risk. These include detailed environmental and social risk analyses (ESRA) programmes as well as programmes for the management of direct operational risk impacts. 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 project finance transactions. The group's report on environmental and social risk is available on the group's website, www.firstrand.co.za.

FirstRand has a dedicated environmental and social risk management team, which manages direct and indirect environmental (inclusive of climate change) and social risk in the group. The team forms part of ERM, which allows for the integration of environmental and social risks into the group risk management processes identify, manage and mitigate environmental, social and climate related risks and to maximise opportunities. The environmental and social risk management team:

- measures, monitors and reports on the group's own climate resilience and water, energy and waste management;
- manages the environmental and social risk processes which form part of the credit risk framework; and
- is involved in integrating the UN sustainable development goals into business opportunities.

A FirstRand exclusions list and sensitive industry matrix have been developed to indicate activities which the group will not finance or where there are restrictions on the financing of these activities, for example, due to legal constraints, financing restrictions due to international financing agreements, or, where the group may suffer reputational damage due to involvement with the specific industries.

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:

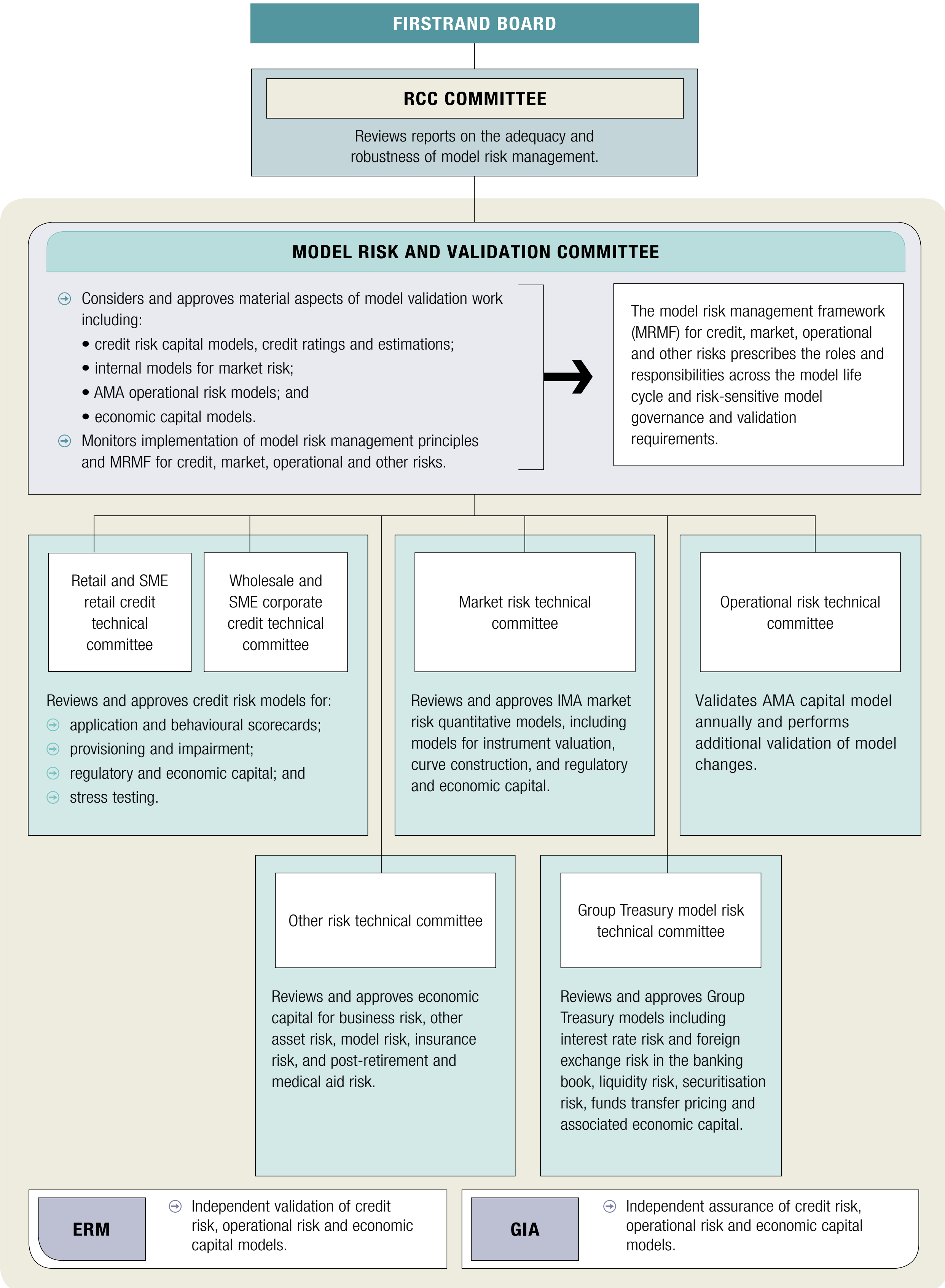
- information input component, which delivers assumptions and data to the model;
- processing component, which transforms inputs into estimates; and
- reporting component, which translates the estimates into useful business information.

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

YEAR UNDER REVIEW	RISK MANAGEMENT FOCUS AREAS
• Implementation and roll-out of model risk management software for credit risk regulatory capital, IFRS 9, credit risk stress testing and credit risk economic capital models.	• Roll-out model risk management software to remaining credit, operational and market risk models. • Continue to track improvements in model risk management across risk types. • Formalise a risk appetite statement for model risk.

ORGANISATIONAL STRUCTURE AND GOVERNANCE



ASSESSMENT AND MANAGEMENT

The level of model risk related to a particular model is influenced by model complexity, uncertainty about inputs and assumptions, and the extent to which the model is used to make financial and strategic decisions. 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 effective management of the 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 levels of materiality for model evaluation and validation.

Model risk management principles

Data and systems	Development	Testing and validation	Monitoring	Governance
use systems that ensure data and reporting integrity; use suitable data; maintain master list of field data; implement appropriate system controls; and assess data quality.	document model design, theory and logic which is supported by published research and industry practice; expert challenge of methods and assumptions; and ensure appropriate conservatism.	provide independent validation; review documentation, empirical evidence, model construction assumptions and data; perform sensitivity analysis; perform stress testing; and obtain independent assurance from GIA.	perform regular stress testing and sensitivity analysis; perform quantitative outcome analysis; perform back testing and establish early warning metrics; assess model limitations; set and test error thresholds; and test model validity.	provided by three lines of control; approve model risk management framework; ensure effective management; ensure approval committees with adequate skills; and ensure appropriate documentation.

MODEL RISK MEASUREMENT

A scorecard with risk factors based on model risk management principles is used for model risk measurement and quantification of capital. Intrinsic model risk and incremental model risk are assessed and tracked separately, then combined to obtain overall model risk scorecards. 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 to be specific to that risk type.

Each regulatory capital and economic capital model is rated using the model risk scorecard and assigned an overall model risk rating of low, medium or high. These ratings are used to determine the model risk economic capital add-on multiplier, which is applied to the output of capital models to determine the amount of model risk economic capital to be held.

Regulatory risk

INTRODUCTION AND OBJECTIVES

Regulatory risk refers to the risk of statutory or regulatory sanction, 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 ethics and compliance culture embraces standards of integrity and ethical conduct which affects all stakeholders of the group, both internal and external.

RRM objective and approach

OBJECTIVE	APPROACH
Ensure business practices, policies, frameworks and approaches across the group are consistent with applicable laws and that regulatory risks are identified and proactively managed.	- 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 and restrictions imposed by regulatory authorities.

Ethical conduct is core to FirstRand's commitment of acting responsibly. Unethical conduct carries regulatory, legal, financial and reputational risk and therefore FirstRand's RRM function is committed to appropriately managing ethics and conduct risk.

Applicable standards, laws and regulations include:

- Banks Act, 1990 and related Regulations;
- Companies Act, 2008;
- King Code of Governance Principles for South Africa 2016 (King IV);
- 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 (FAIS) Act, 2002;
- National Credit Act (NCA), 2005;
- Consumer Protection Act, 2008;
- JSE rules and directives;
- Financial Markets Act, 2012;
- Foreign Account Tax Compliance Act;
- Protection of Personal Information Act (PoPIA), 2013;
- Prevention of Corrupt Activities Act, 2004; and
- Financial Sector regulation Act, 2017.

Effective regulatory and conduct risk management promotes ethical conduct, 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 ethics, conduct and compliance issues. RRM interacts and cooperates closely with other group and franchise functions, as well as with the group's various regulatory and conduct authorities.

Year under review and focus areas

YEAR UNDER REVIEW	RISK MANAGEMENT FOCUS AREAS
• The FIC Amendment Bill was signed into law by the President on 26 April 2017. The Minister of Finance, who must determine the commencement date, has recently pronounced on sections that took effect and announced that the remaining sections would be effective from 2 October 2017. In this regard, draft regulations and guidance has been published for comment whilst further transitional periods for implementation of related regulations and requirements will be agreed with the relevant regulatory authorities. • The Financial Sector Regulation Bill, was recently passed by the National Assembly after which it was sent to the President for acceptance. • The Regulations relating to Banks is currently in process of being amended in line with various new and/or revised internationally agreed frameworks and requirements.	• 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, including FICA, NCA, FAIS and PoPIA. • Ongoing investment in systems, processes and resources to ensure compliance with anti-money laundering and combating the financing of terrorism (AML/CFT) legislation. • Strengthen focus on anti-bribery and corruption strategy and programmes to ensure compliance with both local and international regulatory instruments with extraterritorial reach. • Continue to focus on managing regulatory and conduct risk posed by clients and other external stakeholders. • Continue to focus on managing organisational culture risk detection, prevention and remediation, which supports regulatory risk management. • 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 assessments by regulators in other jurisdictions such as Namibia, Botswana and Swaziland. • Continue to work closely with regulators and industry on the authenticated collections project; the main objective of which is to prevent debit order abuse. • Continue to manage risks associated with illicit cross-border flows.

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 compliant with international standards and best practice. Changes in international standards and requirements, such as the large volume of regulatory changes implemented subsequent to the 2008 global financial crisis, normally result in amendments to the South African prudential regulatory framework for banks and banking groups, which usually result in amendments to the Regulations. These, including the Basel III phase-in arrangements, largely resulted in previous prudential regulatory changes and new and/or amended requirements and standards. In this regard, the Regulations are currently again in the process of being amended. In line with 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, which will, going forward, result in revised, additional and/or new regulatory requirements.

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. The FSR Bill, which will give effect to the government's 2011 decision to implement a twin peaks system of financial sector regulation in South Africa, was recently passed by the National Assembly after which it was sent to the President for signature.

In terms of the twin peaks approach, equal focus is placed on prudential and market conduct regulation with separate but equally important focus on financial stability. A phased-in approach will be followed for implementation of the twin peaks system of financial regulation in South Africa, which is anticipated to result in additional complexities for financial services and product providers in managing regulatory risks. The group will continue to work closely with its regulators on matters pertaining to the above.

Some of the policy priorities identified in relation to reforming the financial sector, certain desired outcomes of the approach, and phased-in implementation strategies are shown in the following diagram.

Twin peaks policy priorities and implementation

POLICY PRIORITIES

- Financial stability
- Consumer protection and market conduct
- Expanding access to financial services through inclusion
- Combating financial crime

DESIRED OUTCOMES

- Financial systemic stability
- Strengthened financial regulatory system and structures
- Sound market conduct, micro- and macro-prudential regulation
- Strengthened operational independence, governance and accountability of regulators

TWIN PEAKS IMPLEMENTATION

Phase 1

- enactment of the Financial Sector Regulation Bill; and
- establishment of the required regulatory architecture.

Phase 2

- establishment of a target framework, which will include the development of the required legal frameworks for prudential and market conduct regulation; and
- introduction of new legislation and 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 (PoPIA)

- PoPIA provides for privacy and protection of personal information held by the group in respect of employees, customers, suppliers and third parties.
- The effective date is yet to be announced.
- 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 processing of personal information and complaints handling.

AML AND CFT MEASURES

- The group's objective is to ensure compliance with the provisions of AML/CFT legislation and other requirements pertaining thereto.
- The FIC Amendment Bill was signed into law by the President on 26 April 2017. The Minister of Finance, who must determine the commencement date, recently pronounced on which sections have taken effect and indicated that the remaining sections would be effective from 2 October 2017.
- A number of initiatives are under way in anticipation of changes required under new legislation.
- Ongoing focus on implementation of the FIC's GoAML system reporting requirements.
- Participation in industry engagements, including with the World Bank, on various matters such as correspondent banking and derisking.

MARKET CONDUCT

- Informs the group's market conduct programme activity.
- Participation in regulatory discussions with National Treasury on conduct risk issues raised in Nedlac discussions.
- Participation in the World Bank retail banking diagnostic exercise, including meetings and submission of documentary evidence on varied focus areas, such as financial inclusion, switches and closures, advertising, disclosure and rewards.
- Updating of key policies in relation to competition law and market conduct, as well as the development of training material for FAIS regulatory exams and competition law.
- Facilitating the sharing of market conduct best practice to market conduct forums in business.
- Participation in public commentary processes relating to market conduct position papers, including *Retail Distribution Review.*
- Engagement with the FSB on Policy Protection Rules.

FINANCIAL SECTOR REGULATION ACT

- The Act will enable establishment of the twin peaks regulatory architecture.
- The Prudential Authority will be responsible for the supervision of the safety and soundness of financial institutions while the Financial Sector Conduct Authority will be responsible for the supervision of financial institutions market conduct.
- The SARB will be responsible for protecting and enhancing financial stability within a policy framework agreed with the Minister of Finance.
- It is expected that the Minister of Finance will make specific regulations relating to transitional arrangements.

ETHICS OFFICE

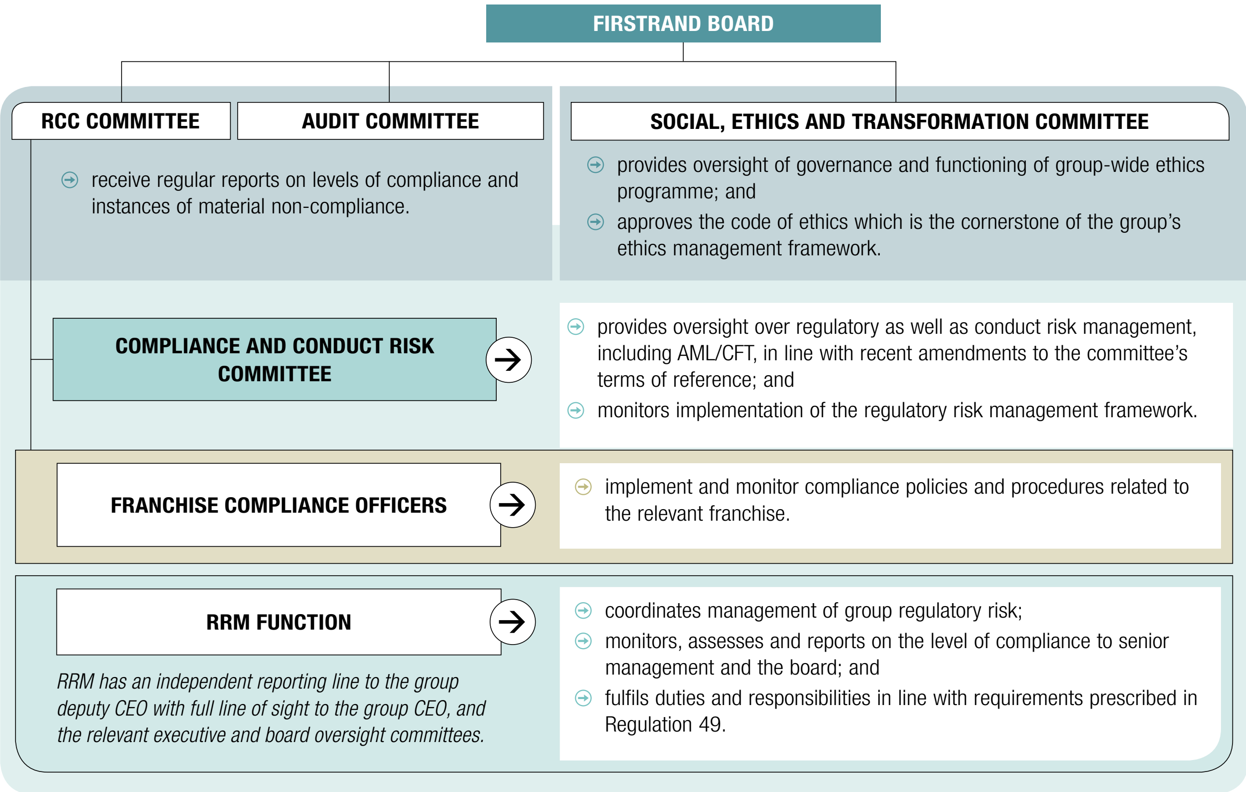
- Continuously reinforces a culture of integrity and ethical business practices.
- Maintains focus on the promotion of responsible business including enhancing and maturing ethics and conduct risk capabilities across the group.
- Promotes training relating to and awareness of the independent whistle-blowing line.
- Provides oversight on personal account trading and conflicts of interest management.
- Leads the group's anti-bribery and corruption practices, including risk assessments, training and guidance, third-party anti bribery and corruption risk management.
- Coordinates and provides advice on client desirability review processes.

THE NATIONAL CREDIT ACT

- Maintain focus on ensuring compliance with all applicable regulatory requirements across the group.
- Ongoing engagement with the National Credit Regulator on matters which arise from time to time.

ORGANISATIONAL STRUCTURE AND GOVERNANCE

Regulatory risk governance structure



RRM's board mandate is to facilitate the management of compliance with statutes and regulations. To achieve this, RRM has implemented appropriate governance arrangements, including structures, policies, processes and procedures to identify and manage regulatory and supervisory risks. RRM monitors the management of these risks and reports on the level of compliance to the board and the SARB. These include:

- risk identification through determining which laws, regulations and supervisory requirements are applicable to the group;
- risk measurement and mitigation through the development and execution of risk management plans and related actions;
- 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 board maintains an effective relationship with both local and international regulatory authorities for the group's 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 CEO and 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.

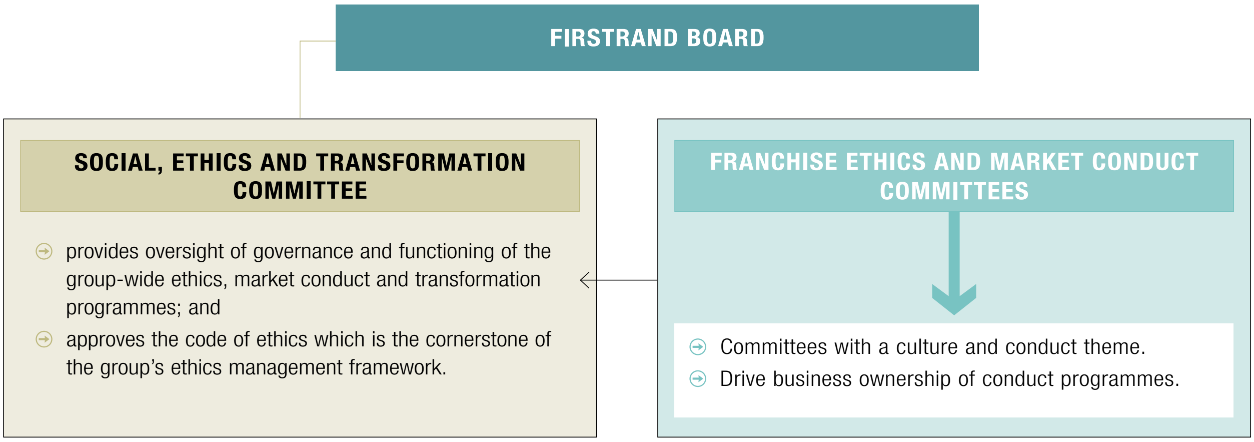
Leadership is required to integrate ethics and conduct risk objectives, especially in respect of market conduct, into commercial strategies. For this reason, strategy and leadership and the intersect with culture and conduct are continuously evaluated.

Year under review and focus areas

The FirstRand social, ethics and transformation committee oversees a culture and conduct framework. The table below outlines the focus areas during the year.

YEAR UNDER REVIEW	RISK MANAGEMENT FOCUS AREAS
• Reviewed the outcomes of several culture risk assessments, coupled with group engagement assessments. • Launched anti-bribery and corruption risk assessments in the operations outside of South Africa. • Reviewed whistle-blowing trend analysis and adequacy for the group. • Reviewed culture and conduct risk in specialised areas of WesBank and FNB. • Oversaw clients of interest with adverse news, origination, deliberation and remediation processes. • Developed an anti-bribery and corruption risk framework.	• Review market conduct maturity and associated platform developments. • Focus on emerging culture risks and appropriate responses to the increasing regulatory requirements. • Oversee implementation of business conduct programme with a focus on anti-bribery and corruption, whistle-blowing and clients of interest reviews (due diligence). • Oversee the prevention of insider trading via the FirstRand personal account trading programme.

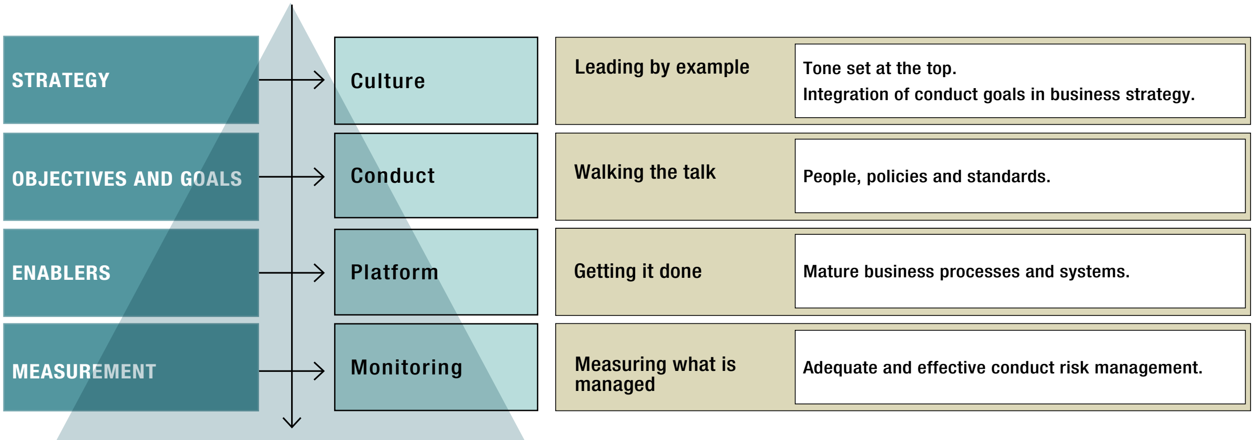
ORGANISATIONAL STRUCTURE AND GOVERNANCE



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 employee 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
• conflicts of interest management; • safe whistle-blowing; • personal account trading; • bribery and corruption; and • client desirability reviews.	• retail market conduct (treating customers fairly); • ethical trading in financial markets (OTC derivatives); and • responsible wholesale banking practice.	• 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, 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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SEC1 Securitisation exposure and rating distribution	✓		137
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SEC4 Securitisation exposure and associated capital requirements (investor)	✓		140
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Definition, governance, assessment, measurement		Regulation 43	141
MRA Qualitative disclosure for market risk	✓		141
MRB IMA qualitative disclosure	✓		144
MR2 RWA flow statement of market risk exposures under IMA	✓		145
VaR exposure per asset class		Regulation 43	146
MR3 IMA values for trading portfolios	✓		146
MR4 Comparison of VaR estimates with gains/losses	✓		149
MR1 Market risk RWA under standardised approach	✓		151
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– NII sensitivity	✓	Regulation 43	155
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Equity investment risk			
Definition, governance, assessment, measurement		Regulation 43	158
Investment risk exposure and sensitivity		Regulation 43	161
CR10 Equities under simple risk-weight approach	✓		161
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Operational risk	✓	Regulation 43	164
Other risks			
Strategic, business, reputational, environmental and social, model, insurance, regulatory and conduct risks		Regulation 43	170
Remuneration and compensation		Regulation 43	183

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 business strategy.
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).
Exposure at default (EAD)	Gross exposure of a facility upon default of a counterparty.
FirstRand Bank (SA)	FRB excluding foreign branches.
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 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 AT1 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
BIA	Basic indicator approach
BPRMF	Business performance and risk management framework
CCF	Credit conversion factors
CEM	Current exposure method
CRM	Credit risk mitigation
CSA	Credit support annexes
CVA	Credit value adjustment
D-SIB	Domestic systemically important bank
EAD	Exposure at default
ECAI	External credit assessment institution
ETL	Expected tail loss
EVE	Economic value of equity
GIA	Group Internal Audit
HQLA	High quality liquid asset
ICAAP	Internal capital adequacy assessment process
IMA	Internal models approach
ISDA	International Swaps and Derivatives Association
ISMA	International Securities Market Association
LCR	Liquidity coverage ratio
LGD	Loss given default
NAV	Net asset value
NSFR	Net stable funding ratio
PD	Probability of default
RWA	Risk weighted average
SA-CCR	Standardised approach for measuring counterparty credit risk
sVar	Stressed VaR
TSA	The standardised approach for operational risk
VaR	Value-at-Risk

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