BASEL PILLAR 3 DISCLOSURE

for the six months ended 31 December 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 businesses comprises FNB, RMB, WesBank and Ashburton Investments and provides a universal set of transactional, lending, investment and insurance products and services. FCC 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*Regulations relating to Banks* (Regulations), issued in terms of the Banks Act, 1990 (Act No. 94 of 1990), where not superseded by the revised Pillar 3 disclosure requirements.

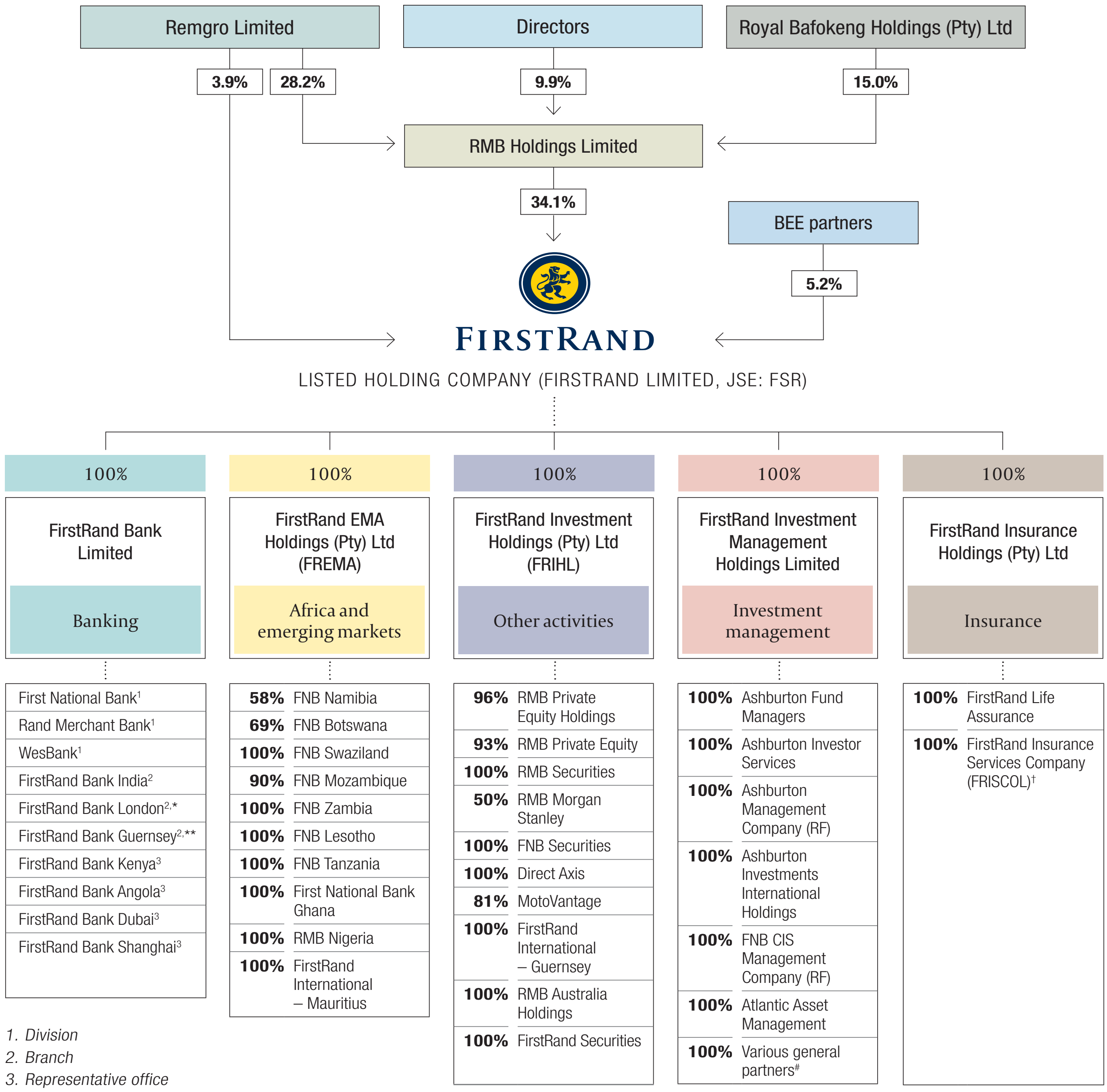
The most significant revisions are templates for quantitative disclosure and definitions, some with a fixed format which aims to enhance comparability of banks' disclosures.

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



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 and FirstRand Bank Ltd.

FirstRand strategy

FirstRand is a portfolio of integrated financial services businesses operating in South Africa, certain markets in sub-Saharan Africa, India and the UK. Many of these businesses are market leaders in their respective segments and markets, and represent a universal set of transactional, lending, investment, and insurance products and services.

FirstRand can provide its customers with differentiated and competitive value propositions due to its unique and highly flexible model of leveraging the most appropriate brand, distribution channel, licence and operating platform available within the portfolio. This approach, which is underpinned by the disciplined allocation of financial resources, allows the group to fully optimise the value of its portfolio. This has resulted in a long track record of consistent growth in high quality earnings and superior and sustainable returns for shareholders.

FirstRand's strategy accommodates a broad set of growth opportunities across the entire financial services universe from a product, market, segment and geographic perspective.

Currently group earnings are tilted to its domestic market and are generated predominantly by lending and transactional activities, which have resulted in deep and loyal client bases, and the group is focused on protecting and growing these valuable banking businesses. It also believes that through the utilisation of the origination capabilities, operating platforms and distribution networks of these businesses, it can diversify and capture a larger share of profits from providing savings, insurance and investment products.

The growth opportunity is significant given the level of 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.

With regards the group's strategy outside of its domestic market, in the rest of Africa it is growing its presence and offerings in nine markets where it believes it can organically build competitive advantage and scale over time. In the UK, the group has acquired Aldermore plc and will integrate its existing retail VAF business, MotoNovo, into the Aldermore portfolio. This will result in more diversified lending business in the UK with a sustainable funding franchise.

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 16 for a detailed discussion of the group's risk appetite.

Measure	Commentary	Reference
Normalised ROE 22.5% December 2016: 22.9% June 2017: 23.4% Long-term target **18% – 22%** **Normalised earnings growth** +7% December 2016: +7% June 2017: +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 Analysis of financial results for the six months ended 31 December 2017 provides an overview of the group's financial position and performance.*

Measure	Commentary	Reference
Capital adequacy 16.9% December 2016: 17.3% June 2017: 17.1% Target **>14%** **Tier 1** 14.6% December 2016: 14.8% June 2017: 14.9% Target **>12%** **CET1** 14.0% December 2016: 14.1% June 2017: 14.3% Target **10% – 11%** **Leverage ratio** 8.5% December 2016: 8.4% June 2017: 8.6% 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 issued R2.75 billion Basel III-compliant Tier 2 instruments in the domestic market during the period. 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 21 of this report.*

Note: Capital and leverage ratios include unappropriated profits.

Measure	Commentary	Reference
Liquidity coverage ratio 107% December 2016: 95% June 2017: 97% 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 107%. The group's high quality liquid asset (HQLA) holdings amounted to R190 billion.	*For a detailed analysis of funding and liquidity risk refer to page 32 of this report.*

Normalised NPLs		
2.33% December 2016: 2.37% June 2017: 2.41%	Group credit loss ratio stabilised, despite a challenging macroeconomic environment, benefiting from risk mitigation measures implemented. 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 44 of this report.*
Normalised credit loss ratio		
0.87% December 2016: 0.86% June 2017: 0.91% Long-run average **100 – 110 bps**		

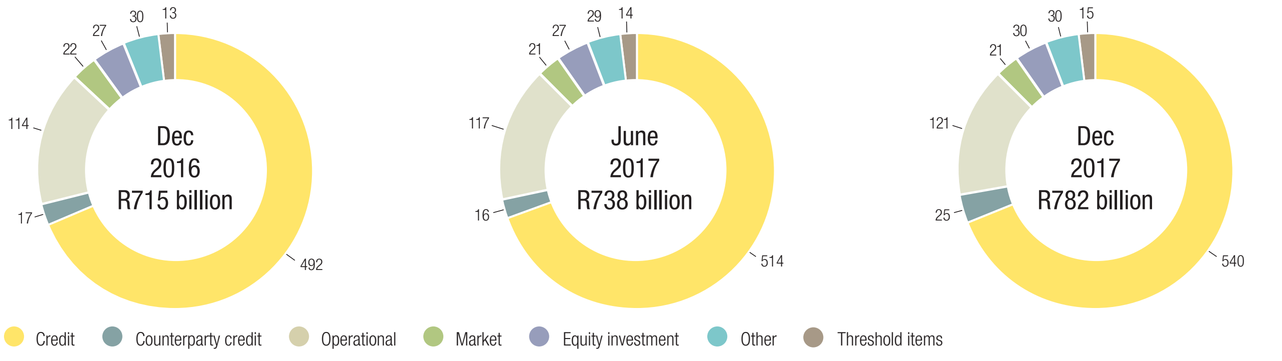
Market risk 10-day ETL		
R434 million December 2016: R363 million June 2017: R350 million	The interest rate risk asset class represents the most significant market risk in the trading book exposure at December 2017. The group's market risk profile remained within risk appetite.	*For a detailed analysis of market risk in the trading book refer to page 109 of this report.*

Equity investment risk exposure as % of Tier 1		
11.0% December 2016: 11.6% June 2017: 10.1%	The period under review was characterised by two large acquisitions and a few small realisations by private equity. The quality of the investment portfolio remains acceptable and within risk appetite.	*For a detailed analysis of equity investment risk refer to page 126 of this report.*

NII sensitivity downward 200 bps		
-R2.6 billion December 2016: -R1.9 billion June 2017: -R2.1 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 R2.6 billion. A similar increase in interest rates would result in an increase in projected 12-month NII of R1.9 billion. The group's average endowment book was R210 billion for the six months ended 31 December 2017.	*For a detailed analysis of interest rate risk in the banking book refer to page 120 of this report.*
NII sensitivity upward 200 bps		
R1.9 billion December 2016: R1.4 billion June 2017: R1.4 billion		

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

- Since the outcome of the ANC elective conference in December 2017, sentiment and markets have staged a material recovery and the outlook for South Africa is more positive than it has been for some time. Given the structural nature of many of South Africa's challenges, however, the group believes that the domestic fundamentals will not change quickly, therefore, it expects a similar macro picture for the remainder of its financial year to June 2018.
- Risk of a further local currency rating 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.
- Political risk remains high but with the increased possibility of positive governance, economic and structural reforms.
- Business resilience risk is high, due to amongst others, regional water supply shortages, and continued protest actions and social unrest associated with challenging socio-economic conditions in South Africa.
- Rising regulatory and macroeconomic risks in the rest of Africa.

GLOBAL LANDSCAPE

- Rising income and wealth disparity fuelled by the impact of automation on labour markets and high structural unemployment.
- Global societal trends of deepening social and cultural polarisation, and intensifying national sentiment.
- Developed and emerging economies forecasting economic growth, however, impacted by 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 (e.g. Brexit) and the effect of migration.
- Environmental-related risks include extreme weather conditions, accelerating biodiversity loss, pollution, 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.
- Growing vulnerability to systemic risks due to the interconnectedness and complex nature of societies, ecosystems, economies and the global financial system.

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 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 businesses 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; 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 ratings; • preserve a "fortress" balance sheet that can sustain shocks through the cycle; • ensure group remains appropriately capitalised; and • ensure an efficient capital structure with appropriate/conservative gearing.

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.

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

Core risk competencies and key risks

CORE COMPETENCIES

1. Identification
2. Assessment
3. Monitoring
4. 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 changes – 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 be consistently 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 and Conduct Risk Management (RCRM)
- Regulatory and conduct risk executive represented on platform and conduct executive committees
- Franchise compliance heads have functional reporting lines to RCRM head

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

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

RISK GOVERNANCE STRUCTURE

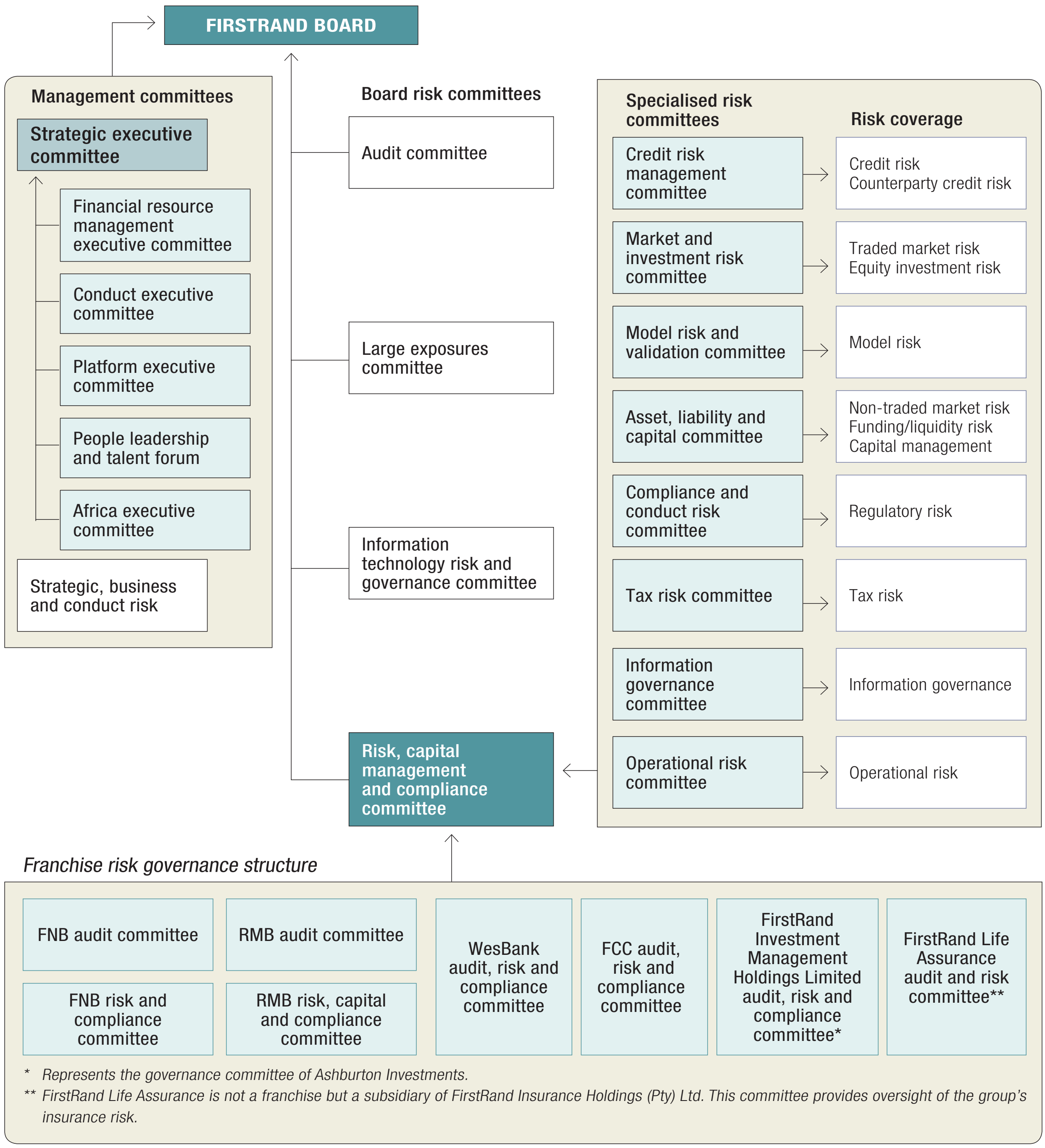
The risk management structure is set out in the group's BPRMF. As a policy of the board, the BPRMF delineates the roles and responsibilities of key stakeholders in business, support and control functions across the various franchises and the group.

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



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, RCRM and external auditors. The combined outcome of independent oversight, validation and audit tasks performed by the assurance providers ensure a high standard across methodologies, and operational and process components of the group's risk and financial resource management.

The group established a combined assurance forum, supported by franchise combined assurance forums, with the primary objective to assist the audit committee in discharging its responsibilities on the integration, coordination and alignment of the various risk management and assurance processes and activities across the group. Combined assurance is firmly embedded in the organisation and drives consistent reporting to relevant governance committees.

Combined assurance results in a more efficient assurance process through the reduction 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 robust, collaborative and 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 12. 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 the 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 director; and
- limits, authorities and delegations granted to 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 their possible impact on the group's risk profile;
- the impact of environmental changes on the strategic risk profile of the group;
- assessment of whether 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 scope 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 South African Reserve Bank (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 risk weighted assets (RWA).

RISK TYPE	FRB DOMESTIC OPERATIONS	SARB APPROVAL DATE	REMAINING FIRSTRAND SUBSIDIARIES AND FRB FOREIGN OPERATIONS
Credit risk	Advanced internal ratings-based (AIRB) approach and the standardised approach for certain portfolios	January 2008	Standardised approach
Counterparty credit risk	Standardised method	May 2012	Current exposure method
Market risk in the trading book	Internal model approach	July 2007	Standardised approach
Equity investment risk	Market-based approach: Simple risk-weighted method**	June 2011	Market-based approach: Simple risk-weighted method**
Operational risk*	Advanced measurement approach (AMA)	January 2009	**Remaining subsidiaries and FRB foreign operations:** • The standardised approach (TSA) for operational risk **FRIHL entities:** • Basic indicator approach (BIA), TSA, AMA **FirstRand Investment Management Holdings (FRIM) entities:** • BIA
Other assets	Standardised approach	January 2008	Standardised approach

* *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.*

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

Financial resource management

The management of the group's financial resources, which it defines as capital, funding and liquidity, and risk capacity, is critical and supportive 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, regulators and rating agencies. 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.

The management of the group's financial resources is executed through Group Treasury and is independent of the operating franchises. This ensures the required level of discipline is applied in the allocation of financial resources and pricing of these resources. This also ensures that Group Treasury's mandate is aligned with the portfolio's growth, return and volatility targets to deliver shareholder value. The group continues to monitor and proactively manage a fast-changing regulatory environment and ongoing macroeconomic challenges.

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. 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 return and risk appetite statement 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. Constraints are also set for downturn cycles. 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.

Return and risk appetite statement

FirstRand's return and risk appetite statement aims to ensure that the group maintains an appropriate balance between risk and reward. Risk/return targets and appetite limits are set to ensure the group achieves its overall strategic objectives, namely to:

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

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 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.

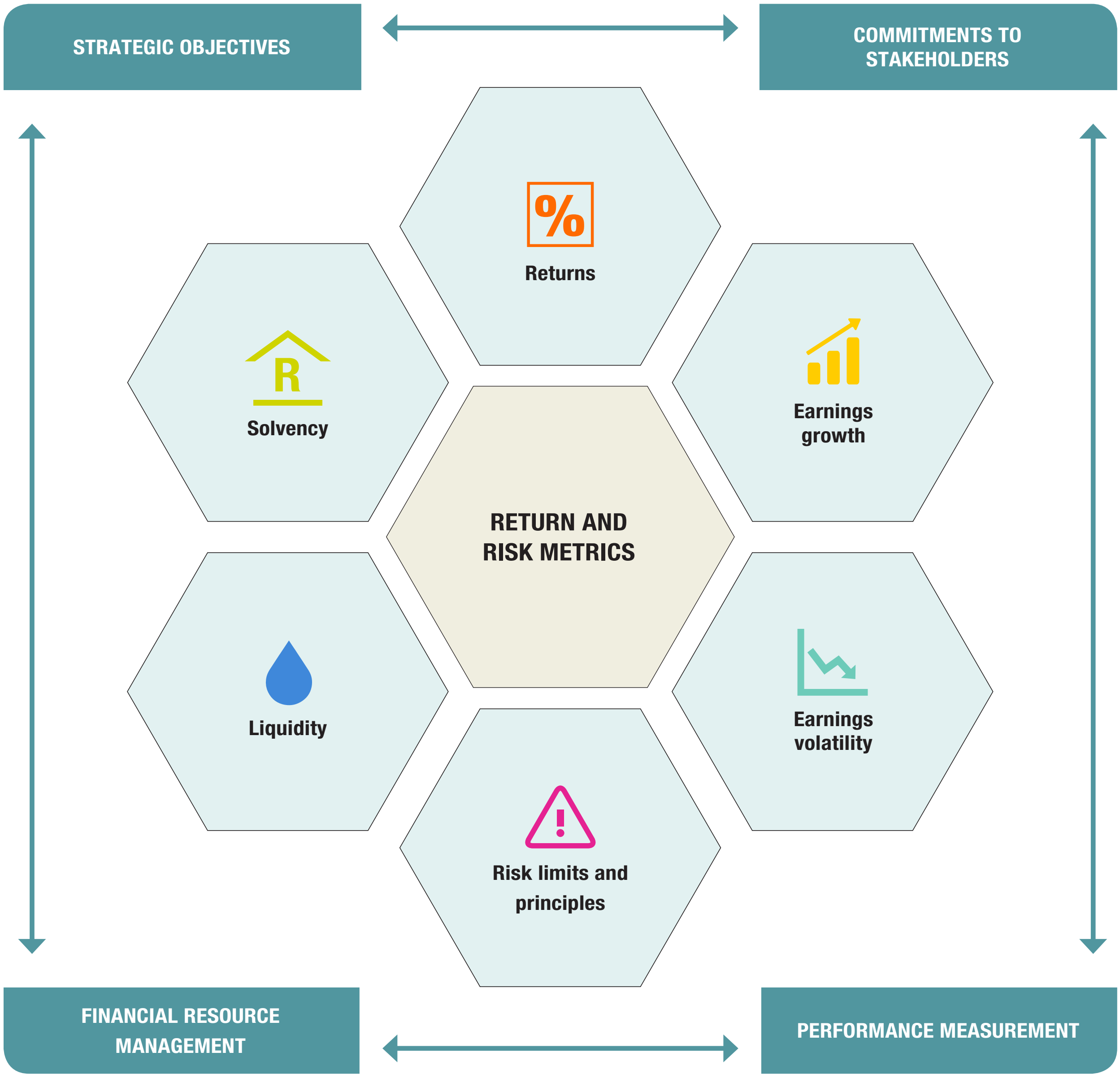
Risk limits are clearly defined risk boundaries for different measures per risk type, and are also referred to as thresholds, tolerances or triggers.

The 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.

Risk appetite targets and limits are used to monitor the group's risk/return 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 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/or limits at risk type, franchise and subsequent activity level, and these represent the targets and 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.

The following diagram illustrates the risk/return appetite metrics and processes.



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

Risk appetite framework

QUANTITATIVE MEASURES

Normal cycle

Performance targets		Resource objectives and constraints		
Returns	ROE **18% – 22%**	Solvency	Capital CET1 **10% – 11%**	Basel III leverage **>5%**
Earnings growth	Nominal GDP plus **>0% – 3%**	Liquidity	To exceed minimum regulatory requirements with appropriate buffers	

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.*

Normal downturn and stressed downturn

Internal limits set for earnings fall under stressed conditions, together with minimum ROE, CET1, leverage and liquidity ratios.

RISK LIMITS

Risk limits, thresholds, tolerances and triggers are defined per risk type.

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.	

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.

During December 2017, the BCBS issued a consultative document, *Stress test principles*. The purpose is to enhance and streamline the principles agreed in the BCBS May 2009 document. In addition, it allows more robust development in stress testing practices over time for both banks and regulators. The group not only supports these principles, but has for some time incorporated them in its stress testing framework.

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

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

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

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

- 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 period, FirstRand participated in a supervisory stress test to assess the impact of a potential local currency sovereign downgrade on the South African banking industry. In line with a request to the banking industry, the group is currently assisting the regulator with the collection of common stress test data that will be modelled top down. The banks are expected to model a similar scenario bottom up later in the year.

Recovery and resolution regime

Financial Stability 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-SIB 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 including its franchises and key subsidiaries (FirstRand Bank, FNB Namibia and FNB Botswana) will recover from a severe stress event/scenario that threatens the group's commercial viability. The recovery plan:

- analyses the potential for severe stress 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 five annually-revised versions of its recovery plan to the SARB, the most recent in December 2017.

RESOLUTION FRAMEWORK

The South African regulatory architecture is currently undergoing significant transformation to create a regulatory framework that will support an effective resolution regime. The country is in the process of adopting a twin peaks supervisory framework model that will reduce the number of agencies involved in supervision, with the establishment of two new regulatory agencies: the Prudential Authority (PA) in the SARB, and a Market Conduct Authority (MCA) that will replace the Financial Services Board. Whilst the PA/SARB is responsible for monitoring and enhancing financial stability as part of its explicit financial stability mandate, the SARB will also be responsible for assisting with the prevention of systemic events by means of its designation as the Resolution Authority (RA).

In January 2018, a draft resolution framework was released to the banking industry for initial review following which it will be released to the public for general comment. This draft framework sets out the broad principles for the resolution of banks, systemically-important non-bank financial institutions and holding companies of banks, and highlights the various legislative amendments required to ensure the framework is enforceable. Detailed definitions of key elements of the resolution framework are subject to finalisation, and directives or addendums to this framework will be published once finalised. The resolution plans will allow the PA to prepare for an event from which the group's recovery actions have failed or are deemed likely to fail. Bank resolution plans will be owned and maintained by the RA, but will require a significant amount of bilateral engagement and input from the individual banks to enable the RA to develop a customised plan that is most appropriate to each bank.

As part of the Resolution Framework and powers of the Resolution Authority, 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.

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. No changes were made to the internal targets during the period.

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

Key focus areas and considerations

OPTIMAL LEVEL AND COMPOSITION OF CAPITAL IS DETERMINED AFTER TAKING INTO ACCOUNT:

- Prudential requirements.
- Rating agencies' considerations.
- Investor expectations.
- Peer comparison.
- 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.

DIVIDEND POLICY INCLUDED IN OVERALL CAPITAL PLAN

- 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.
- 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.

EFFECTIVE ALLOCATION OF RESOURCES (INCLUDING CAPITAL AND RISK CAPACITY)

- Aligned to risk appetite to maximise value for shareholders.

CAPITAL ADEQUACY AND PLANNING

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

Capital position

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; and
- investments in financial, banking and insurance institutions*.

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.

CAPITAL RATIOS

QUALIFYING CAPITAL		RWA		RATIOS
CET1 capital	÷	TOTAL OF:	=	CET1 %
TIER 1 capital	÷	+ Credit + Counterparty credit + Operational + Market + Equity investment + Other	=	TIER 1 %
TOTAL CAPITAL	÷		=	TOTAL %

* 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.

Leverage position

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.

Period under review

The group operated comfortably above its capital and leverage targets during the period and its capital and leverage position is summarised in the table below.

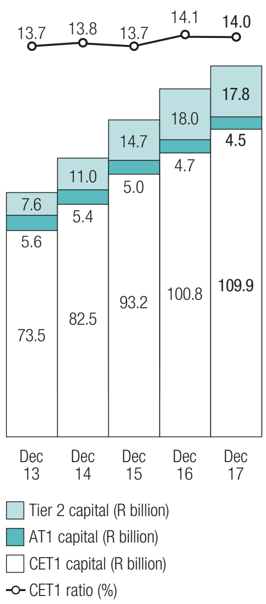
Capital adequacy and leverage position

	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	**14.0**	**14.6**	**16.9**	**8.5**
– Excluding unappropriated profits	12.8	13.3	15.6	7.8

* *Excludes the bank-specific capital requirements.*
** *Based on actual month-end balances.*

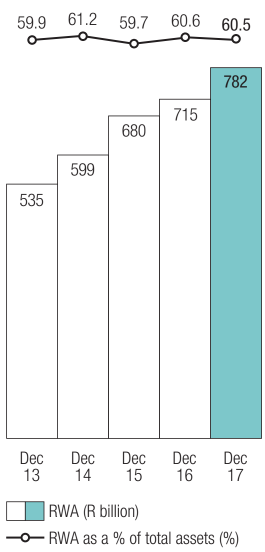
The graphs below show the historical overview of the group's capital adequacy, RWA and leverage.

*Capital adequacy**

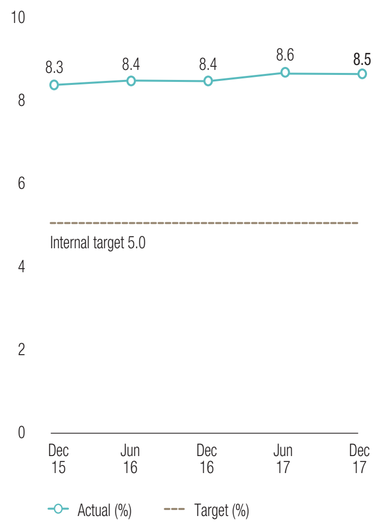


* *Includes unappropriated profits.*

RWA history



*Leverage**



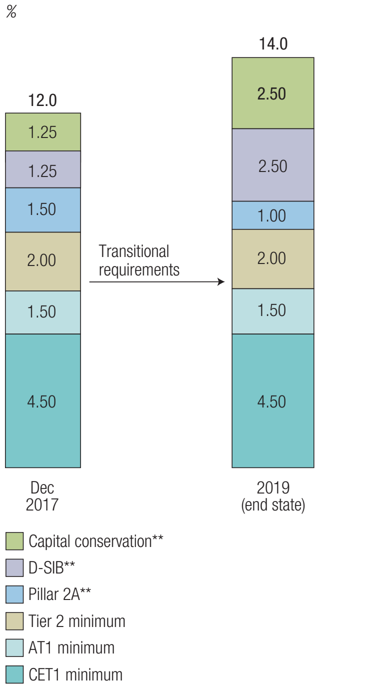
* *Includes unappropriated profits.*

Regulatory update

South Africa transitional arrangements

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, however, the group is required to calculate the countercyclical buffer requirement on private sector exposures in foreign jurisdictions where these buffers are applicable. 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.*

The SARB issued Directive 5/2017, *Regulatory treatment of accounting provisions – interim approach and transitional arrangements including disclosure and auditing aspects*, which allows banks to apply a transitional phase-in of the *IFRS 9 Financial Instruments* accounting provisions for regulatory capital purposes. The transitional arrangements will only apply to incremental provisions that arise upon the adoption of IFRS 9 on 1 July 2018. Once implemented, both the phased-in and fully-loaded impact on capital will disclosed.

BCBS

The BCBS finalised the Basel III reforms in December 2017, with specific focus on reducing the variability of risk weighted assets and the introduction of transitional arrangements from January 2022. The impact on the group's capital position depends on the final implementation by the SARB given the level of national discretion. The group continues to participate in the BCBS quantitative impact studies to assess and understand the impact of such reforms. The table below provides a high-level summary of the Basel III reforms.

Summary of final Basel III reforms

REVISED APPROACHES	OBJECTIVES	EFFECTIVE DATE
Credit risk	Standardised approach: • enhances risk sensitivity; • allows a more detailed risk weighting approach instead of a flat risk weighting (specifically for residential and commercial real estate); and • reduce reliance on external ratings. Internal ratings based approach: • constraints to bank's estimates of risk parameters; and • option to use AIRB removed for financial institutions and large corporates, with the foundation internal ratings based approach (F-IRB) and standardised approaches available.	1 January 2022
Operational risk	• Replacement of the current four approaches with a single standardised approach. • Framework more risk sensitive by combining a refined measure of gross income with the bank's own internal loss history over ten years.	1 January 2022
Risk-sensitive output floor	• Limits the capital benefit a bank obtains from the use of internal models, when compared to the revised standardised approaches. • Output floor of 72.5% of risk weighted assets computed using the revised standardised approaches. • Increase in RWA from application of the floor capped to 25% of the RWA prior to the application of the floor. This is applicable during the phase-in period and subject to national discretion.	1 January 2022: 50% 1 January 2023: 55% 1 January 2024: 60% 1 January 2025: 65% 1 January 2026: 70% 1 January 2027: 72.5%

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 strategy, risk and capital required to support strategy;
- embedding a responsible risk culture across all levels in 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 inherent risks in the various businesses; and
- the 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 update 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 period-on-period movements.

Composition of capital analysis

R million	As at 31 December 2017	As at 31 December 2016	As at 30 June 2017
Including unappropriated profits			
CET1	**109 850**	100 844	105 737
Tier 1	**114 318**	105 556	110 035
Total qualifying capital	**132 077**	123 546	126 191
Excluding unappropriated profits			
CET1	**99 769**	85 322	92 490
Tier 1	**104 237**	90 034	96 788
Total qualifying capital	**121 996**	108 024	112 944

KEY DRIVERS: DECEMBER 2017 VS DECEMBER 2016		
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 and movement in third-party capital.
Tier 2 capital	↓	Additional 10% haircut on Tier 2 instruments not compliant with Basel III, redemption of FRB11 (R1.5 billion) in December 2017 and movement in third-party capital. Issuance of Basel III-compliant instruments totalling R2.75 billion (December 2016: R2.3 billion). Tier 2 mix comprises R16.1 billion Basel III-compliant instruments and R3.2 billion old-style instruments.

DEMAND FOR CAPITAL

Risk weighted assets

The table below provides RWA per risk type and associated minimum capital requirements.

OV1: Overview of RWA

		RWA			Minimum capital requirements†
R million		As at 31 December 2017	As at 31 December 2016	As at 30 June 2017	As at 31 December 2017
1.	**Credit risk (excluding counterparty credit risk)***	**508 792**	468 064	489 712	**54 695**
2.	– Standardised approach	**112 190**	103 310	113 930	**12 060**
3.	– AIRB	**396 602**	364 754	375 782	**42 635**
12.	**Securitisation exposures in banking book**	**31 334**	23 712	24 071	**3 369**
13.	– IRB ratings-based approach	**17**	17	17	**2**
14.	– IRB supervisory formula approach	**1 896**	1 432	1 525	**204**
15.	– Standardised approach/simplified supervisory formula approach	**29 421**	22 263	22 529	**3 163**
	Total credit risk	**540 126**	491 776	513 783	**58 064**
4.	**Counterparty credit risk*,****	**24 740**	17 002	15 718	**2 660**
5.	– Standardised approach	**24 740**	17 002	15 718	**2 660**
11.	**Settlement risk**	**–**	–	–	**–**
7.	**Equity positions in banking book under market-based approach#**	**29 857**	27 407	26 624	**3 210**
16.	**Market risk**	**20 789**	22 463	21 459	**2 235**
17.	– Standardised approach	**8 708**	5 296	11 263	**936**
18.	– Internal model approach	**12 081**	17 167	10 196	**1 299**
19.	**Operational risk**	**110 155**	113 231	108 440	**11 842**
20.	– Basic indicator approach	**6 037**	8 652	7 547	**649**
21.	– Standardised approach	**22 960**	20 471	21 531	**2 468**
22.	– Advanced measurement approach	**81 158**	84 108	79 362	**8 725**
23.	**Amounts below the thresholds for deduction (subject to 250% risk weight)**	**14 980**	12 640	14 240	**1 610**
24.	**Floor adjustment**	**10 919**	1 206	9 047	**1 174**
	Other assets	**30 430**	29 515	29 075	**3 271**
25.	**Total**	**781 996**	715 240	738 386	**84 066**

* *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). Implementation for the standardised approach for counterparty credit risk (SA-CCR) has been delayed.*

The simple risk weighted method is applied to equity investment risk. The BCBS standard on equity investment in funds has not yet been implemented, rows 8 – 10 of the OV1 template have, therefore, been excluded from this table.

† *Capital requirement calculated at 10.75% of RWA (2016: 10.375%). The minimum requirement excludes the bank-specific capital requirements. 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.*

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

Overview of credit RWA

	As at 31 December 2017*			
	RWA			
R million	Advanced approach	Standardised approach	Total	Capital requirement
Corporate, banks and sovereigns	187 053	42 953	230 006	24 726
Small and medium enterprises (SMEs)	50 294	23 591	73 885	7 943
Residential mortgages	58 046	7 453	65 499	7 041
Qualifying revolving retail	27 884	7 276	35 160	3 780
Other retail	73 325	30 917	104 242	11 206
Securitisation exposure	1 913	29 421	31 334	3 368
Total credit risk	**398 515**	**141 611**	**540 126**	**58 064**

* *Capital requirement calculated at 10.75% of RWA (December 2016: 10.375%). The minimum requirement excludes the bank-specific capital requirements. 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 provides an analysis of RWA movements.

KEY DRIVERS: DECEMBER 2017 VS DECEMBER 2016		
Credit	↑	Organic growth and model recalibrations. Incorporates the impact of the downgrades on the South Africa sovereign, state-owned enterprises and large corporates.
Counterparty credit	↑	Volumes, mark-to-market and exchange rate movements. Incorporates the impact of the downgrade on the South Africa sovereign, state-owned entities and large corporates.
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 the downgrade on the South Africa sovereign.
Equity investment	↑	New investments and fair value adjustments.
Threshold items**	↑	Movement in deferred tax assets and investments in financial, banking and insurance entities.

* *Includes the floor adjustment.*
** *Risk weighted at 250%.*

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 period, no restrictions were experienced on the repayment of such dividends or profits to the group.

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

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

	As at 31 December				As at 30 June
	2017			2016	2017
	RWA R million	Tier 1 %	Total capital adequacy %	Total capital adequacy %	Total capital adequacy %
Basel III (SARB regulations)					
FirstRand*	**781 996**	**14.6**	**16.9**	17.3	17.1
FirstRand Bank*,**	**629 875**	**14.1**	**17.3**	17.7	17.3
FirstRand Bank South Africa*	**580 652**	**14.3**	**17.3**	17.5	17.2
FirstRand Bank London#	**47 824**	**8.7**	**14.0**	20.2	17.8
FirstRand Bank India#	**1 926**	**32.4**	**32.9**	24.7	31.7
FirstRand Bank Guernsey#,†	**196**	**16.5**	**16.5**	36.2	37.9
Basel II (local regulations)					
FNB Namibia	**26 952**	**13.8**	**17.3**	17.2	17.2
FNB Mozambique	**2 015**	**15.1**	**15.1**	12.3	15.6
RMB Nigeria	**2 491**	**46.0**	**46.0**	54.6	43.4
FNB Botswana	**20 390**	**15.4**	**19.9**	18.5	17.7
Basel I (local regulations)					
FNB Swaziland	**3 309**	**26.3**	**27.6**	27.3	28.3
FNB Lesotho	**998**	**12.7**	**16.0**	15.5	17.6
FNB Zambia	**3 926**	**18.4**	**20.8**	22.8	21.2
FNB Tanzania	**1 199**	**43.2**	**44.8**	52.0	41.9
First National Bank Ghana	**365**	**92.9**	**92.9**	>100	>100

* *Includes unappropriated profits.*
** *Includes foreign branches.*
# *Branches of FirstRand Bank Limited.*
† *Trading as FNB Channel Islands.*

COMMON DISCLOSURES

BASEL III CAPITAL AND LEVERAGE COMMON DISCLOSURES

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 III LCR DISCLOSURE

The BCBS *Liquidity coverage ratio disclosure standards* propose consistent and transparent disclosure of banks' liquidity positions as measured by Basel III 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.

BASEL III REFORMS	The BCBS finalised the Basel III reforms in December 2017, with specific focus on reducing the variability of risk weighted assets. The BCBS has agreed on a lengthy five-year transitional period, starting 1 January 2022. The 2017 reforms aim to address weaknesses identified during the global financial crisis, i.e. credibility of the risk-based capital framework and to introduce constraints on the estimates banks use in the internal models for regulatory capital purposes. The impact on the group capital position depends on the final implementation by the SARB given a level of national discretion, however, the group continues to participate in the BCBS quantitative impact studies to assess and understand the impact of such reforms. Based on the Basel guidelines, the group is expected to comfortably meet these requirements over the transitional period.
LIQUIDITY COVERAGE RATIO	The LCR has been fully adopted by the SARB with the inclusion of a committed liquidity facility (CLF). Phasing in of the LCR commenced in 2015 and banks are required to be fully compliant by 2019. The minimum LCR requirement is currently 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 bank publishes the 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 (BIS) timelines. Banks have been engaging on a bilateral basis on interpretive matters relating to this form. The SARB, via proposed *Directive 15/8 of 2017*, has employed national discretion with respect to the calibration of the NSFR. The SARB, after due consideration and noting that rand funding is contained in the financial system, has concluded it to be appropriate to apply a 35% available stable funding (ASF) to deposits from financial institutions less than R6 million. In line with several other international regulators the SARB has also provided clarity on the alignment of the LCR and NSFR, applying a 5% required stable funding (RSF) to the assets net of their haircut eligible for CLF purposes. These changes are anchored in the assessment of the true liquidity risk and will significantly assist the South African banking sector in meeting the NSFR requirements.
RESOLUTION FRAMEWORK	The South African regulatory architecture is currently undergoing significant transformation to create a regulatory framework that will support an effective resolution regime. The country is in the process of adopting a twin peaks supervisory framework model that will reduce the number of agencies involved in supervision, with the establishment of two new regulatory agencies: the Prudential Authority (PA) in the SARB, and a Market Conduct Authority (MCA) that will replace the Financial Services Board. Whilst the PA/SARB is responsible for monitoring and enhancing financial stability as part of its explicit financial stability mandate, the SARB will also be responsible for assisting with the prevention of systemic events by means of its designation as the Resolution Authority (RA). In January 2018, a draft resolution framework was released to the banking industry for initial review following which it will be released to the public for general comment. This draft framework sets out the broad principles for the resolution of banks, systemically-important non-bank financial institutions and holding companies of banks, and highlights the various legislative amendments required to ensure the framework is enforceable. Detailed definitions of key elements of the resolution framework are subject to finalisation, and directives or addendums to this framework will be published once finalised. The resolution plans will allow the PA to prepare for an event from which the group's recovery actions have failed or are deemed likely to fail. Bank resolution plans will be owned and maintained by the RA, but will require a significant amount of bilateral engagement and input from the individual banks to enable the RA to develop a customised plan that is most appropriate to each bank. As part of the Resolution Framework and powers of the Resolution Authority, 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.

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.

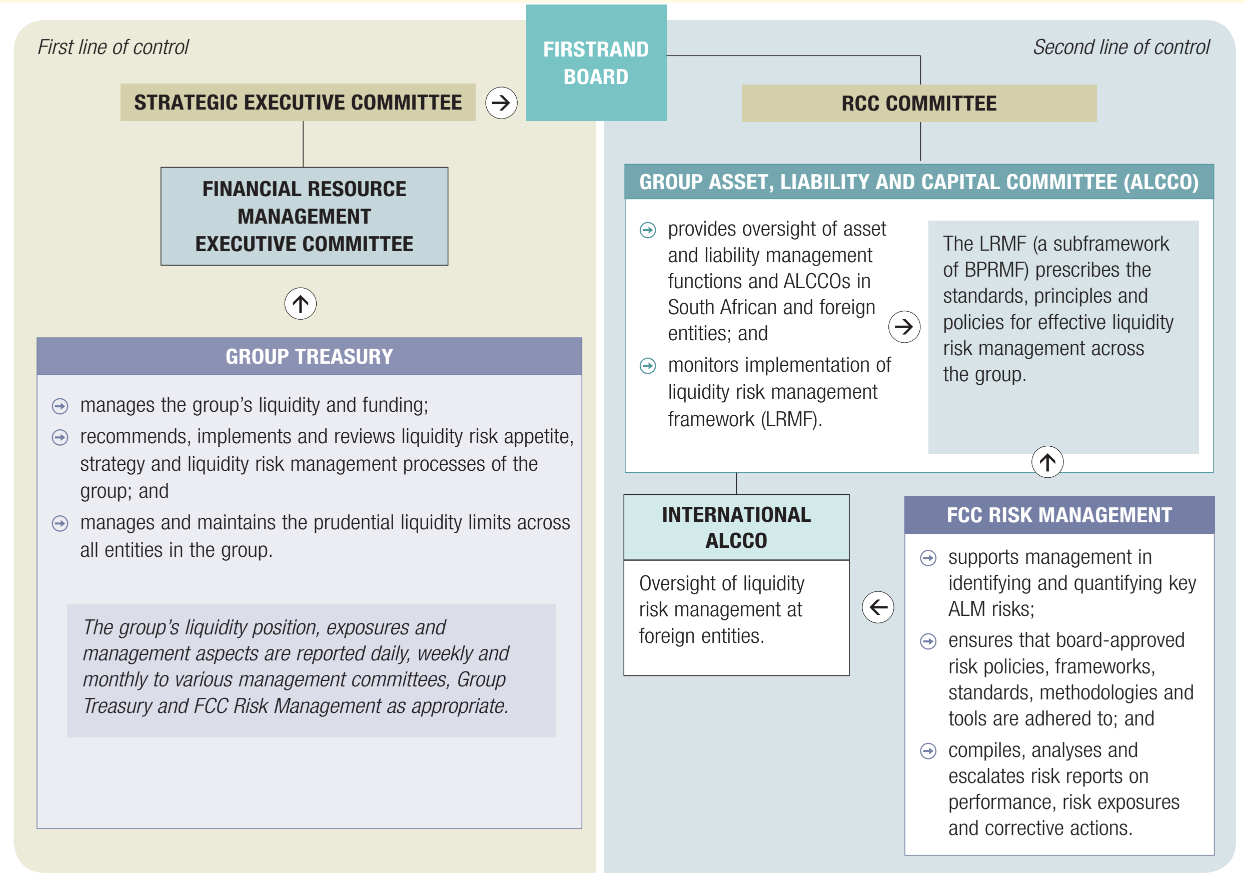
Given market conditions and the regulatory environment, the group increased its holdings of available liquidity in line with risk appetite over the period. The group utilised new market structures, platforms and the SARB committed liquidity facility to efficiently increase available liquidity holdings.

At 31 December 2017, the group exceeded the 80% minimum LCR requirement with a LCR measurement of 107% (December 2016: 95%). The bank's LCR was 101% (December 2016: 104%).

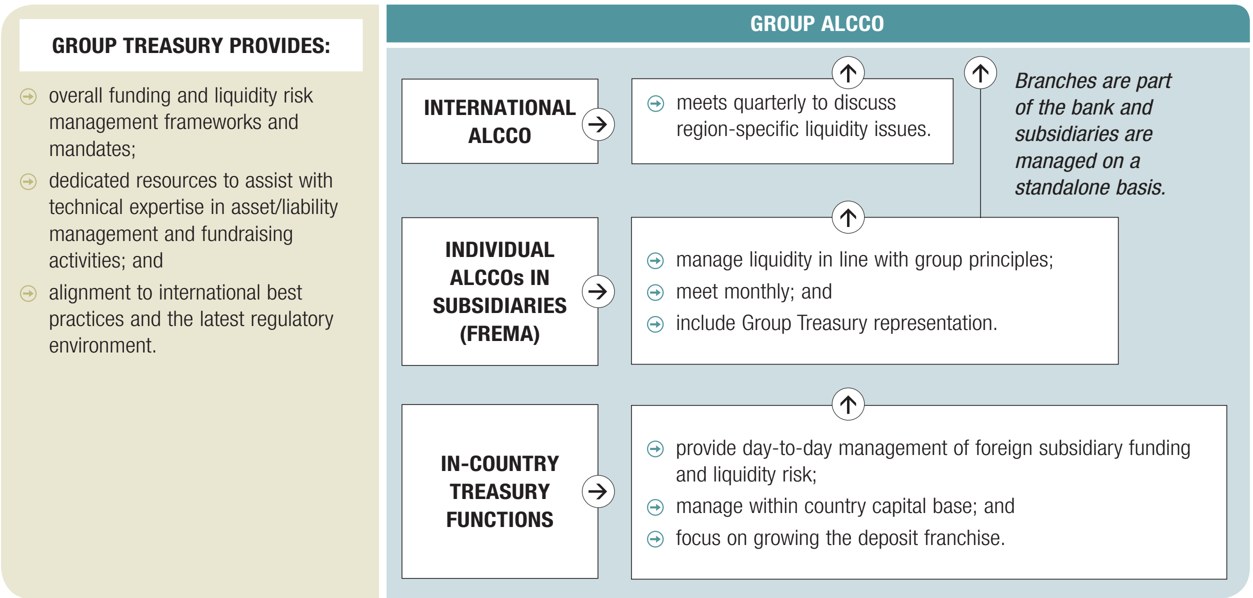
At 31 December 2017, the group's available HQLA sources of liquidity per the LCR amounted to R190 billion, with an additional R13 billion of management liquidity available. This represents an increase from 31 December 2016 of R173 billion in HQLA and R9 billion in total management liquidity available.

ORGANISATIONAL STRUCTURE AND GOVERNANCE

Group and bank



Foreign operations

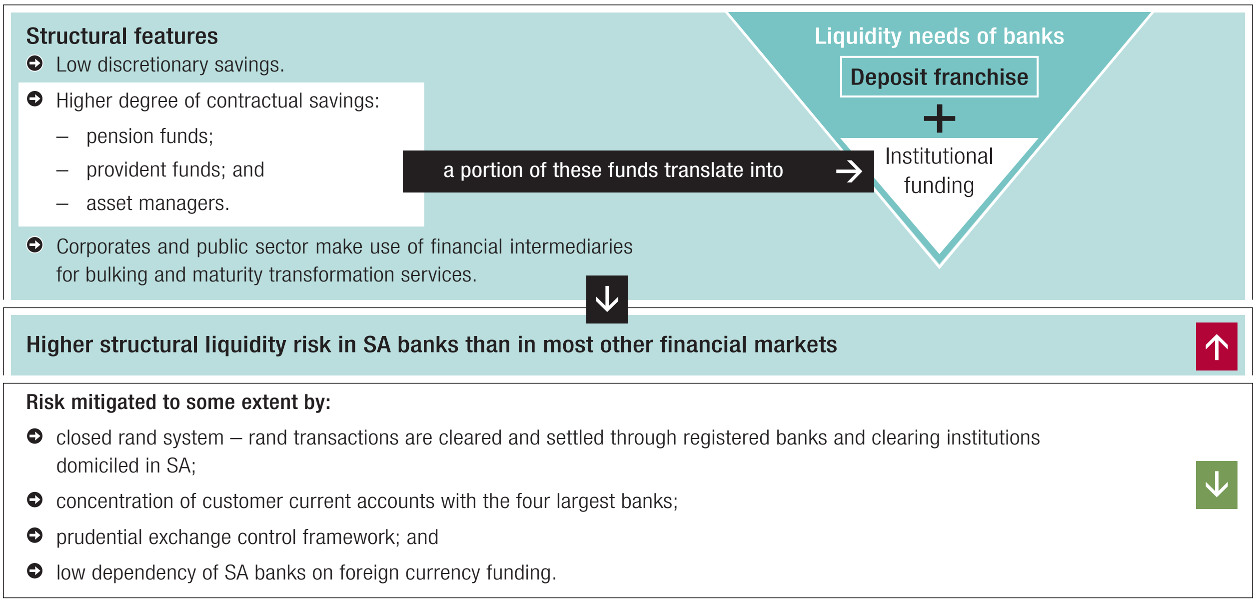


FirstRand Bank's London branch is categorised in the UK as a non-EEA branch. FRB is authorised by the Prudential Regulation Authority (PRA) and subject to regulation by the Financial Conduct Authority and limited regulation by the PRA.

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 2017 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 and the central bank's open market operations without a commensurate increase in savings flows, resulted in higher liquidity costs. In light of the structural features discussed above, the group's 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 has 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.

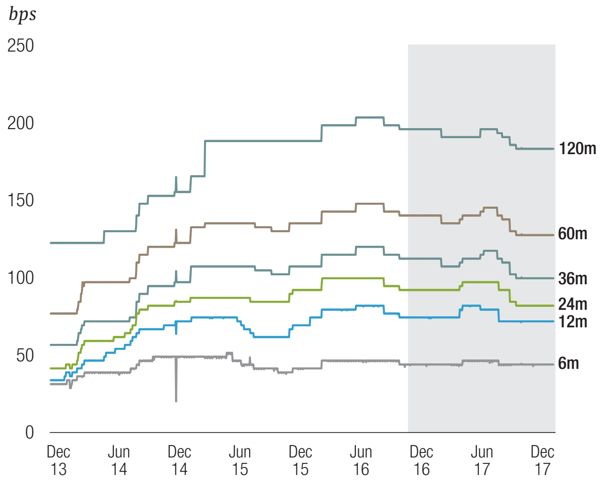
The following graph is a representation of the market cost of liquidity, measured as the spread paid on NCDs relative to the prevailing swap curve for that tenor. The liquidity spread graph is based on the most actively-traded money market instrument issued by banks, namely 12-month NCDs. The graph shows 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, although moderating recently. 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 primary debt-issuing entity, generates a larger proportion of its funding from deposits compared to the South African aggregate. Its funding profile also reflects the structural features described previously.

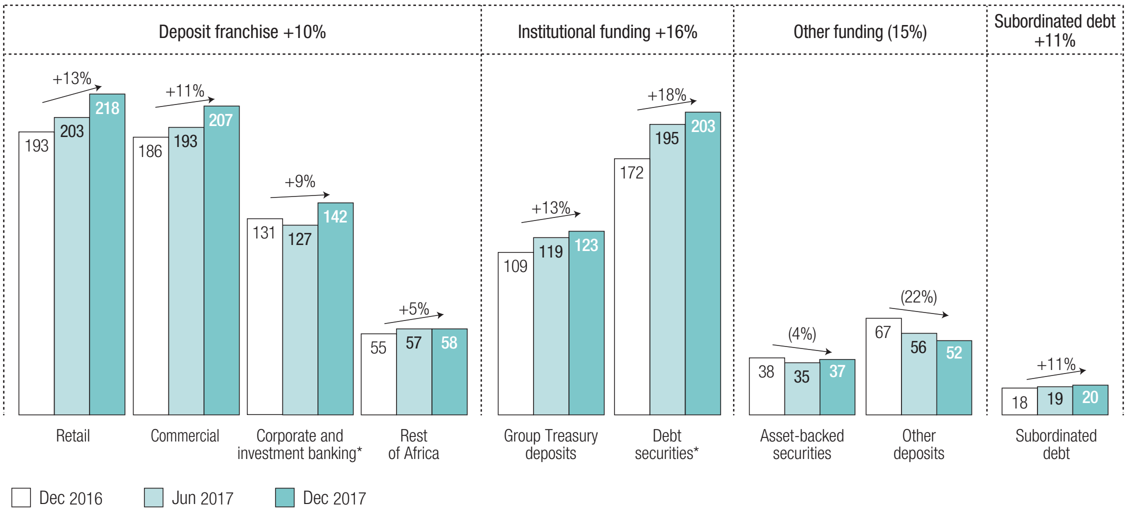
The group manages its funding structure by source, counterparty type, product, currency and market. The deposit franchise is the most efficient source of funding and represented 59% of total group funding liabilities as at 31 December 2017 (December 2016: 60%). The deposit franchise represents 60% of total bank funding as at 31 December 2017 (December 2016: 61%).

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.

Funding portfolio growth

R billion

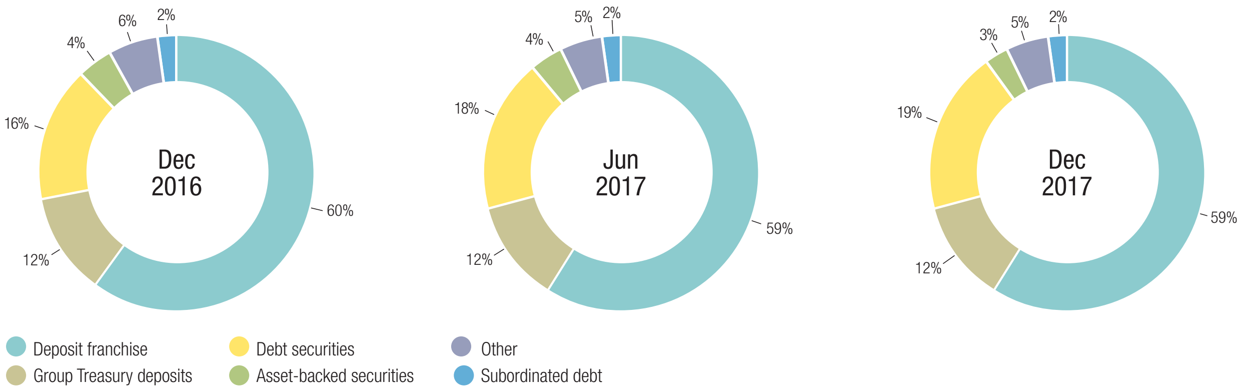


Note 1: Percentage growth is based on actual, not rounded numbers shown in the bar graphs.

* *The December 2016 and June 2017 numbers have been restated due to a resubmission of the BA900 returns due to a reclassification of credit-linked notes and inflation-linked notes previously disclosed as CIB deposits.*

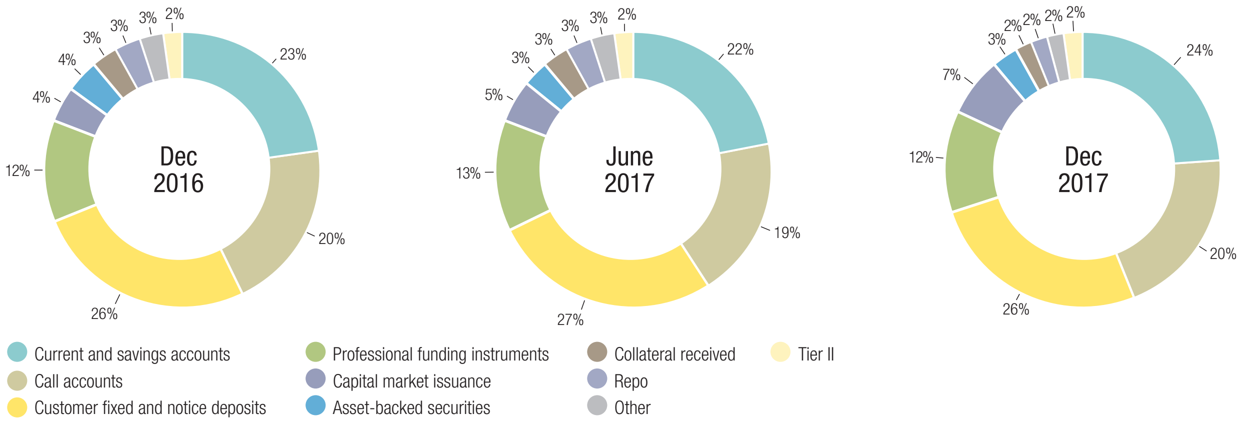
The graphs below show that the group's funding mix has remained stable over the last 12 months.

Group's funding mix



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

Group's funding analysis by instrument type



Note: *The December 2016 and June 2017 numbers have been restated due to a resubmission of the BA900 return due to a reclassification of credit-linked notes and inflation-linked notes previously disclosed as CIB deposits.*

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 behavioural characteristics 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 per counterparty type.

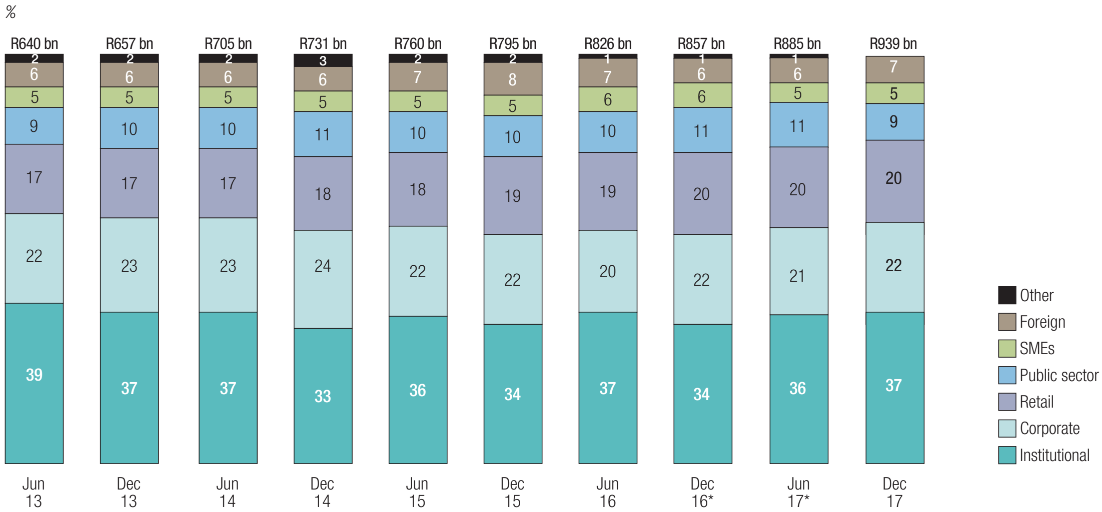
Funding sources of FirstRand Bank (excluding foreign branches)

	As at 31 December 2017				As at 31 December 2016*	As at 30 June 2017*
% of funding liabilities	Total	Short term	Medium term	Long term	Total	Total
Institutional funding	**36.8**	**11.7**	**7.7**	**17.4**	35.2	37.0
Deposit franchise	**63.2**	**50.0**	**7.6**	**5.6**	64.8	63.0
Corporate	**21.9**	**18.7**	**2.3**	**0.9**	22.6	20.1
Retail	**20.2**	**16.2**	**2.6**	**1.4**	19.9	19.2
SME	**5.3**	**4.4**	**0.6**	**0.3**	5.4	5.5
Governments and parastatals	**9.0**	**7.2**	**1.1**	**0.7**	10.4	10.2
Foreign	**6.8**	**3.5**	**1.0**	**2.3**	6.4	6.9
Other	**–**	**–**	**–**	**–**	0.1	1.1
Total	**100.0**	**61.7**	**15.3**	**23.0**	100.0	100.0

* *The December 2016 and June 2017 numbers have been restated due to a resubmission of the BA900 return due to a reclassification of credit-linked notes and inflation-linked notes previously disclosed as CIB deposits.*

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

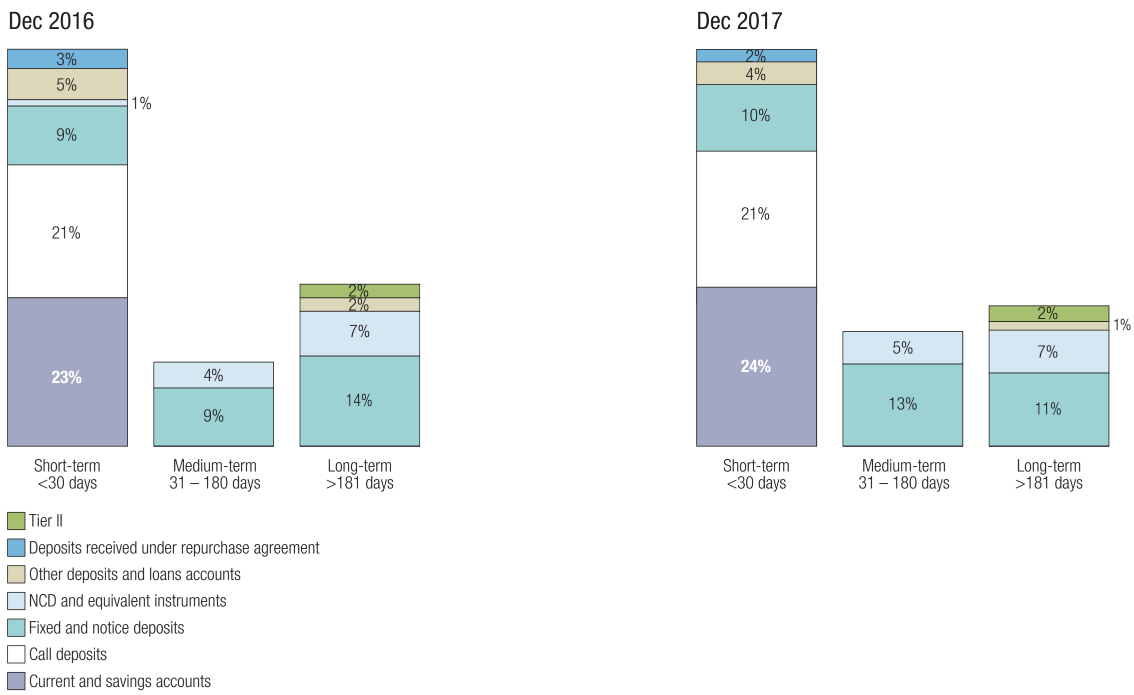
Funding analysis by source of FirstRand Bank (excluding foreign branches)



* *The December 2016 and June 2017 numbers have been restated due to a resubmission of the BA900 return due to a reclassification of credit-linked notes and inflation-linked notes previously disclosed as CIB deposits.*

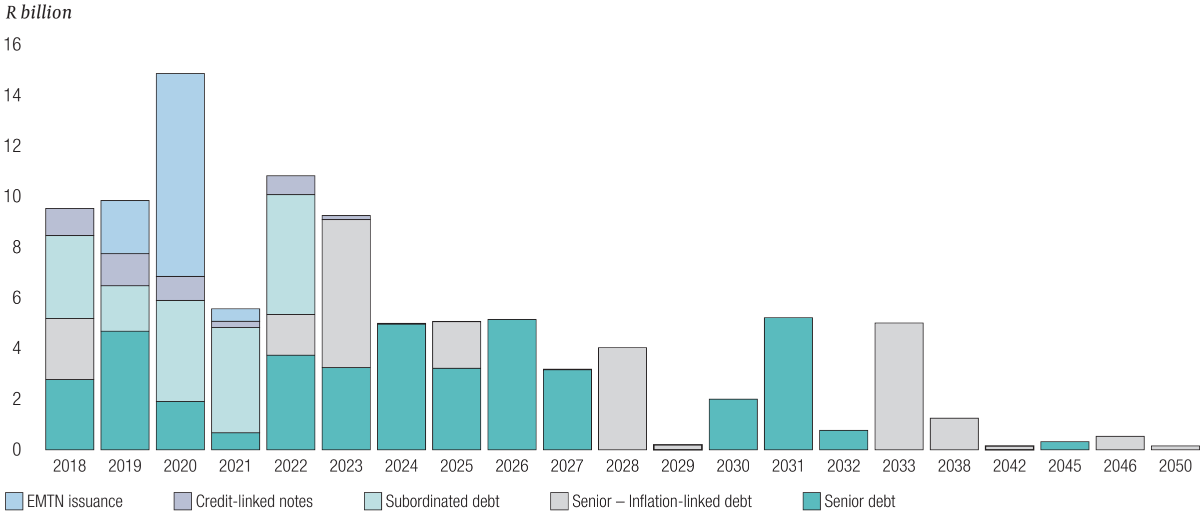
The following chart illustrates a breakdown of the group's funding liabilities by instrument and term.

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)



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 is 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 are 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 provided 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

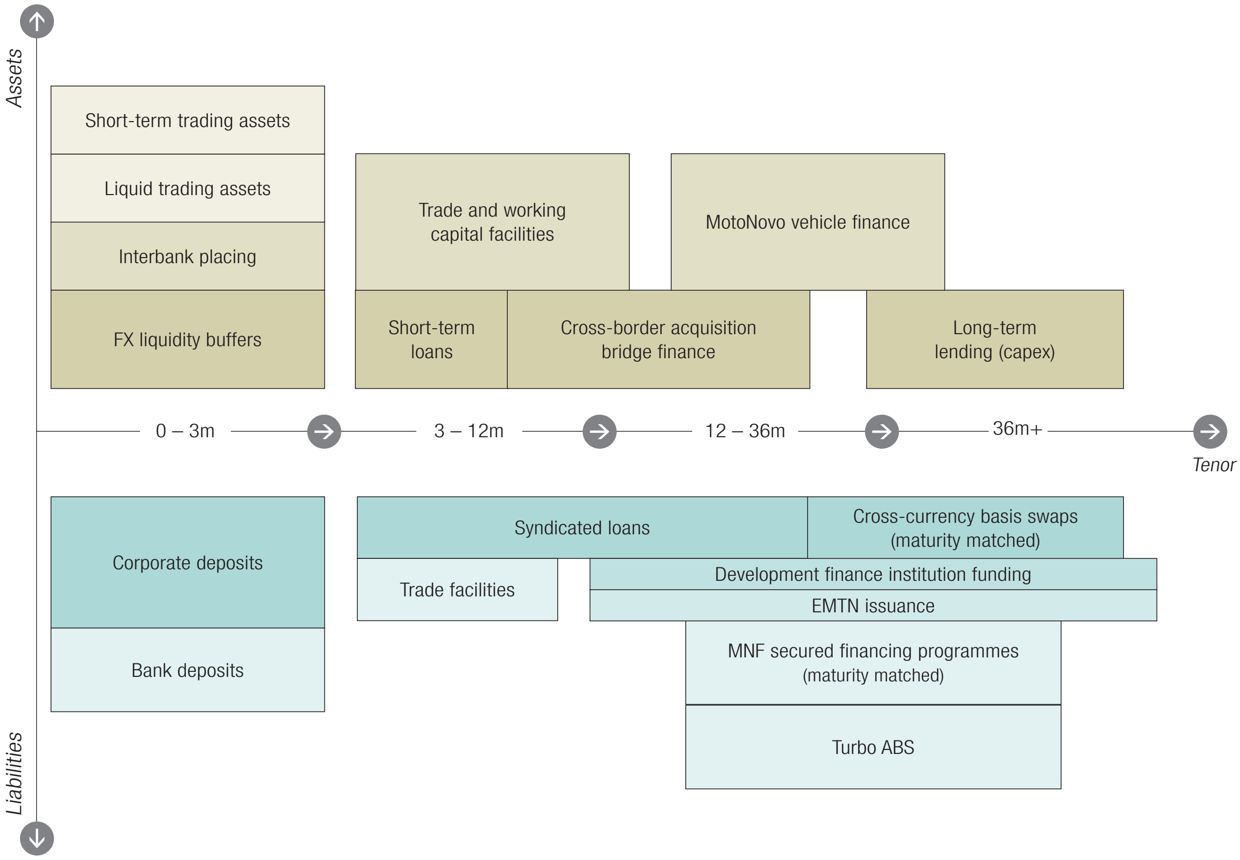
Given that the group continues to grow its businesses in the rest of Africa, and given the size of MotoNovo, the active management of foreign currency liquidity risk continues to be a strategic focus. The group seeks to avoid exposing itself to undue liquidity risk and to maintain liquidity risk within the risk appetite approved by the board and ALCCO. 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 limit framework.

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

Philosophy on foreign currency external debt

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

Graphical representation of the foreign currency balance sheet



LIQUIDITY RISK MANAGEMENT

Overview

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

The group recognises two types of liquidity risk:

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

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

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

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

Liquidity risk management approaches

STRUCTURAL LIQUIDITY RISK	DAILY LIQUIDITY RISK	CONTINGENCY LIQUIDITY RISK
Managing the risk that structural, long-term, on- and off-balance sheet exposures cannot be funded timeously or at reasonable cost.	Ensuring that intraday and day-to-day anticipated and unforeseen payment obligations can be met by maintaining a sustainable balance between liquidity inflows and outflows.	Maintaining a number of contingency funding sources to draw upon in times of economic stress.
• 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 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.

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.

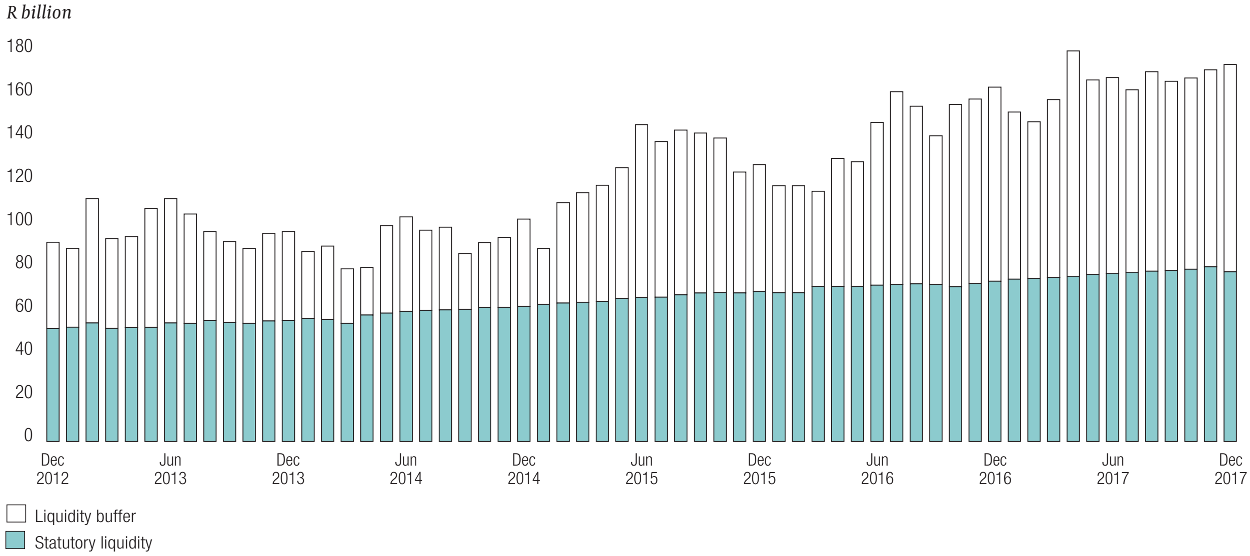
Group's composition of liquid assets

	As at 31 December 2017								
	Marketable assets	HQLA Basel III view after haircut*					Management view after haircuts		
R billion	Total December 2017*	Level 1	Level 2	Total December 2017	Total December 2016	Total June 2017	Total December 2017	Total December 2016	Total June 2017
Cash and deposits with central banks	**45**	**36**		**36**	34	35	**36**	34	35
Government bonds and bills	**131**	**119**		**119**	108	98	**131**	108	107
Other liquid assets	**46**		**35**	**35**	31	34	**37**	40	43
Total	**222**	**155**	**35**	**190**	173	167	**204**	182	185

* *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 FirstRand Bank (excluding foreign branches)



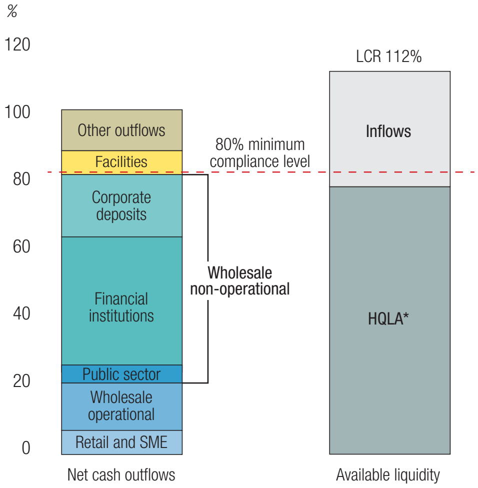
GROUP LCR

The group's LCR increased due to a decrease in HQLA holdings of R23 billion and a reduction in net cash outflows of R43 billion. This is as a result of targeted strategies to raise more funding from stable sources and increase liquid asset holdings. In addition, certain components of the LCR have now been clarified by the SARB and industry working groups, which has allowed FirstRand to align its methodology with other sector players, resulting in a structural uplift in its LCR.

The following graph illustrates the group's average LCR position over the last quarter of 112% (December 2016: 95%) and demonstrates compliance with the 80% minimum requirement. FirstRand Bank's average LCR over the quarter ended 31 December 2017 was 123% (December 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 the 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.*

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.	

Period under review and focus areas

PERIOD 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 rollout 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

FIRSTRAND BOARD

Second line of risk control

LARGE EXPOSURES COMMITTEE

Approves credit applications >10% of group's qualifying capital.

RCC COMMITTEE

Reviews reports on:

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

ERM GROUP CREDIT RISK MANAGEMENT

- independent view of the credit risk profile;
- credit risk governance;
- independent validation of credit measurement and models;
- monitors implementation of credit risk related frameworks across the group;
- implements methodologies and capabilities; and
- facilitates credit risk appetite processes.

MODEL RISK AND VALIDATION COMMITTEE

Reviews credit risk capital models, credit ratings and estimations.

CREDIT RISK MANAGEMENT COMMITTEE

- oversight of credit risk exposures, profile and management across the group; and
- monitors implementation of the credit risk management framework (CRMF).

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

First line of risk control

- Retail credit policy and risk appetite approval subcommittee
- Commercial credit policy and risk appetite approval subcommittee
- Credit impairments subcommittee
- Retail credit portfolio committee
- Commercial credit portfolio committee
- Wholesale credit committee
- Retail and SME retail credit technical committee
- Wholesale and SME corporate credit technical committee

CREDIT RISK FUNCTIONS IN FRANCHISES

Portfolio heads (retail, commercial, corporate)

- accountable to the group's governance forums;
- ensure alignment with credit origination strategy and appetite;
- implement and assess frameworks/policy compliance; and
- calculate volatility profile for aggregate portfolios.

Third line of control

GIA

- provides independent assurance to the FirstRand audit committee;
- verifies compliance to the CRMF, and adequacy and effectiveness of credit risk management processes to identify deficiencies and internal control shortcomings; and
- verifies appropriateness and use of the credit rating systems, credit risk models and scorecards.

CREDIT ASSETS

Credit assets by type, segment and SARB approach

R million	As at 31 December 2017 Total	AIRB approach: FirstRand Bank South Africa (SA)	Standardised approach subsidiaries: Regulated bank entities in the rest of Africa	Standardised approach subsidiaries: Other subsidiaries	As at 31 December 2016 Total	As at 30 June 2017 Total
On-balance sheet exposures	**1 140 848**	**950 756**	**85 127**	**104 965**	1 054 486	1 092 294
Cash and short-term funds	**54 226**	**39 911**	**10 548**	**3 767**	54 872	59 813
– Money at call and short notice	**29 327**	**20 445**	**5 246**	**3 636**	29 353	34 015
– Balances with central banks	**24 899**	**19 466**	**5 302**	**131**	25 519	25 798
Gross advances*	**944 588**	**795 098**	**58 947**	**90 543**	880 322	909 646
Less: impairments	**16 856**	**14 182**	**1 704**	**970**	16 151	16 540
Net advances	**927 732**	**780 916**	**57 243**	**89 573**	864 171	893 106
Debt investment securities (excluding non-recourse investments)**	**158 890**	**129 929**	**17 336**	**11 625**	135 443	139 375
Off-balance sheet exposures	**162 703**	**145 660**	**12 230**	**4 813**	166 697	164 209
Total contingencies	**43 356**	**37 729**	**4 674**	**953**	46 635	40 737
– Guarantees	**35 027**	**30 560**	**3 754**	**713**	40 317	34 006
– Letters of credit#	**8 329**	**7 169**	**920**	**240**	6 318	6 731
Irrevocable commitments	**114 604**	**103 188**	**7 556**	**3 860**	115 382	119 325
Credit derivatives	**4 743**	**4 743**	**–**	**–**	4 680	4 147
Total	**1 303 551**	**1 096 416**	**97 357**	**109 778**	1 221 183	1 256 503

* *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 31 December 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**	**21 982**	**905 041**	**11 450**	**6 115**	**944 588**	**17 276**	**927 312**
FNB	**12 356**	**363 557**	**6 192**	**2 963**	**385 068**	**8 109**	**376 959**
– Retail	**7 598**	**239 819**	**3 977**	**2 036**	**253 430**	**5 161**	**248 269**
– Commercial	**2 235**	**85 202**	**295**	**168**	**87 900**	**1 527**	**86 373**
– Rest of Africa	**2 523**	**38 536**	**1 920**	**759**	**43 738**	**1 421**	**42 317**
WesBank	**8 616**	**194 051**	**5 196**	**2 559**	**210 422**	**4 754**	**205 668**
RMB investment banking	**909**	**237 470**	**6**	**593**	**238 978**	**3 119**	**235 859**
RMB corporate banking	**101**	**51 257**	**56**	**–**	**51 414**	**1 003**	**50 411**
FCC (including Group Treasury)	**–**	**58 706**	**–**	**–**	**58 706**	**291**	**58 415**
2. **Debt investment securities**	**–**	**157 560**	**120**	**840**	**158 520**	**(370)**	**158 890**
3. **Off-balance sheet exposures**	**16**	**162 687**	**–**	**–**	**162 703**	**–**	**162 703**
4. **Total**	**21 998**	**1 225 288**	**11 570**	**6 955**	**1 265 811**	**16 906**	**1 248 905**

* *Gross exposures exclude recoverable loan commitments.*

	As at 31 December 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**	20 851	840 509	11 428	7 534	880 322	16 571	863 751
FNB	11 356	346 227	6 131	3 763	367 477	7 429	360 048
– Retail	7 221	230 183	3 901	2 225	243 530	4 678	238 852
– Commercial	2 235	77 452	204	473	80 364	1 577	78 787
– Rest of Africa	1 900	38 592	2 026	1 065	43 583	1 174	42 409
WesBank	7 136	181 668	5 286	2 647	196 737	4 042	192 695
RMB investment banking*	2 288	230 841	10	1 124	234 263	3 707	230 556
RMB corporate banking	71	40 645	1	–	40 717	889	39 828
FCC (including Group Treasury)	–	41 128	–	–	41 128	504	40 624
2. **Debt investment securities**	–	135 443	–	–	135 443	–	135 443
3. **Off-balance sheet exposures**	–	166 697	–	–	166 697	–	166 697
4. **Total**	20 851	1 142 649	11 428	7 534	1 182 462	16 571	1 165 891

* *Impaired advances for RMB investment banking include cumulative credit fair value adjustments on the non-performing book.*
** *Gross exposures exclude recoverable loan commitments.*

CR1: Analysis of gross advances, debt investment securities and off-balance sheet exposures continued

	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

* *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 2017**	**21 906**
2. Advances defaulted	**12 420**
3. Return to not defaulted status	**(2 545)**
4. Amounts written off	**(4 700)**
5. Other changes	**(5 083)**
6. **Defaulted credit exposures at 31 December 2017**	**21 998**

CREDIT RISK MITIGATION

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

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

Credit risk mitigation instruments

- Mortgage and instalment sale finance portfolios in FNB HomeLoans, FNB Wealth and WesBank are secured by the underlying assets financed.
- 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.

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 yield a more accurate financial impact.

Limited on- and off-balance sheet netting is used 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

R million	As at 31 December 2017				
	Exposures*				
	Unsecured carrying value	Secured by collateral		Secured by financial guarantees	
		Carrying value	Secured amount	Carrying value	Secured amount
Advances	170 336	765 640	765 640	8 243	8 243
Debt securities	44 341	114 549	114 549	–	–
Total advances and debt securities	214 677	880 189	880 189	8 243	8 243
Of which defaulted:	4 399	13 455	13 455	3 766	3 766

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

R million	As at 31 December 2016				
	Exposures*				
	Unsecured carrying value	Secured by collateral		Secured by financial guarantees	
		Carrying value	Secured amount	Carrying value	Secured amount
Advances	–	–	–	–	–
Debt securities	–	–	–	–	–
Total advances and debt securities	215 633	783 981	783 981	6 048	5 426
Of which defaulted:	4 259	8 610	8 610	–	–

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

R million	As at 30 June 2017				
	Exposures*				
	Unsecured carrying value	Secured by collateral		Secured by financial guarantees	
		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 period.*

CREDIT RISK UNDER AIRB APPROACH

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

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

Credit risk models are widely employed in the assessment of capital requirements, origination, pricing, impairment calculations and stress testing of the credit portfolio. All of these models are built on a number of client and facility rating models, in line with the 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	**82**	**18**
Commercial	**78**	**22**
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 S&P Global Ratings (S&P) rating scales.

Mapping of FirstRand (FR) grades to rating agency scales

FR rating	Midpoint PD	International scale mapping
1 – 14	0.06%	AAA, AA, A
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.

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 50;
- 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 31 December 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	76 472	29 076	44.49	94 619	0.04	206 496
0.15 to < 0.25	83 051	39 929	49.33	92 879	0.17	101 654
0.25 to < 0.50	270 765	68 287	41.80	280 892	0.42	351 801
0.50 to < 0.75	86 586	25 444	49.25	96 996	0.66	436 237
0.75 to < 2.50	250 350	54 691	52.53	269 496	1.57	2 130 928
2.50 to < 10.00	130 059	20 957	33.70	139 569	4.59	2 445 141
10.00 to < 100.00	29 939	2 983	51.65	31 964	25.69	1 156 347
100.00 (default)	18 640	–	–	18 588	100.00	1 211 010
Total	945 862	241 367	46.01	1 025 003	3.85	8 039 614

	Total FirstRand Bank SA					
	As at 31 December 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	29.65	0.86	4 555	4.81	11	
0.15 to < 0.25	31.66	1.52	23 430	25.23	52	
0.25 to < 0.50	19.98	1.91	67 699	24.10	224	
0.50 to < 0.75	26.47	1.00	32 296	33.30	179	
0.75 to < 2.50	27.93	0.67	120 132	44.58	1 225	
2.50 to < 10.00	35.72	0.52	94 288	67.56	2 330	
10.00 to < 100.00	40.36	0.36	36 924	115.52	3 354	
100.00 (default)	39.92	0.46	13 936	74.96	6 511	
Total	27.78	1.10	393 260	38.37	13 886	13 601

* *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

PD scale	Total FirstRand Bank SA – As at 31 December 2016 – 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	133 858	20 576	45.03	139 661	0.02	145 996
0.15 to < 0.25	115 135	46 636	50.68	121 275	0.18	104 839
0.25 to < 0.50	111 628	62 687	45.19	136 869	0.38	275 805
0.50 to < 0.75	55 165	31 110	53.24	71 102	0.70	494 053
0.75 to < 2.50	270 476	64 418	47.79	293 701	1.67	2 601 114
2.50 to < 10.00	121 613	16 151	41.51	129 035	5.04	1 827 736
10.00 to < 100.00	30 366	4 966	24.97	30 957	30.35	1 102 939
100.00 (default)	16 252	60	1.88	16 224	100.00	1 122 295
Total	854 493	246 604	47.25	938 824	4.08	7 674 777

PD scale	Total FirstRand Bank SA – As at 31 December 2016 – Average LGD %	Average maturity Years	RWA R million	RWA density %	Expected loss R million	Provisions R million
0.00 to < 0.15	30.03	2.09	9 057	6.49	11	
0.15 to < 0.25	32.77	1.66	30 438	25.10	65	
0.25 to < 0.50	28.03	1.39	43 329	31.66	142	
0.50 to < 0.75	29.92	1.21	27 314	38.42	146	
0.75 to < 2.50	26.38	0.95	119 042	40.53	1 156	
2.50 to < 10.00	35.83	1.24	87 748	68.00	2 062	
10.00 to < 100.00	39.83	0.98	34 470	111.35	3 459	
100.00 (default)	42.19	1.43	13 356	82.32	6 476	
Total	30.27	1.34	364 754	38.85	13 517	13 287

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

	Corporate					
	As at 31 December 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	1 851	757	42.33	2 096	0.08	6
0.15 to < 0.25	47 883	26 918	52.48	58 030	0.17	60
0.25 to < 0.50	43 987	25 780	50.15	54 830	0.39	119
0.50 to < 0.75	27 108	9 797	55.11	29 775	0.74	101
0.75 to < 2.50	33 037	9 364	53.38	37 334	1.85	179
2.50 to < 10.00	3 728	2 267	51.94	4 900	4.28	88
10.00 to < 100.00	1 832	355	50.59	2 036	10.86	55
100.00 (default)	432	–	39.09	418	100.00	7
Total	159 858	75 238	52.01	189 419	1.11	615

	Corporate					
	As at 31 December 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	33.75	1.16	284	13.54	1	
0.15 to < 0.25	33.21	1.63	15 953	27.49	33	
0.25 to < 0.50	33.56	2.09	26 221	47.82	72	
0.50 to < 0.75	32.63	1.70	16 360	54.94	72	
0.75 to < 2.50	34.66	2.01	32 101	85.98	236	
2.50 to < 10.00	34.61	2.05	5 532	112.89	73	
10.00 to < 100.00	39.25	1.83	3 470	172.30	84	
100.00 (default)	70.77	2.27	–	–	311	
Total	33.70	1.86	99 921	52.75	882	2 553

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

	Corporate					
	As at 31 December 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	6 231	2 949	57.88	8 211	0.08	13
0.15 to < 0.25	62 247	33 459	52.54	73 655	0.17	91
0.25 to < 0.50	42 570	25 909	52.42	51 640	0.38	132
0.50 to < 0.75	22 323	17 336	60.19	30 575	0.74	111
0.75 to < 2.50	25 692	13 973	56.62	32 846	1.80	197
2.50 to < 10.00	6 042	1 479	56.02	6 767	4.43	81
10.00 to < 100.00	841	732	52.29	1 187	23.62	52
100.00 (default)	1 206	–	–	1 174	100.00	6
Total	167 152	95 837	54.70	206 055	1.41	683

	Corporate					
	As at 31 December 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	28.22	1.68	1 136	13.83	3	
0.15 to < 0.25	33.82	1.79	20 495	27.83	42	
0.25 to < 0.50	34.38	1.95	23 262	45.05	67	
0.50 to < 0.75	31.34	1.65	16 323	53.38	72	
0.75 to < 2.50	34.06	2.07	26 381	80.32	191	
2.50 to < 10.00	36.24	1.46	7 593	112.18	106	
10.00 to < 100.00	41.64	1.23	2 350	197.91	114	
100.00 (default)	23.86	2.10	–	–	273	
Total	33.47	1.84	97 540	47.34	868	2 947

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

	Specialised lending					
	As at 31 December 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	321	128	58.00	395	0.08	2
0.15 to < 0.25	7 882	877	0.15	7 883	0.17	14
0.25 to < 0.50	25 059	3 441	59.75	25 799	0.35	48
0.50 to < 0.75	8 840	208	48.98	8 579	0.74	59
0.75 to < 2.50	12 332	1 070	59.09	12 863	1.42	651
2.50 to < 10.00	3 380	244	57.99	3 644	5.27	359
10.00 to < 100.00	156	–	–	162	17.52	37
100.00 (default)	592	–	–	592	100.00	30
Total	58 562	5 968	50.38	59 917	1.94	1 200

	Specialised lending					
	As at 31 December 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	27.29	1.09	58	14.71	–	
0.15 to < 0.25	18.32	2.87	1 534	19.46	3	
0.25 to < 0.50	17.60	1.98	5 895	22.85	16	
0.50 to < 0.75	25.07	2.14	3 978	46.37	21	
0.75 to < 2.50	24.38	0.90	8 121	63.13	52	
2.50 to < 10.00	29.05	1.43	3 847	105.56	56	
10.00 to < 100.00	25.53	0.26	223	137.67	8	
100.00 (default)	41.05	4.99	–	–	218	
Total	21.23	1.87	23 656	39.48	374	507

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

	Specialised lending					
	As at 31 December 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	153	–	–	153	0.07	6
0.15 to < 0.25	8 168	944	57.98	8 249	0.17	25
0.25 to < 0.50	22 389	2 979	45.41	22 822	0.34	48
0.50 to < 0.75	6 368	1 212	57.38	7 030	0.73	58
0.75 to < 2.50	12 192	884	57.99	12 588	1.34	568
2.50 to < 10.00	2 895	542	55.25	3 166	4.89	183
10.00 to < 100.00	297	–	–	297	20.96	33
100.00 (default)	1 043	–	–	1 043	100.00	35
Total	53 505	6 561	51.94	55 348	2.84	956

	Specialised lending					
	As at 31 December 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	21.74	0.95	32	21.02	–	
0.15 to < 0.25	18.80	2.76	1 639	19.87	3	
0.25 to < 0.50	17.84	2.11	5 246	22.99	14	
0.50 to < 0.75	24.09	2.02	3 127	44.48	12	
0.75 to < 2.50	24.55	0.82	10 330	82.07	30	
2.50 to < 10.00	31.26	2.18	5 934	187.40	40	
10.00 to < 100.00	25.54	0.97	447	150.64	7	
100.00 (default)	43.96	4.99	–	–	458	
Total	21.61	1.95	26 755	48.34	564	704

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

	Sovereign					
	As at 31 December 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	9 584	–	–	9 584	0.04	2
0.15 to < 0.25	729	–	58.00	18	0.17	17
0.25 to < 0.50	124 446	4 546	50.76	112 834	0.48	71
0.50 to < 0.75	873	2 814	49.78	2 133	0.73	125
0.75 to < 2.50	2 374	924	48.89	2 847	2.08	47
2.50 to < 10.00	370	54	16.13	397	3.85	180
10.00 to < 100.00	649	71	33.50	676	12.79	17
100.00 (default)	3	–	–	3	100.00	15
Total	139 028	8 409	49.86	128 492	0.56	474

	Sovereign					
	As at 31 December 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	29.02	0.20	335	3.50	1	
0.15 to < 0.25	41.57	0.10	5	24.99	–	
0.25 to < 0.50	8.95	2.89	16 151	14.31	47	
0.50 to < 0.75	18.25	3.60	868	40.69	3	
0.75 to < 2.50	29.65	3.39	2 512	88.21	17	
2.50 to < 10.00	49.00	1.64	581	146.14	7	
10.00 to < 100.00	19.67	1.48	634	93.85	23	
100.00 (default)	34.00	1.00	6	163.14	–	
Total	11.25	2.70	21 092	16.41	98	118

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

	Sovereign					
	As at 31 December 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	97 296	–	–	85 960	0.01	3
0.15 to < 0.25	1 258	259	12.37	1 401	0.17	26
0.25 to < 0.50	188	13	13.37	195	0.33	43
0.50 to < 0.75	210	173	6.66	303	0.62	33
0.75 to < 2.50	417	175	27.31	509	1.81	59
2.50 to < 10.00	174	66	9.29	208	4.70	5
10.00 to < 100.00	4	5	1.72	7	32.13	5
100.00 (default)	–	–	–	–	–	–
Total	99 547	691	14.38	88 583	0.04	174

	Sovereign					
	As at 31 December 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	29.34	2.56	4 856	5.65	3	
0.15 to < 0.25	29.33	3.16	433	30.92	1	
0.25 to < 0.50	25.00	4.86	94	48.31	–	
0.50 to < 0.75	27.74	3.77	180	59.56	1	
0.75 to < 2.50	23.12	3.01	330	64.74	2	
2.50 to < 10.00	38.61	1.19	248	119.16	4	
10.00 to < 100.00	25.39	1.83	9	–	1	
100.00 (default)	–	–	–	–	–	
Total	29.31	2.58	6 150	6.94	12	5

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

	Banks and securities firms					
	As at 31 December 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	53 441	9 362	50.47	63 442	0.02	54
0.15 to < 0.25	13 097	5 892	51.77	10 940	0.16	64
0.25 to < 0.50	38 397	3 300	47.02	31 754	0.39	74
0.50 to < 0.75	1 724	254	33.41	968	0.74	29
0.75 to < 2.50	20 218	137	23.61	2 523	1.48	61
2.50 to < 10.00	1 886	867	23.89	1 472	4.25	51
10.00 to < 100.00	73	175	37.78	157	25.06	40
100.00 (default)	–	–	–	–	–	–
Total	128 836	19 987	48.62	111 256	0.27	373

	Banks and securities firms					
	As at 31 December 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	28.60	1.19	3 238	5.10	4	
0.15 to < 0.25	32.82	1.23	3 156	28.85	6	
0.25 to < 0.50	27.58	0.60	10 393	32.73	35	
0.50 to < 0.75	18.86	1.96	381	39.39	1	
0.75 to < 2.50	75.56	0.77	4 574	181.30	29	
2.50 to < 10.00	32.53	1.13	1 376	93.50	19	
10.00 to < 100.00	24.28	1.00	170	108.40	8	
100.00 (default)	–	–	–	–	–	
Total	29.75	1.02	23 288	20.93	102	151

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

	Banks and securities firms					
	As at 31 December 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	28 163	9 802	41.84	39 349	0.03	82
0.15 to < 0.25	33 211	7 429	53.61	25 321	0.16	63
0.25 to < 0.50	16 700	3 029	53.46	17 634	0.37	61
0.50 to < 0.75	966	77	53.23	396	0.74	25
0.75 to < 2.50	16 929	648	40.48	2 259	2.13	73
2.50 to < 10.00	1 935	781	39.11	1 859	4.92	52
10.00 to < 100.00	870	148	48.99	98	15.93	32
100.00 (default)	–	–	–	–	–	–
Total	98 774	21 914	47.39	86 916	0.32	388

	Banks and securities firms					
	As at 31 December 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	29.23	1.47	2 782	7.07	3	
0.15 to < 0.25	29.17	0.88	5 311	20.97	11	
0.25 to < 0.50	35.56	0.92	7 712	43.73	22	
0.50 to < 0.75	40.81	1.99	358	90.43	1	
0.75 to < 2.50	57.51	0.91	3 334	147.57	30	
2.50 to < 10.00	36.02	0.68	1 881	101.22	32	
10.00 to < 100.00	37.36	0.91	160	163.59	8	
100.00 (default)	–	–	–	–	–	
Total	31.44	1.16	21 538	24.78	107	–

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

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

	SME corporate					
	As at 31 December 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	4	52.57	2	0.10	36
0.15 to < 0.25	8 960	368	5.90	8 982	0.20	444
0.25 to < 0.50	7 817	5 814	0.39	10 051	0.43	5 391
0.50 to < 0.75	6 384	3 662	0.29	8 026	0.60	2 018
0.75 to < 2.50	27 479	8 882	2.04	31 062	1.46	11 797
2.50 to < 10.00	13 564	3 468	19.13	15 517	4.33	5 095
10.00 to < 100.00	1 640	436	3.20	2 012	18.38	766
100.00 (default)	668	–	–	668	100.00	2 305
Total	66 513	22 634	4.04	76 320	3.23	27 852

	SME corporate					
	As at 31 December 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	76.29	1.65	1	32.40	–	
0.15 to < 0.25	26.67	1.19	2 275	25.33	5	
0.25 to < 0.50	23.33	2.43	3 228	32.11	10	
0.50 to < 0.75	21.92	2.28	2 700	33.64	11	
0.75 to < 2.50	21.12	2.04	13 556	43.64	97	
2.50 to < 10.00	24.28	2.15	10 238	65.98	162	
10.00 to < 100.00	22.35	1.66	2 093	118.00	72	
100.00 (default)	44.40	3.47	9	0.95	456	
Total	23.10	2.04	34 100	44.68	813	886

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

	SME corporate					
	As at 31 December 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	–	2	44.48	1	0.09	38
0.15 to < 0.25	8 895	428	6.05	9 109	0.37	2 152
0.25 to < 0.50	6 725	5 533	0.44	8 956	0.48	4 156
0.50 to < 0.75	4 605	3 004	0.41	5 963	0.66	1 564
0.75 to < 2.50	30 499	9 191	1.92	35 303	1.80	16 960
2.50 to < 10.00	12 705	3 505	22.10	14 746	5.38	6 744
10.00 to < 100.00	1 706	560	2.12	2 007	22.43	790
100.00 (default)	780	58	–	808	100.00	2 426
Total	65 915	22 281	4.00	76 893	3.65	34 830

	SME corporate					
	As at 31 December 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	72.85	1.63	–	29.59	–	
0.15 to < 0.25	39.52	2.22	2 116	23.23	4	
0.25 to < 0.50	29.71	2.35	3 299	36.83	11	
0.50 to < 0.75	26.46	2.45	2 298	38.54	9	
0.75 to < 2.50	29.40	2.39	16 325	46.24	116	
2.50 to < 10.00	27.76	2.42	9 598	65.09	151	
10.00 to < 100.00	30.25	2.19	2 576	128.32	81	
100.00 (default)	53.84	2.76	235	29.03	561	
Total	30.37	2.37	36 447	47.40	933	1 186

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

	SME retail					
	As at 31 December 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	181	25	–	193	0.08	998
0.15 to < 0.25	46	69	–	73	0.20	2 025
0.25 to < 0.50	4 419	6 855	0.68	9 350	0.33	69 146
0.50 to < 0.75	1 562	613	9.25	1 942	0.60	12 067
0.75 to < 2.50	25 585	7 045	0.63	31 155	1.77	540 917
2.50 to < 10.00	18 521	2 025	0.80	20 181	3.64	658 874
10.00 to < 100.00	2 986	156	4.27	3 062	26.85	24 994
100.00 (default)	2 517	–	–	2 479	100.00	36 928
Total	55 817	16 788	1.02	68 435	6.77	1 345 949

	SME retail					
	As at 31 December 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	33.74	2.26	15	7.56	–	
0.15 to < 0.25	57.33	1.14	18	24.94	–	
0.25 to < 0.50	34.52	0.01	1 915	20.48	11	
0.50 to < 0.75	27.12	0.03	449	23.09	3	
0.75 to < 2.50	33.54	0.64	13 609	43.68	190	
2.50 to < 10.00	36.75	1.10	11 228	55.64	286	
10.00 to < 100.00	39.17	1.07	2 764	90.26	328	
100.00 (default)	50.45	0.91	1 948	78.55	866	
Total	35.33	0.71	31 946	46.68	1 684	1 360

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

	SME retail					
	As at 31 December 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	465	1 114	–	1 385	0.08	6 763
0.15 to < 0.25	505	1 107	–	1 469	0.25	14 849
0.25 to < 0.50	2 907	3 924	1.29	5 412	0.34	46 568
0.50 to < 0.75	1 979	1 996	0.12	3 648	0.63	80 104
0.75 to < 2.50	22 682	5 695	0.32	27 366	2.09	937 444
2.50 to < 10.00	15 517	921	1.23	16 032	6.60	80 132
10.00 to < 100.00	2 650	87	0.39	2 689	41.71	16 942
100.00 (default)	1 952	2	–	1 928	100.00	22 395
Total	48 657	14 846	0.56	59 929	7.89	1 205 197

	SME retail					
	As at 31 December 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	38.90	0.02	124	8.96	–	
0.15 to < 0.25	40.23	0.06	291	–	1	
0.25 to < 0.50	31.49	0.01	1 018	18.82	6	
0.50 to < 0.75	42.98	–	1 362	37.34	10	
0.75 to < 2.50	40.68	0.88	11 624	42.48	151	
2.50 to < 10.00	40.49	1.70	7 422	46.30	187	
10.00 to < 100.00	43.18	1.70	2 150	79.96	285	
100.00 (default)	57.42	0.62	1 913	99.26	1 117	
Total	40.54	0.95	25 904	43.23	1 757	1 045

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

	Retail mortgages					
	As at 31 December 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	9 641	10 396	30.21	12 781	0.08	22 909
0.15 to < 0.25	3 382	2 490	29.86	4 125	0.18	8 034
0.25 to < 0.50	23 677	12 184	49.55	29 714	0.38	35 102
0.50 to < 0.75	34 630	2 398	58.98	36 044	0.61	57 724
0.75 to < 2.50	74 090	16 233	89.06	88 546	1.36	146 455
2.50 to < 10.00	33 673	6 714	12.31	34 500	4.95	58 728
10.00 to < 100.00	6 639	432	36.40	6 802	26.44	15 194
100.00 (default)	5 962	–	–	5 962	100.00	16 165
Total	**191 694**	**50 847**	**52.67**	**218 474**	**5.05**	**360 311**

	Retail mortgages					
	As at 31 December 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	14.27	–	402	3.15	2	
0.15 to < 0.25	15.41	–	259	6.27	1	
0.25 to < 0.50	14.50	–	3 024	10.18	17	
0.50 to < 0.75	16.05	–	5 706	15.83	37	
0.75 to < 2.50	16.02	–	23 080	26.07	195	
2.50 to < 10.00	15.36	–	18 046	52.31	261	
10.00 to < 100.00	16.03	–	5 976	87.97	297	
100.00 (default)	18.79	–	1 554	26.02	1 116	
Total	**15.68**	**–**	**58 047**	**26.57**	**1 926**	**1 613**

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

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

	Retail mortgages					
	As at 31 December 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	675	581	103.72	1 277	0.03	1 776
0.15 to < 0.25	90	70	44.37	121	0.23	240
0.25 to < 0.50	16 194	15 910	49.60	24 086	0.39	32 174
0.50 to < 0.75	14 279	1 009	67.26	14 958	0.66	30 441
0.75 to < 2.50	108 102	22 081	61.71	121 728	1.54	191 096
2.50 to < 10.00	32 396	4 138	8.66	32 755	4.70	52 737
10.00 to < 100.00	7 591	2 877	4.40	7 717	30.46	37 532
100.00 (default)	3 825	–	–	3 825	100.00	10 773
Total	183 152	46 666	49.96	206 467	4.74	356 769

	Retail mortgages					
	As at 31 December 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	1.29	–	
0.15 to < 0.25	10.30	–	6	4.81	–	
0.25 to < 0.50	10.87	–	1 824	7.57	10	
0.50 to < 0.75	13.22	–	1 979	13.23	13	
0.75 to < 2.50	13.89	–	29 483	24.22	264	
2.50 to < 10.00	15.61	–	16 984	51.85	241	
10.00 to < 100.00	15.13	–	6 173	79.99	365	
100.00 (default)	20.88	–	451	11.78	971	
Total	13.92	–	56 916	27.57	1 864	1 838

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

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

	Retail revolving					
	As at 31 December 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	1 448	8 387	55.62	6 113	0.08	182 365
0.15 to < 0.25	1 070	3 310	52.95	2 823	0.20	90 483
0.25 to < 0.50	2 686	5 996	56.17	6 054	0.35	234 758
0.50 to < 0.75	2 512	5 289	71.80	6 310	0.62	336 158
0.75 to < 2.50	11 744	10 503	71.82	19 288	1.49	1 014 172
2.50 to < 10.00	8 684	4 856	73.43	12 250	4.50	1 098 615
10.00 to < 100.00	3 484	1 320	72.23	4 437	24.45	816 286
100.00 (default)	1 272	–	–	1 272	100.00	1 043 213
Total	32 900	39 661	64.66	58 547	5.58	4 816 050

	Retail revolving					
	As at 31 December 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	72.24	–	220	3.60	3	
0.15 to < 0.25	71.52	–	228	8.08	4	
0.25 to < 0.50	70.64	–	759	12.54	15	
0.50 to < 0.75	69.77	–	1 231	19.51	27	
0.75 to < 2.50	70.20	–	7 336	38.03	202	
2.50 to < 10.00	69.98	–	10 011	81.72	384	
10.00 to < 100.00	69.30	–	7 786	175.47	750	
100.00 (default)	68.71	–	312	24.54	902	
Total	70.33	–	27 883	47.63	2 287	1 636

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

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

	Retail revolving					
	As at 31 December 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	855	6 120	40.04	3 305	0.08	137 153
0.15 to < 0.25	759	2 936	40.45	1 947	0.20	86 774
0.25 to < 0.50	1 993	5 233	39.78	4 074	0.36	171 232
0.50 to < 0.75	2 344	5 904	60.38	5 909	0.62	363 256
0.75 to < 2.50	10 969	11 394	60.20	17 828	1.50	1 041 962
2.50 to < 10.00	9 451	4 359	71.56	12 571	4.61	1 088 987
10.00 to < 100.00	3 198	533	81.94	3 634	27.94	713 894
100.00 (default)	957	–	–	957	100.00	966 432
Total	30 526	36 479	54.00	50 225	5.73	4 569 690

	Retail revolving					
	As at 31 December 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	–	111	3.35	2	
0.15 to < 0.25	65.69	–	146	7.48	3	
0.25 to < 0.50	65.80	–	487	11.96	10	
0.50 to < 0.75	66.60	–	1 099	18.60	24	
0.75 to < 2.50	66.31	–	6 412	35.97	177	
2.50 to < 10.00	66.21	–	9 889	78.67	384	
10.00 to < 100.00	66.77	–	6 285	172.94	681	
100.00 (default)	66.58	–	15	1.60	700	
Total	66.25	–	24 444	48.67	1 981	1 980

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

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

	Other retail					
	As at 31 December 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	4	17	53.14	13	0.08	124
0.15 to < 0.25	2	5	60.59	5	0.20	513
0.25 to < 0.50	277	371	61.77	506	0.41	7 092
0.50 to < 0.75	2 953	409	64.93	3 219	0.56	27 956
0.75 to < 2.50	43 491	533	72.57	43 878	1.73	416 649
2.50 to < 10.00	46 253	462	98.44	46 708	4.83	623 151
10.00 to < 100.00	12 480	38	364.96	12 620	29.80	298 958
100.00 (default)	7 194	–	–	7 194	100.00	112 347
Total	112 654	1 835	81.14	114 143	12.25	1 486 790

	Other retail					
	As at 31 December 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	72.60	–	2	16.82	–	
0.15 to < 0.25	77.92	–	2	33.96	–	
0.25 to < 0.50	31.80	–	113	22.22	1	
0.50 to < 0.75	23.78	–	623	19.35	4	
0.75 to < 2.50	26.70	–	15 243	34.74	207	
2.50 to < 10.00	45.75	–	33 429	71.57	1 082	
10.00 to < 100.00	48.12	–	13 808	109.42	1 784	
100.00 (default)	46.40	–	10 107	140.48	2 642	
Total	38.05	–	73 327	64.24	5 720	4 777

* *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 31 December 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	20	8	5.72	20	0.03	162
0.15 to < 0.25	2	4	27.83	3	0.23	619
0.25 to < 0.50	1 962	157	56.37	2 050	0.43	21 391
0.50 to < 0.75	2 091	399	57.37	2 320	0.60	18 461
0.75 to < 2.50	42 994	377	74.24	43 274	1.67	412 755
2.50 to < 10.00	40 498	360	120.27	40 931	4.83	598 815
10.00 to < 100.00	13 209	24	460.49	13 321	30.77	333 659
100.00 (default)	6 489	–	–	6 489	100.00	120 228
Total	107 265	1 329	86.09	108 408	12.28	1 506 090

	Other retail					
	As at 31 December 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	20.14	–	–	2.38	–	
0.15 to < 0.25	75.87	–	1	35.72	–	
0.25 to < 0.50	26.89	–	387	18.86	2	
0.50 to < 0.75	29.90	–	588	25.34	4	
0.75 to < 2.50	26.68	–	14 823	34.25	195	
2.50 to < 10.00	44.03	–	28 199	68.89	917	
10.00 to < 100.00	47.75	–	14 320	107.50	1 917	
100.00 (default)	48.22	–	10 742	165.54	2 396	
Total	37.18	–	69 060	63.70	5 431	3 582

* *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 period.

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

	Pre-credit derivatives RWA		
R million	**As at 31 December 2017**	As at 31 December 2016	As at 30 June 2017
2. Sovereign	**21 091**	6 150	16 516
4. Banks and securities firms	**23 288**	21 538	19 743
6. Corporate	**88 226**	97 540	87 871
8. Specialised lending	**38 697**	26 755	36 072
SME corporate	**34 099**	36 447	27 951
9. Retail revolving	**27 884**	24 444	27 530
10. Retail mortgages	**58 047**	56 916	58 197
11. SME retail	**31 945**	25 904	29 949
12. Other retail	**73 325**	69 060	71 953
17. **Total**	**396 602**	364 754	375 782

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 30 September 2017**	**377 117**
2. Asset size	**10 434**
3. Asset quality	**9 042**
8. Other	**9**
9. **RWA at 31 December 2017***	**396 602**

* *The RWA represents credit risk exposures excluding securitisation exposure per Overview of credit RWA table on page 27.*

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 53).

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 31 December 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	**24 866**	**389**	**22 801**	**52**	**16 275**	**0.71**
2. Non-central government public sector entities	**3 670**	**956**	**2 471**	**382**	**2 247**	**0.79**
3. Multilateral development banks	**1**	**21**	**1**	**4**	**3**	**0.50**
4. Banks	**26 057**	**141**	**26 002**	**220**	**2 321**	**0.09**
5. Securities firms	**–**	**–**	**–**	**–**	**6**	**16.24**
6. Corporates	**24 709**	**13 214**	**27 279**	**7 184**	**30 397**	**0.88**
7. Regulatory retail portfolios	**62 562**	**10 886**	**62 043**	**4 787**	**45 828**	**0.69**
8. Secured by residential property	**18 772**	**1 883**	**18 680**	**941**	**7 455**	**0.38**
9. Secured by commercial real estate	**–**	**–**	**–**	**–**	**–**	**–**
11. Past due advances	**243**	**–**	**243**	**–**	**253**	**1.04**
13. Other assets*	**–**	**–**	**–**	**–**	**–**	**–**
14. **Total**	**160 880**	**27 490**	**159 520**	**13 570**	**104 833**	**60.57**

* *Exposures in the other assets category in the prior period were included in the regulatory retail portfolios category in the current period due to refinement in methodology.*

	As at 31 December 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	19 461	128	18 201	127	9 662	52.72
2. Non-central government public sector entities	3 731	2 191	2 571	1 194	1 769	46.98
3. Multilateral development banks	1	21	5	17	2	11.43
4. Banks	14 084	298	14 087	506	2 592	17.76
5. Securities firms	282	–	282	–	141	50.00
6. Corporates	19 277	8 588	21 793	3 913	22 808	88.73
7. Regulatory retail portfolios	29 422	10 590	32 125	4 684	25 686	69.78
8. Secured by residential property	19 121	2 110	19 120	1 152	7 759	38.28
9. Secured by commercial real estate	5 731	525	5 726	469	6 195	100.00
11. Past due advances	2 512	151	2 388	30	2 230	92.22
13. Other assets	28 160	–	28 160	–	18 459	65.55
14. **Total**	141 782	24 602	144 458	12 092	97 303	62.16

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 31 December 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	2 070	–	–	–	685	16 665	3 433	–	–	22 853
2. Non-central government public sector entities	–	–	–	–	92	2 237	524	–	–	2 853
3. Multilateral development banks	–	–	–	–	5	–	–	–	–	5
4. Banks	8 162	–	993	2 531	2 324	–	67	–	12 146	26 223
5. Securities firm	–	–	–	–	–	–	–	–	–	–
6. Corporates	229	–	402	–	4 744	1 480	24 460	255	2 894	34 464
7. Regulatory retail portfolios	–	–	–	–	2	61 778	5 050	–	–	66 830
8. Secured by residential property	–	–	–	15 702	3 919	–	–	–	–	19 621
9. Secured by commercial real estate	–	–	–	–	–	–	–	–	–	–
11. Past due advances	–	–	–	–	107	–	9	127	–	243
13. Other assets*	–	–	–	–	–	–	–	–	–	–
14. **Total**	10 461	–	1 395	18 233	11 878	82 160	33 543	382	15 040	173 092

* *Exposures in the other assets category in the prior period were included in the regulatory retail portfolio category in the current period due to refinement in methodology.*

	As at 31 December 2016									
	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	1 335	–	5 892	–	5 866	–	4 477	758	–	18 328
2. Non-central government public sector entities	–	–	–	–	3 765	–	–	–	–	3 765
3. Multilateral development banks	–	–	–	–	22	–	–	–	–	22
4. Banks	5 898	–	1 593	–	6 602	–	474	26	–	14 593
5. Securities firms	–	–	–	–	282	–	–	–	–	282
6. Corporates	–	–	952	–	2 548	–	20 990	619	597	25 706
7. Regulatory retail portfolios	–	–	–	–	–	35 667	1 142	–	–	36 809
8. Secured by residential property	–	–	–	18 918	–	864	490	–	–	20 272
9. Secured by commercial real estate	–	–	–	–	–	–	6 195	–	–	6 195
11. Past due advances	–	–	–	–	931	–	564	923	–	2 418
13. Other assets	2 079	–	2 751	–	282	–	2 798	–	20 250	28 160
14. **Total**	9 312	–	11 188	18 918	20 298	36 531	37 130	2 326	20 847	156 550

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 31 December 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	–	32	50%	–	–	–	–	–
	Equal to or more than 2.5 years	8 745	–	70%	8 632	18	8 650	6 650	39
Good	Less than 2.5 years	–	–	70%	–	–	–	–	–
	Equal to or more than 2.5 years	6 785	447	90%	6 945	153	7 099	6 772	57
Satisfactory		1 564	123	115%	1 370	317	1 687	1 964	42
Weak		60	3	250%	2	60	62	164	6
Total		17 154	605		16 949	548	17 498	15 550	144

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

R million		As at 31 December 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	616	54	50%	–	670	670	996	29
	Equal to or more than 2.5 years	11 979	–	70%	11 979	–	11 979	9 174	53
Good	Less than 2.5 years	–	–	70%	–	–	–	–	–
	Equal to or more than 2.5 years	4 979	601	90%	5 580	–	5 580	5 323	45
Satisfactory		92	297	115%	389	–	389	371	3
Weak		194	–	250%	–	194	194	514	16
Total		17 860	952		17 948	864	18 812	16 378	146

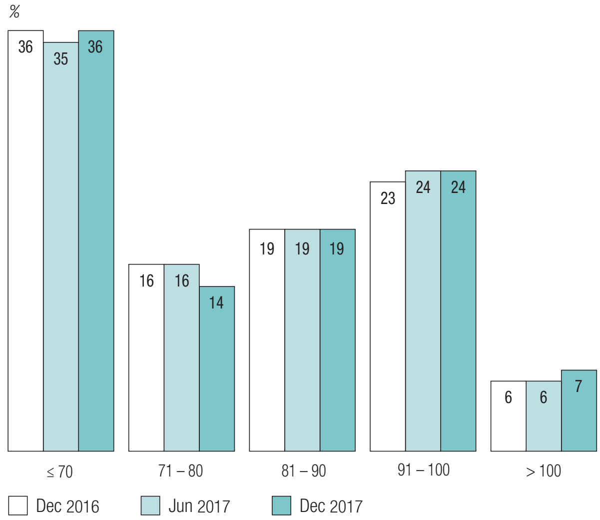
* *There were no high-volatility commercial real estate exposures during the period. For specialised lending exposures other than high-volatility commercial real estate, there were no exposures to object finance or commodities asset classes during the period.*

SELECTED RISK ANALYSES

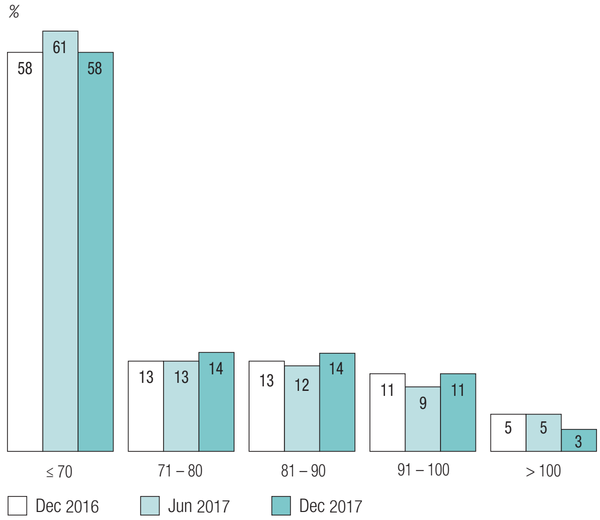
The graphs below provide loan balance-to-value ratios and age distributions of residential mortgages.

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.

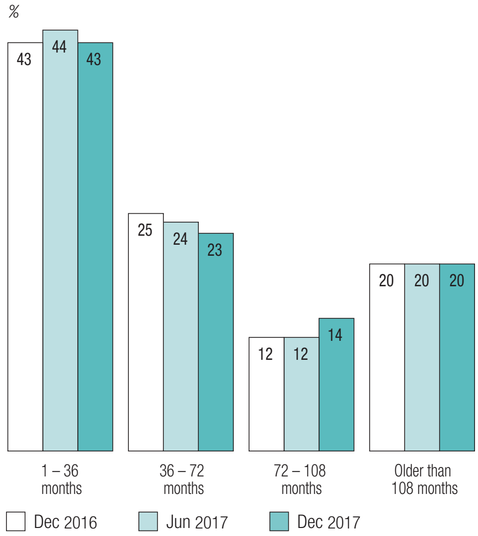
Residential mortgages balance-to-original value



Residential mortgages balance-to-market value



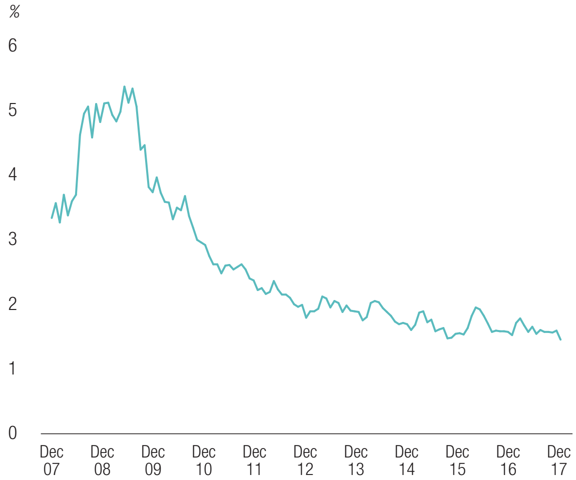
Residential mortgages age distribution



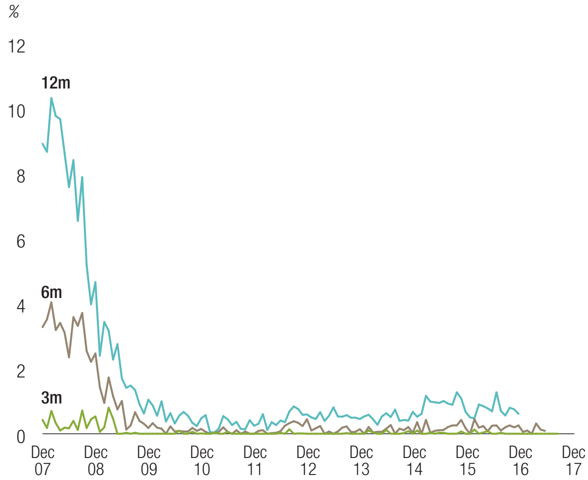
The following graph shows arrears in the FNB HomeLoans portfolio. It includes accounts where more than one full payment is in arrears, expressed as a percentage of total advances. The increase in arrears in the 12-month period from December 2015 to December 2016 reflected the reclassification of restructured debt review accounts to arrear status. Since then arrears have stabilised and as a percentage of advances, trended downwards. The 30- and 60-day arrears percentages reduced as collections improved and book growth has remained modest.

Vintages in FNB HomeLoans remained stable as collections were strong. Lower new business volumes constrained book growth for most of the current period.

FNB HomeLoans arrears



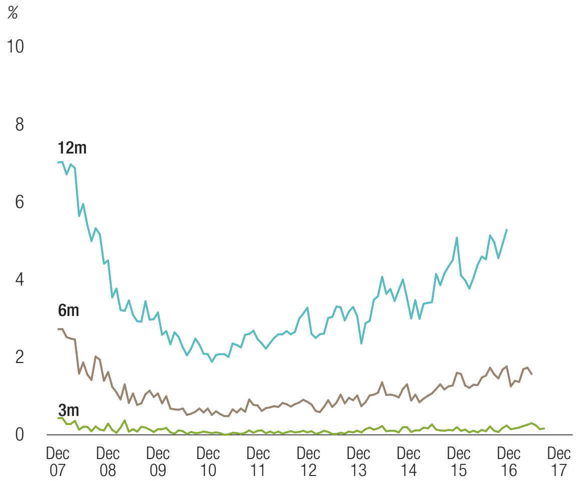
FNB HomeLoans vintage analysis



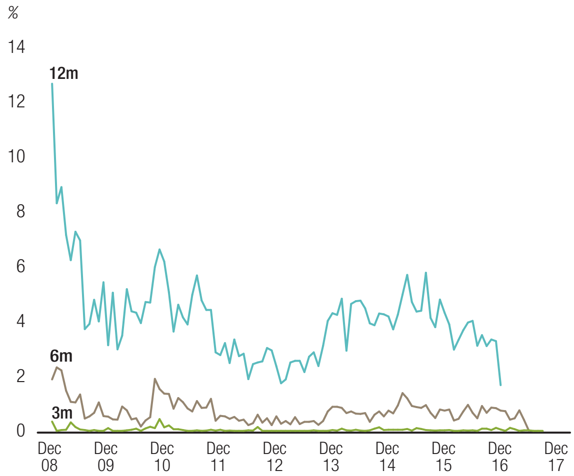
The retail SA VAF vintages continued to increase to levels similar to that of December 2015. The increase reflects the impact of deterioration in the self-employed and small business segments, lengthening recovery timelines and more customers opting for court orders for repossessions, the challenging macroeconomic environment as well as the ongoing increase in debt-review NPLs. Risk appetite was adjusted during the latter part of 2017, with a continued focus on originating a greater proportion of low-risk business. In the six- and three-month vintages, the risk appetite adjustments have already led to a reduction of the early vintages.

FNB card growth differed across segments over the past six month period. Card growth in premium benefited from customer growth, while the book contracted in the consumer segment as appetite remained conservative. The vintages trended lower given the change in mix and better collections.

WesBank retail SA VAF vintage analysis



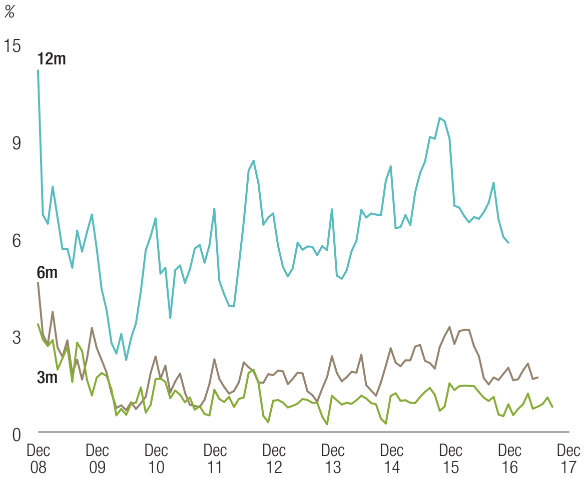
FNB card vintage analysis



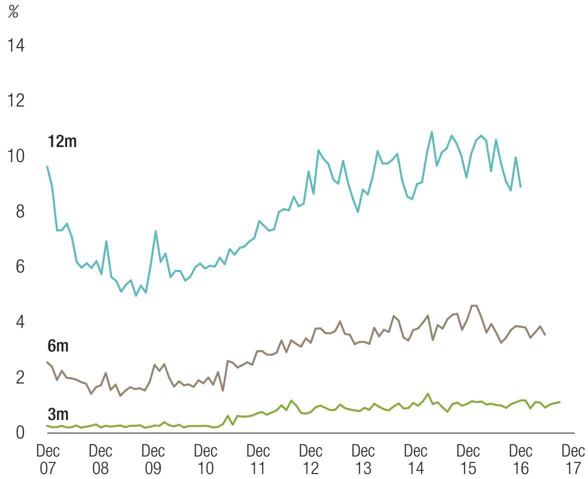
FNB personal loans growth was concentrated in the premium segment. The change in risk mix and effective collections resulted in vintages trending downwards since December 2016. Although the debt-review NPL portfolio grew proportionally more when compared to the performing book, it still remains a relatively small percentage when compared to the total book. Collections in the debt-review book are, however better than normal NPLs, further improving vintages.

WesBank personal loans vintages have been stable since December 2013 due to continuous adjustments to risk appetite. This proactive approach has proved to be effective and assisted in countering the macroeconomic conditions.

FNB personal loans vintage analysis



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.

Period under review and focus areas

PERIOD 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. • Performed impact assessment of the proposed BCBS's Basel III post-crisis regulatory reforms, commonly referred to as "Basel IV" standards.	• 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 to be advised by the SARB. • 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

The wholesale credit function in RMB 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 its valuation, where applicable, is easily observable in the market and as lower regulatory haircuts apply. In addition, the group has set up a function to clear OTC derivatives centrally as part of risk mitigation.

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

The effectiveness of 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. RMB 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 create visibility on portfolio concentrations and exposures, which may be a source of wrong-way risk. These areas are monitored and managed within the relevant exposure mandates.

Credit valuation adjustment (CVA)

CVA is an adjustment to the fair value (or price) of derivative instruments to account for counterparty credit risk (CCR). Thus, CVA is commonly viewed as the price of CCR. This price depends on counterparty credit spreads as well as on the market risk factors that drive derivatives' value and, therefore, exposure.

The current CVA framework is being revised by Basel with the intention to implement new standards by January 2022. The rationale for revising the current framework are as follows:

- capturing all CVA risks and better recognition of CVA hedges;
- alignment with industry practices for accounting purposes; and
- alignment with proposed revisions of the market risk framework.

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

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

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

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 other 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 immediately closed out of its transactions. 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 requirements and the main parameters used within each method. The exposures reported exclude CVA charges and exposures cleared through central clearing counterparties (CCP). The changes in counterparty exposure numbers are attributable to factors which include changes in market prices, a decrease in trade volumes, expiry of trades and hedges. In the last six months, CCR portfolio exposures and RWA increased on the back of the stronger rand and counterparty credit rating downgrades. Replacement cost, potential future exposure and alpha used for computing regulatory EAD, EAD post-CRM and RWA are not inputs into the VaR model calculation for security financing transactions. Row 5 of CCR1 is, therefore, excluded from these tables.

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

	As at 31 December 2017				
R million	Replacement cost	Potential future exposure	Alpha used for computing regulatory EAD	EAD post-CRM	RWA
1. Standardised approach (for derivatives)*	**9 194**	**8 015**	**1.4**	**25 989**	**11 181**
4. Comprehensive approach for credit risk mitigation for security financing transactions**	**–**	**–**	**–**	**1 846**	**1 969**
6. **Total**	**9 194**	**8 015**		**27 835**	**13 150**

* *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.*

	As at 31 December 2016				
R million	Replacement cost	Potential future exposure	Alpha used for computing regulatory EAD	EAD post-CRM	RWA
1. Standardised approach (for derivatives)*	6 288	11 433	1.4	24 810	13 509
4. Comprehensive approach for credit risk mitigation for security financing transactions**	–	–	–	1 882	1 980
6. **Total**	6 288	11 433		26 692	15 489

* *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.*

	As at 30 June 2017				
R million	Replacement cost	Potential future exposure	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
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.*

The following table provides the exposure at default post credit risk mitigation and risk weighted asset amounts for portfolios subject to the standardised CVA capital charge. The group does not apply the advanced approach for CVA charge, rows 1 and 2 are excluded from CCR2. CVA RWA are sensitive to EAD and credit ratings. Due to increased trade volumes and exposures coupled with the credit rating downgrades, the group has seen an increase in CVA RWA over the last six months.

CCR2: CVA capital charge

	As at 31 December 2017		As at 31 December 2016		As at 30 June 2017	
R million	EAD post-CRM	RWA	EAD post-CRM	RWA	EAD post-CRM	RWA
3. All portfolios subject to the standardised CVA capital charge	**25 989**	**10 886**	24 810	6 566	18 461	6 573
4. **Total subject to the CVA capital charge**	**25 989**	**10 886**	24 810	6 566	18 461	6 573

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

	As at 31 December 2017				
	Risk weight#				
R million	0%	20%	50%	100%	Total credit exposure
Asset classes**					
Sovereigns	**–**	**–**	**–**	**44**	**44**
Non-central government public sector entities	**–**	**–**	**9**	**65**	**74**
Multilateral development banks	**–**	**–**	**–**	**–**	**–**
Banks	**1 006**	**5**	**37**	**2**	**1 050**
Securities firms	**–**	**–**	**13**	**–**	**13**
Corporates	**–**	**–**	**–**	**1 659**	**1 659**
Total	**1 006**	**5**	**59**	**1 770**	**2 840**

* *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 31 December 2017.*
# *There were no exposures in the 10%, 35%, 75% and 150% risk weight buckets at 31 December 2017.*

	As at 31 December 2016						
	Risk weight#						
R million	0%	20%	50%	75%	100%	150%	Total credit exposure
Asset classes**							
Sovereigns	–	–	775	–	6	–	781
Non-central government public sector entities	–	–	1	–	–	–	1
Banks	185	–	114	–	5	–	304
Securities firms	–	–	0.14	–	–	–	0.14
Corporates	646	–	85	–	979	1	1 711
Regulatory retail portfolios	–	–	–	199	–	–	199
Other assets	2	1	–	15	43	–	61
Total	833	1	975	214	1 033	1	3 057

* *These exposures are for the subsidiaries in the rest of Africa and foreign branches.*
** *There were no exposures in the multilateral development banks and regulatory retail classes at 31 December 2016.*
# *There were no exposures in the 10% and 35% risk weight buckets at 31 December 2016.*

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

	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.*

The total CCR3 credit exposure increase for the period from June 2017 to December 2017 was largely driven by an increase in the banking and corporate exposures in the London and India branches, respectively.

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 31 December 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	**2 511**	**0.07**	**48**	**16.28**	**1.10**	**223**	**8.90**
0.15 to <0.25	**7 932**	**0.17**	**130**	**19.97**	**0.89**	**1 372**	**17.30**
0.25 to <0.50	**8 191**	**0.40**	**123**	**33.44**	**2.28**	**3 929**	**47.97**
0.50 to <0.75	**850**	**0.74**	**92**	**28.00**	**1.09**	**383**	**45.05**
0.75 to <2.50	**4 256**	**1.53**	**208**	**39.84**	**1.18**	**4 046**	**95.06**
2.50 to <10.00	**282**	**4.25**	**64**	**34.21**	**1.77**	**294**	**104.19**
10.00 to <100.00	**19**	**20.07**	**26**	**30.29**	**1.83**	**33**	**170.31**
100.00 (default)	**–**	**–**	**–**	**–**	**–**	**–**	**–**
Total	**24 041**		**691**			**10 280**	**42.76**

	Total FirstRand Bank SA						
	As at 31 December 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	5 404	0.07	51	26.22	1.25	859	15.89
0.15 to <0.25	9 249	0.16	147	23.33	1.74	1 915	20.70
0.25 to <0.50	1 094	0.35	70	34.30	1.23	503	45.93
0.50 to <0.75	164	0.56	34	39.87	8.30	135	82.77
0.75 to <2.50	3 238	1.08	176	26.84	1.91	2 022	62.47
2.50 to <10.00	1 238	3.22	192	35.48	1.50	1 324	106.88
10.00 to <100.00	61	22.00	25	31.05	1.09	100	164.21
100.00 (default)	–	–	–	–	–	–	–
Total	20 448		695			6 858	33.54

The change in RWA in the 0.25% to <0.50% PD band from R503 million to R3 929 million was due to credit rating downgrades of SOEs and local banks, increased trade volumes and the stronger rand in the six months to 31 December 2017.

For the last quarter of 2017, the bank's portfolio, in addition to the credit rating downgrades of the local banks, experienced a reduction in exposure and RWA for international banks as reflected by the PD band 0.00% to <0.15% changes below.

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

	Banks						
	As at 31 December 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	**2 338**	**0.07**	**39**	**15.49**	**1.06**	**194**	**8.30**
0.15 to <0.25	**282**	**0.16**	**6**	**37.11**	**1.22**	**98**	**34.75**
0.25 to <0.50	**686**	**0.45**	**14**	**13.93**	**1.42**	**152**	**22.16**
0.50 to <0.75	**16**	**0.74**	**1**	**45.00**	**0.25**	**11**	**68.75**
0.75 to <2.50	**8**	**1.53**	**5**	**29.93**	**2.17**	**6**	**75.00**
2.50 to <10.00	**1**	**4.80**	**4**	**50.12**	**0.25**	**2**	**200.00**
10.00 to <100.00	**7**	**32.20**	**3**	**44.79**	**0.30**	**18**	**257.14**
100.00 (default)	**–**	**–**	**–**	**–**	**–**	**–**	**–**
Subtotal	**3 338**		**72**			**481**	**14.41**

	Banks						
	As at 31 December 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	5 023	0.07	40	26.50	1.26	809	16.11
0.15 to <0.25	942	0.15	7	24.39	1.58	224	23.81
0.25 to <0.50	287	0.35	14	36.81	1.27	147	51.28
0.50 to <0.75	1	0.56	1	40.00	0.15	0.33	52.22
0.75 to <2.50	49	1.06	4	39.92	0.74	39	81.06
2.50 to <10.00	9	4.14	13	40.50	0.54	12	129.20
10.00 to <100.00	17	32.17	8	27.31	0.28	25	151.83
100.00 (default)	–	–	–	–	–	–	–
Subtotal	6 328		87			1 256	19.88

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

	Securities						
	As at 31 December 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	**114**	**0.09**	**2**	**22.11**	**1.83**	**20**	**17.54**
0.15 to <0.25	**6 403**	**0.17**	**61**	**17.02**	**0.80**	**967**	**15.10**
0.25 to <0.50	**3 690**	**0.37**	**35**	**38.90**	**1.92**	**1 796**	**48.67**
0.50 to <0.75	**356**	**0.74**	**24**	**17.01**	**0.45**	**96**	**26.97**
0.75 to <2.50	**3 197**	**1.38**	**119**	**41.46**	**1.08**	**3 136**	**98.09**
2.50 to <10.00	**80**	**4.47**	**18**	**22.84**	**5.63**	**70**	**87.50**
10.00 to <100.00	**11**	**10.07**	**10**	**18.80**	**3.06**	**12**	**109.09**
100.00 (default)	**–**	**–**	**–**	**–**	**–**	**–**	**–**
Subtotal	**13 851**		**269**			**6 097**	**44.02**

	Securities						
	As at 31 December 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	304	0.08	3	19.90	1.14	41	13.33
0.15 to <0.25	6 097	0.16	71	20.30	1.29	926	15.19
0.25 to <0.50	50	0.35	16	19.18	3.37	19	37.54
0.50 to <0.75	101	0.56	7	41.92	11.48	100	99.53
0.75 to <2.50	2 231	1.17	77	24.03	1.45	1 281	57.41
2.50 to <10.00	922	2.89	99	34.43	1.27	970	105.14
10.00 to <100.00	27	10.24	9	24.72	2.17	33	120.73
100.00 (default)	–	–	–	–	–	–	–
Subtotal	9 732		282			3 370	34.62

The change in exposure and average maturity in the 0.25% to <0.50% PD band was due to new clients that were on-boarded during the last quarter.

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

	Corporate						
	As at 31 December 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	**52**	**0.08**	**6**	**37.22**	**0.73**	**7**	**14.16**
0.15 to <0.25	**1 191**	**0.17**	**56**	**31.85**	**1.20**	**296**	**24.87**
0.25 to <0.50	**1 132**	**0.36**	**55**	**39.63**	**1.10**	**515**	**45.55**
0.50 to <0.75	**415**	**0.74**	**60**	**37.17**	**1.38**	**242**	**58.27**
0.75 to <2.50	**601**	**1.67**	**79**	**38.65**	**0.29**	**496**	**82.47**
2.50 to <10.00	**199**	**4.12**	**35**	**38.73**	**0.22**	**219**	**110.05**
10.00 to <100.00	**1**	**35.57**	**12**	**44.96**	**0.17**	**3**	**247.07**
100.00 (default)	**–**	**–**	**–**	**–**	**–**	**–**	**–**
Subtotal	**3 591**		**303**			**1 778**	**49.51**

	Corporate						
	As at 31 December 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	77	0.07	8	32.55	0.92	9	11.77
0.15 to <0.25	973	0.18	61	32.87	0.84	269	27.67
0.25 to <0.50	422	0.35	31	37.60	0.46	163	38.49
0.50 to <0.75	60	0.56	24	36.64	3.22	34	55.93
0.75 to <2.50	265	1.05	81	39.22	0.46	185	69.85
2.50 to <10.00	300	4.14	72	38.57	2.22	333	110.81
10.00 to <100.00	17	30.99	8	44.99	0.15	42	246.85
100.00 (default)	–	–	–	–	–	–	–
Subtotal	2 114		285			1 035	48.89

The increase in exposure is due to changes in market prices and increased trade volumes during December 2017. The average maturity of the book is below 18 months, reflecting reduced appetite for long-dated transactions from corporate clients.

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

	Public sector and local government						
	As at 31 December 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	5	0.16	1	20.00	8.27	2	38.06
0.25 to <0.50	2 124	0.47	5	30.55	3.83	1 293	60.88
0.50 to <0.75	1	0.74	1	35.00	0.32	0.33	52.71
0.75 to <2.50	446	2.45	3	30.00	3.09	407	91.15
10.00 to <100.00	–	–	–	–	–	–	–
100.00 (default)	–	–	–	–	–	–	–
Subtotal	2 576		10			1 702	66.09

	Public sector and local government						
	As at 31 December 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	1 205	0.16	5	30.16	4.86	487	40.43
0.25 to <0.50	2	–	1	–	2.15	1	48.00
0.50 to <0.75	1	–	1	–	–	0.32	55.59
0.75 to <2.50	659	–	3	–	4.08	499	75.74
10.00 to <100.00	–	–	–	–	–	–	–
100.00 (default)	–	–	–	–	–	–	–
Subtotal	1 867		10			987	52.90

The overall increase in EAD from R1 867 million to R2 576 million reflects an increase in volumes and the effects of a stronger rand against hard currencies. The shift in PD band is due to credit rating downgrades in the last quarter of 2017. These effects can be seen on the sovereign and the remaining sector tables.

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

	Sovereign						
	As at 31 December 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	**1**	**0.17**	**3**	**42.85**	**1.12**	**0.16**	**16.00**
0.25 to <0.50	**268**	**0.41**	**3**	**23.40**	**1.04**	**98.29**	**36.68**
0.50 to <0.75	**–**	**–**	**–**	**–**	**–**	**–**	**–**
0.75 to <2.50	**–**	**–**	**–**	**–**	**–**	**–**	**–**
10.00 to <100.00	**–**	**–**	**–**	**–**	**–**	**–**	**–**
100.00 (default)	**–**	**–**	**–**	**–**	**–**	**–**	**–**
Subtotal	**269**		**6**			**98.45**	**36.60**

	Sovereign						
	As at 31 December 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	1	0.19	1	42.71	2.26	0.35	55.16
0.25 to <0.50	163	0.35	1	–	1.83	134	82.01
0.50 to <0.75	–	–	–	–	–	–	–
0.75 to <2.50	–	–	–	–	–	–	–
2.50 to <10.00	–	–	–	–	–	–	–
10.00 to <100.00	–	–	–	–	–	–	–
100.00 (default)	–	–	–	–	–	–	–
Subtotal	164		2			134	81.91

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

	Other						
	As at 31 December 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	7	0.08	1	30.00	5.56	2	30.30
0.15 to <0.25	53	0.17	3	18.51	2.46	9	17.11
0.25 to <0.50	289	0.35	11	16.32	3.32	74	25.75
0.50 to <0.75	62	0.74	6	25.36	2.99	34	54.04
0.75 to <2.50	3	1.13	4	31.96	0.11	1	58.10
2.50 to <10.00	2	7.50	6	31.15	2.64	3	127.58
10.00 to <100.00	–	–	–	–	–	–	–
100.00 (default)	–	–	–	–	–	–	–
Subtotal	416		31			123	29.57

	Other						
	As at 31 December 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	31	0.19	2	19.36	3.52	8	23.95
0.25 to <0.50	170	0.35	7	16.00	1.88	40	23.26
0.50 to <0.75	1	0.56	1	15.00	1.33	0.11	21.99
0.75 to <2.50	34	0.88	11	22.60	3.36	18	53.44
2.50 to <10.00	7	6.47	6	34.16	3.03	10	136.86
10.00 to <100.00	–	–	–	–	–	–	–
100.00 (default)	–	–	–	–	–	–	–
Subtotal	243		27			76	30.95

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” to collateral not held in a bankruptcy-remote manner.

*CCR5: Composition of collateral for counterparty credit risk exposure per collateral category**

	As at 31 December 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	**6 888**	**7 948**	**–**	**2 834**	**–**	**–**
Cash – other currencies	**–**	**3 631**	**–**	**–**	**–**	**–**
Domestic sovereign debt	**–**	**–**	**–**	**175**	**311 276**	**323 311**
Other sovereign debt	**–**	**–**	**–**	**–**	**31**	**31**
Government agency debt	**–**	**–**	**–**	**2 726**	**12 188**	**12 268**
Corporate bonds	**–**	**–**	**–**	**5 735**	**2 450**	**2 450**
Other collateral	**–**	**–**	**–**	**–**	**–**	**–**
Total	**6 888**	**11 579**	**–**	**11 470**	**325 945**	**338 060**

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

	As at 31 December 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	9 088	7 236	–	1 618	–	–
Cash – other currencies	–	2 508	–	–	–	–
Domestic sovereign debt	–	–	–	194	289 852	300 582
Other sovereign debt	–	–	–	–	60	60
Government agency debt	–	–	–	–	12 016	12 701
Corporate bonds	–	–	–	262	2 492	2 211
Other collateral	–	–	–	2 253	–	–
Total	9 088	9 744	–	4 327	304 420	315 554

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

	As at 30 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 period.*

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 31 December 2017		As at 31 December 2016		As at 30 June 2017	
R million	Protection bought	Protection sold	Protection bought	Protection sold	Protection bought	Protection sold
Notionals*						
– Single-name credit default swaps	**15 402**	**3 618**	15 101	4 866	14 592	4 147
Total notionals	**15 402**	**3 618**	15 101	4 866	14 592	4 147
Fair values	**(924)**	**983**	60	(15)	45	5
– Positive fair value (asset)	**297**	**1 129**	476	1 000	435	920
– Negative fair value (liability)	**(1 221)**	**(146)**	(416)	(1 015)	(390)	(915)

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

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 31 December 2017		As at 31 December 2016		As at 30 June 2017	
R million	EAD post-CRM	RWA	EAD post-CRM	RWA	EAD post-CRM	RWA
2. Exposures for trade at qualifying central counterparties (excluding initial margin and default fund contributions); of which:	**4 125**	**82**	4 363	88	3 155	63
3. – OTC derivatives	**701**	**14**	383	8	718	14
4. – Exchange-traded derivatives	**3 424**	**68**	3 980	80	2 437	49
7. Segregated initial margin*	**6 888**	**–**	9 088	–	9 109	–
9. Pre-funded default fund contributions**	**302**	**158**	322	168	319	143
1. **Total exposures to qualifying central counterparties#**	**11 315**	**240**	13 773	256	12 583	206

* *RWA is not determined on segregated initial margin.*
** *December 2016 and June 2017 restated due to refinement in methodology.*
\# *There were no exposures to non-qualifying central counterparties (rows 11 – 20 of the CCR8 template) for the period.*

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 typically higher credit ratings than its own corporate 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 both 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 itself a securitisation exposure.

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

The group's role in securitisation and conduit structures

Transaction	Originator	Sponsor	Servicer	Investor	Liquidity provider	Credit enhancement provider	Swap counterparty
Own securitisations							
FAST	✓	✓	✓	✓			✓
MotoFirst	✓	✓	✓	✓			
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 it have affiliated entities that invest in securitisation exposures that the group has securitised.

The ultimate responsibility for determining risk appetite and limits vests with the board. Independent oversight and monitoring is conducted via the RCC committee, which in turn delegated the responsibility for securitisation exposures to group ALCCO. ALCCO is also responsible for the allocation of sublimits 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 vehicles (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 unit as if the securitisation had never occurred. Resultant risks from retained exposures and the overall origination and maintenance of securitisation structures are covered as part of the day-to-day management of the various risk types. This includes risk mitigation and management actions depending on risk limits and appetite per risk area. Securitisation performance is monitored on an ongoing basis and reported to management and governance forums.

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

- rigorous internal approval processes are in place for proposed securitisations, and transactions are reviewed by ALCCO, the RCC committee and the board against approved 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 and FirstRand Bank SA 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.

Period under review

TURBO FINANCE 4

With the remaining Turbo 4 assets representing less than 10% of the initial assets sold, the clean-up call option was exercised. The legal process to repurchase the outstanding assets was completed in June 2017, with all notes fully redeemed in July 2017.

MOTONOVO SYNDICATED ISSUANCE (MOTOFIRST)

In October 2017, a new syndicated warehouse for the FirstRand Bank London Branch balance sheet was finalised. The MotoFirst warehouse was structured and funded by a syndicate of banks.

External credit assessment institutions (ECAIs)

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 Investors Service (Moody's), S&P, Fitch Ratings (Fitch) and Global Credit Rating Co (GCR). The following tables show the traditional securitisations currently in issue, the ECAIs that rate the transaction and 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
Nitro 5	Retail: Auto loans	S&P	2015	2023
FAST Issuer	Retail: Auto loans		2016	2025
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
MotoFirst	Retail: Auto loans		2017	2026
MotoHouse	Retail: Auto loans		2015	2023

		Assets outstanding**			Notes outstanding			Retained exposure		
R million	Assets securitised	Dec 2017	Dec 2016	Jun 2017	Dec 2017	Dec 2016	Jun 2017	Dec 2017	Dec 2016	Jun 2017
Nitro 5	2 400	**406**	926	640	**466**	1 023	710	**226**	226	226
FAST Issuer	6 709	**6 222**	6 258	6 293	**6 047**	6 588	6 385	**1 723**	1 754	1 778
Turbo Finance 4	6 095	**–**	1 082	562	**–**	1 207	660	**–**	362	292
Turbo Finance 5	7 790	**1 055**	2 948	1 831	**1 168**	3 161	2 012	**327**	1 040	632
Turbo Finance 6	8 839	**3 740**	6 456	5 271	**1 430**	6 674	5 532	**941**	2 074	1 520
Turbo Finance 7	9 669	**6 813**	8 974	9 297	**7 104**	9 689	9 727	**369**	599	602
MotoFirst	7 345	**7 345**	–	–	**7 687**	–	–	**783**	–	–
MotoHouse	5 668	**4 756**	4 870	4 860	**4 994**	5 084	5 112	**345**	351	353
Total	54 515	**30 337**	31 514	28 754	**28 896**	33 426	30 138	**4 714**	6 406	5 403

* *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 31 December 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	**4 714**	**31**	**24 340**	**–**	**29 085**
6. **Corporate**					
7. – Loans to corporates	**–**	**–**	**–**	**4 282**	**4 282**
Total	**4 714**	**31**	**24 340**	**4 282**	**33 367**

	As at 31 December 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	6 407	31	17 914	–	24 351
6. **Corporate**					
7. – Loans to corporates	–	–	–	3 601	3 601
Total	6 407	31	17 914	3 601	27 952

	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

There were no credit card and resecuritisation exposures in the retail portfolio (rows 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	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 period.

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

	As at 31 December 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	**2 129**	**–**	**–**	**482**	**2 133**	**31**	**1 307**	**1 873**	**1 534**
5. – Corporate	**–**	**4 282**	**–**	**–**	**–**	**–**	**–**	**4 282**	**–**
Total	**2 129**	**4 282**	**–**	**482**	**2 133**	**31**	**1 307**	**6 155**	**1 534**

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

	As at 31 December 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	3 809	282	223	683	1 441	31	1 344	3 622	1 441
5. – Corporate	–	3 601	–	–	–	–	44	3 557	–
Total	3 809	3 883	223	683	1 441	31	1 388	7 179	1 441

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

	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 period.*

	As at 31 December 2017							
	RWA by regulatory approach				Capital charge after cap			
	IRB		SA		IRB		SA	
	RBA	SFA	SSFA	1250%	RBA	SFA	SSFA	1250%
	7	**97**	**1 846**	**26 667**	**1**	**11**	**217**	**3 133**
	–	**–**	**907**	**–**	**–**	**–**	**107**	**–**
	7	**97**	**2 753**	**26 667**	**1**	**11**	**324**	**3 133**

	As at 31 December 2016							
	RWA by regulatory approach				Capital charge after cap			
	IRB		SA		IRB		SA	
	RBA	SFA	SSFA	1250%	RBA	SFA	SSFA	1250%
	7	100	3 241	18 011	1	11	348	1 936
	–	10	1 012	–	–	1	109	–
	7	110	4 253	18 011	1	12	457	1 936

	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	18 628	1	11	318	2 002
	–	–	940	–	–	–	101	–
	7	98	3 902	18 628	1	11	419	2 002

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

	As at 31 December 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	**24 340**	**101**	**24 239**	**11**	**1 799**	**1**	**211**
5. – Corporate	**–**	**–**	**–**	**–**	**–**	**–**	**–**
Total	**24 340**	**101**	**24 239**	**11**	**1 799**	**1**	**211**

* There were no resecuritisations or synthetic securitisations (rows 6 – 15 of the SEC4 template) during the period.
** 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 period.

	As at 31 December 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	17 914	101	17 813	11	1 322	1	142
5. – Corporate	–	–	–	–	–	–	–
Total	17 914	101	17 813	11	1 322	1	142

* There were no resecuritisations or synthetic securitisations (rows 6 – 15 of the SEC4 template) during the period.
** 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 period.

	As at 30June 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	11	1 426	1	153
5. – Corporate	–	–	–	–	–	–	–
Total	19 325	101	19 224	11	1 426	1	153

* There were no resecuritisations or synthetic securitisations (rows 6 – 15 of the SEC4 template) during the period.
** 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 period.

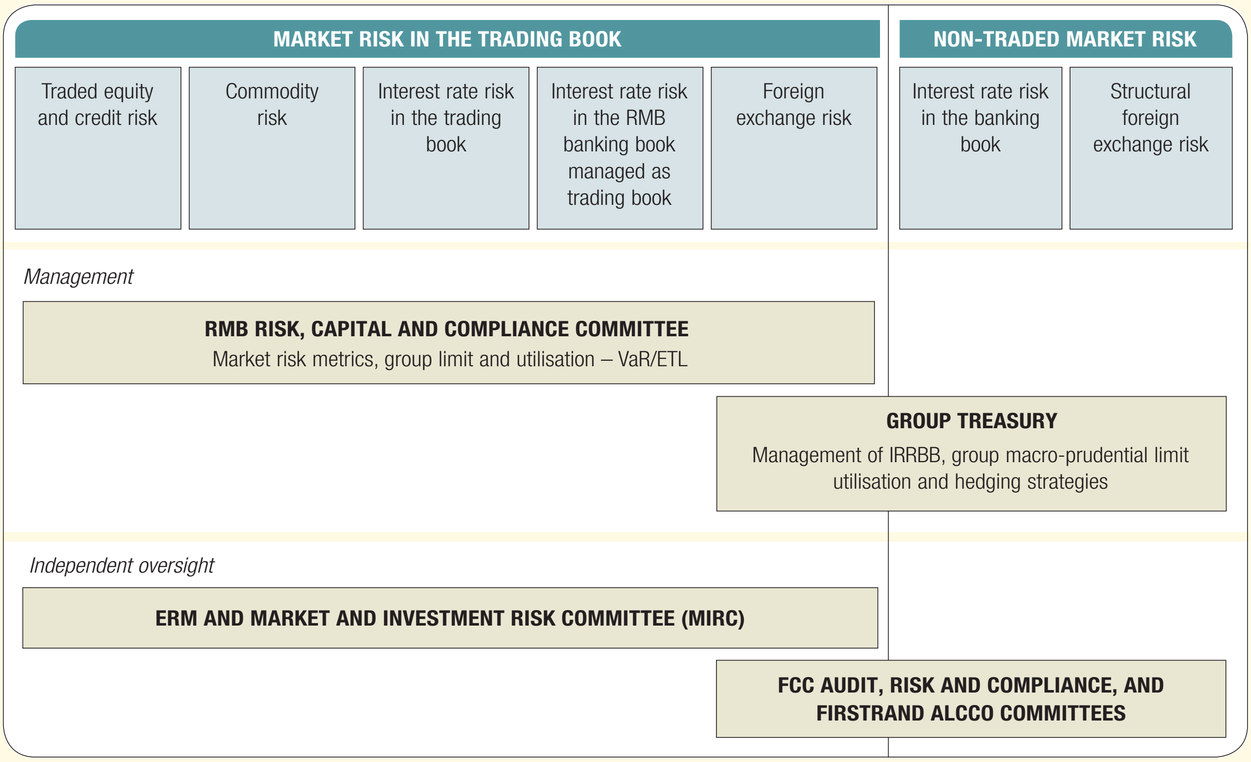
MARKET RISK IN THE TRADING BOOK

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 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 R33 million on a 10-day ETL basis at 31 December 2017 (December 2016: R80 million). Interest rate risk in the remaining domestic banking book is discussed in the *interest rate risk in the banking book* section.

Period under review and focus areas

PERIOD UNDER REVIEW	RISK MANAGEMENT FOCUS AREAS
• Overall diversified levels of market risk remained relatively unchanged over the period. There are no significant concentrations in the portfolio. • The increase in market risk across the group emanated mainly from the group's subsidiaries in the rest of Africa.	• 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 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.

Business unit management and risk 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 30 September 2017**	**3 681**	**6 435**	**10 116**
2. Movement in risk levels	**657**	**1 308**	**1 965**
8. **RWA at 31 December 2017**	**4 338**	**7 743**	**12 081**

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

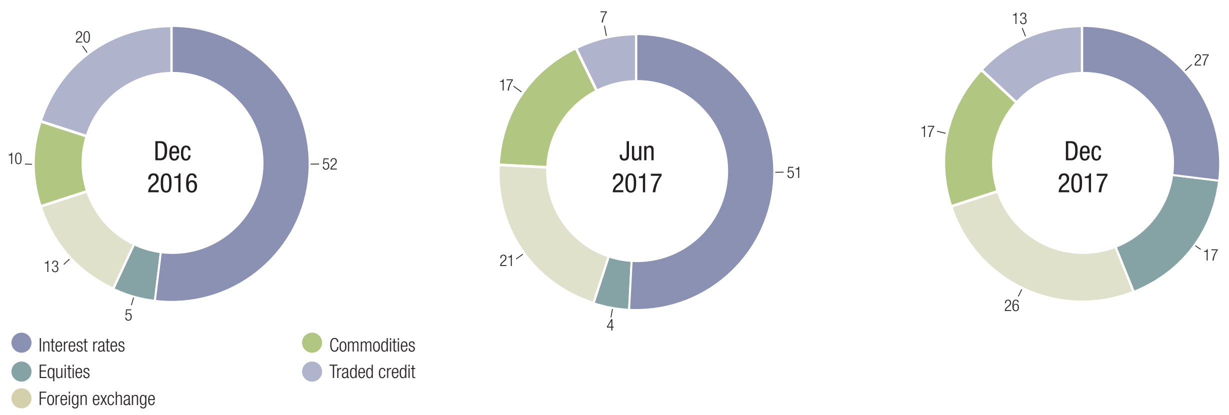
The movement in market RWA for the period ended 31 December 2017 relates to normal business activities.

VaR exposure per asset class

The following chart shows the distribution of exposures per asset class across the group's trading activities at 31 December 2017 based on the VaR methodology. The interest rate asset class represented the most significant exposure at period 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. 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.

MR3: IMA values for traded market risk

	FirstRand Bank SA*		
R million	As at 31 December 2017	As at 31 December 2016	As at 30 June 2017
VaR (10-day 99%)			
1. Maximum value	**105**	489	489
2. Average value	**65**	250	155
3. Minimum value	**40**	154	31
4. Period end	**71**	217	54
sVaR (10-day 99%)			
5. Maximum value	**184**	302	302
6. Average value	**120**	106	113
7. Minimum value	**80**	69	57
8. Period end	**116**	107	121
VaR (1-day 99%)			
Maximum value	**67**	126	126
Average value	**37**	53	41
Minimum value	**23**	25	19
Period end	**50**	36	30

* *FirstRand Bank SA excludes foreign branches.*

MR3: IMA values for non-traded market risk

		FirstRand Bank SA*		
	R million	As at 31 December 2017	As at 31 December 2016	As at 30 June 2017
	VaR (10-day 99%)			
1.	Maximum value	**217**	199	199
2.	Average value	**48**	88	88
3.	Minimum value	**24**	12	12
4.	Period end	**42**	165	40
	sVaR (10-day 99%)			
5.	Maximum value	**356**	280	280
6.	Average value	**99**	135	135
7.	Minimum value	**41**	40	40
8.	Period end	**93**	232	73
	VaR (1-day 99%)			
	Maximum value	**101**	99	99
	Average value	**19**	44	39
	Minimum value	**10**	6	6
	Period end	**18**	82	15

* *FirstRand Bank SA excludes foreign branches.*

MR3: IMA values for total market risk

		FirstRand*			FirstRand Bank SA**		
	R million	As at 31 December 2017	As at 31 December 2016	As at 30 June 2017	As at 31 December 2017	As at 31 December 2016	As at 30 June 2017
	VaR (10-day 99%)						
1.	Maximum value	**197**	387	387	**153**	377	377
2.	Average value	**102**	210	160	**85**	198	149
3.	Minimum value	**64**	114	49	**57**	101	41
4.	Period end	**130**	177	88	**89**	158	79
	sVaR (10-day 99%)						
5.	Maximum value	**341**	313	348	**272**	313	319
6.	Average value	**173**	150	172	**159**	150	169
7.	Minimum value	**97**	87	87	**97**	87	87
8.	Period end	**164**	288	201	**154**	288	188
	VaR (1-day 99%)						
	Maximum value				**95**	90	104
	Average value				**45**	56	49
	Minimum value				**26**	32	19
	Period end				**62**	90	37

* *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.*

Higher VaR and sVaR numbers in June 2017 and December 2016 were due to a higher risk position for a small number of days during the volatile market period of December 2015, which impacted reported VaR and sVaR numbers. VaR and sVaR numbers at December 2017 have normalised to a lower level as expected, as December 2015 risk positions were excluded from the 260 days' trading data for December 2017.

Other than sVaR which showed a marginal increase from December 2016 to December 2017 due to foreign exchange contract transactions concluded by Group Treasury during the period, the risk position remained consistent with the previous period.

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).

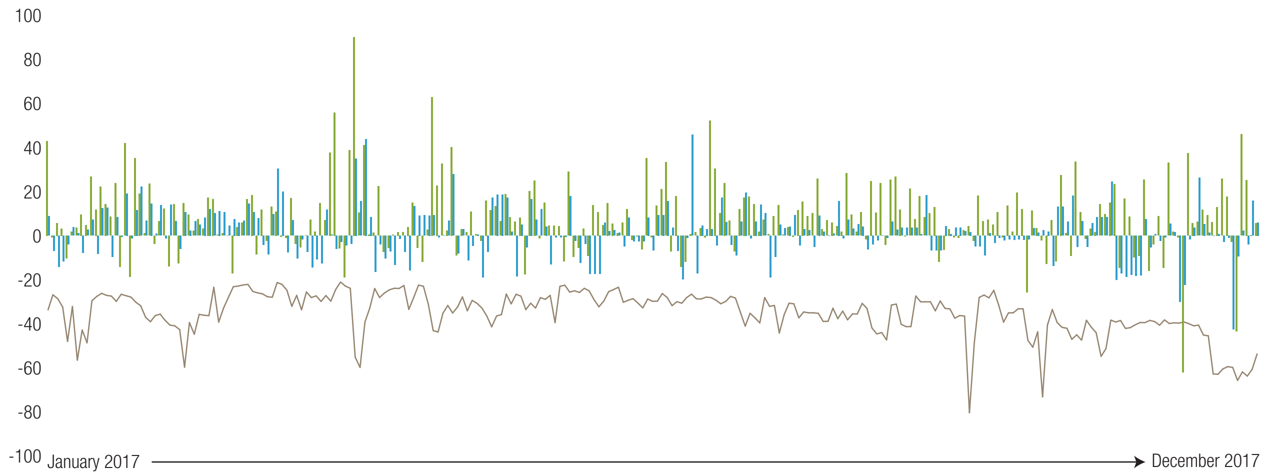
The regulatory standard for back testing is to measure daily actual and hypothetical changes in portfolio value against VaR at the 99th percentile (1-day holding period equivalent). The number of breaches over a period of 250 trading days is calculated, and, should the number exceed that which is considered 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 period.

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

(R million)



Regulatory trading book earnings
Hypothetical gain/loss
99%, 1-day VaR (including diversification benefit)

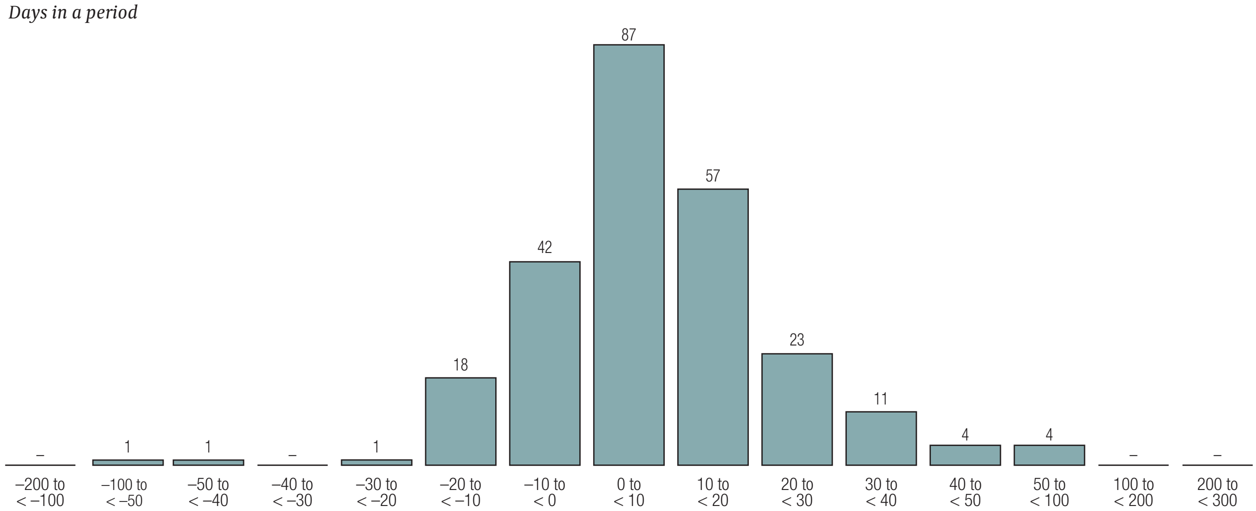
Trading book earnings exceeded 1-day VaR on one occasion during the period. This indicates a good quantification of market risk provided by the group's internal model.

Distribution of daily trading earnings from trading units

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

FirstRand Bank SA distribution of daily earnings – frequency

Days in a period



December 2017

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.

MR1: Market risk under standardised approach – risk weighted assets

	RWA		
R million	As at 31 December 2017	As at 31 December 2016	As at 30 June 2017
Outright products			
1. Interest rate risk	**5 563**	3 192	8 422
– Specific risk*	**3 359**	2 917	7 658
– General risk	**2 204**	275	764
2. Equity risk	**525**	325	649
– Specific risk	**523**	324	643
– General risk	**2**	1	6
3. Foreign exchange risk	**2 595**	1 706	2 192
– Traded market risk	**132**	137	131
– Non-traded market risk	**2 463**	1 569	2 061
4. Commodity risk	**–**	–	–
9. **Total**	**8 683**	5 223	11 263

* *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.*

Market risk was contained within acceptable stress loss limits and effectively managed across the subsidiaries during the period under review. Options are capitalised using IMA (rows 5 – 7 of the MR1 template are excluded) (refer to *MR3: IMA values for traded market risk* table on page 114), and securitisations (row 8 of the MR1 template excluded) are capitalised under the securitisation framework (refer to the *securitisation* section).

The increase in interest rate general risk resulted from the group's subsidiaries in the rest of Africa, and was mainly a result of increased activity in the fixed income market. The increase in foreign exchange risk is largely due to increased growth in the MotoNovo loan book, which is denominated in GBP.

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 (IRRBB) 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.

Period under review and focus areas

PERIOD UNDER REVIEW	RISK MANAGEMENT FOCUS AREAS
• The SARB cut interest rates by 25 bps in July 2017, which had a negative endowment impact on the group's earnings.	• The BCBS, through the task force for IRRBB, has published a more robust regulation for IRRBB. 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

First line of control

Second line of control

FIRSTRAND BOARD

STRATEGIC EXECUTIVE COMMITTEE

FINANCIAL RESOURCE MANAGEMENT COMMITTEE

GROUP TREASURY

- manages IRRBB for FNB, WesBank and Group Treasury;
- manages structural foreign exchange risk as a result of investment in foreign subsidiaries and branches; and
- provides oversight and reporting of group utilisation of foreign currency macro-prudential and regulatory limits.

IRRBB and structural foreign exchange risk are managed in line with the group's macroeconomic outlook and available hedging instruments in the market.

RCC COMMITTEE

GROUP ALCCO

- provides oversight of asset and liability management functions and ALCCOs in South African and foreign entities; and
- monitors implementation of market risk in the banking book framework.

The market risk in the banking book framework (a subframework of BPRMF) prescribes the standards, principles and policies for effective interest rate and foreign exchange risk in the banking book.

INTERNATIONAL ALCCO

Oversight of IRRBB for foreign entities.

FCC RISK MANAGEMENT

- supports management in identifying and quantifying key ALM risks;
- ensures that board-approved risk policies, frameworks, standards, methodologies and tools are adhered to; and
- compiles, analyses and escalates risk reports on performance, risk exposures and corrective actions.

ASSESSMENT AND MANAGEMENT

FirstRand Bank SA

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 R210 billion for the six months ended 31 December 2017. 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 31 December 2017		
	Change in projected 12-month NII		
R million	FirstRand Bank	Subsidiaries in the rest of Africa and foreign branches	FirstRand
Downward 200 bps	**(2 072)**	**(569)**	**(2 641)**
Upward 200 bps	**1 504**	**399**	**1 903**

	As at 31 December 2016		
	Change in projected 12-month NII		
R million	FirstRand Bank	Subsidiaries in the rest of Africa and foreign branches	FirstRand
Downward 200 bps	(1 411)	(482)	(1 893)
Upward 200 bps	996	357	1 353

	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

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 641 million. A similar increase in interest rates would result in an increase in projected 12-month NII of R1 903 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 31 December 2017	As at 31 December 2016	As at 30 June 2017	As at 31 December 2017	As at 31 December 2016	As at 30 June 2017
Downward 200 bps	**2.74**	3.37	2.53	**2.10**	2.57	1.91
Upward 200 bps	**(2.39)**	(2.93)	(2.26)	**(1.84)**	(2.23)	(1.71)

The increase in NAV sensitivity in this period is attributable to active management of strategic hedges. The group has increased its endowment book hedge position relative to the prior period 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.

Period under review and focus areas

PERIOD UNDER REVIEW	RISK MANAGEMENT FOCUS AREAS
• Continued to strengthen principles for 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 period.

Net structural foreign exposures

	As at 31 December 2017		As at 31 December 2016		As at 30 June 2017	
R million	Exposure	Impact on equity from 15% currency translation shock	Exposure	Impact on equity from 15% currency translation shock	Exposure	Impact on equity from 15% currency translation shock
Functional currency						
Botswana pula	**3 941**	**591**	3 422	513	3 819	573
United States dollar	**3 578**	**537**	2 964	445	3 696	554
Sterling	**3 369**	**505**	1 933	290	3 015	452
Nigerian naira	**994**	**149**	1 003	150	1 069	160
Australian dollar	**756**	**113**	981	147	756	113
Zambian kwacha	**805**	**121**	783	117	1 004	151
Mozambican metical	**536**	**80**	553	83	520	78
Indian rupee	**659**	**99**	727	109	634	95
Ghanaian cedi	**371**	**56**	435	65	403	60
Tanzanian shilling	**563**	**85**	783	117	539	81
Common Monetary Area (CMA) countries*	**6 176**	**926**	4 804	721	5 876	881
Total	**21 748**	**3 262**	18 388	2 757	21 331	3 198

* *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 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. 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.

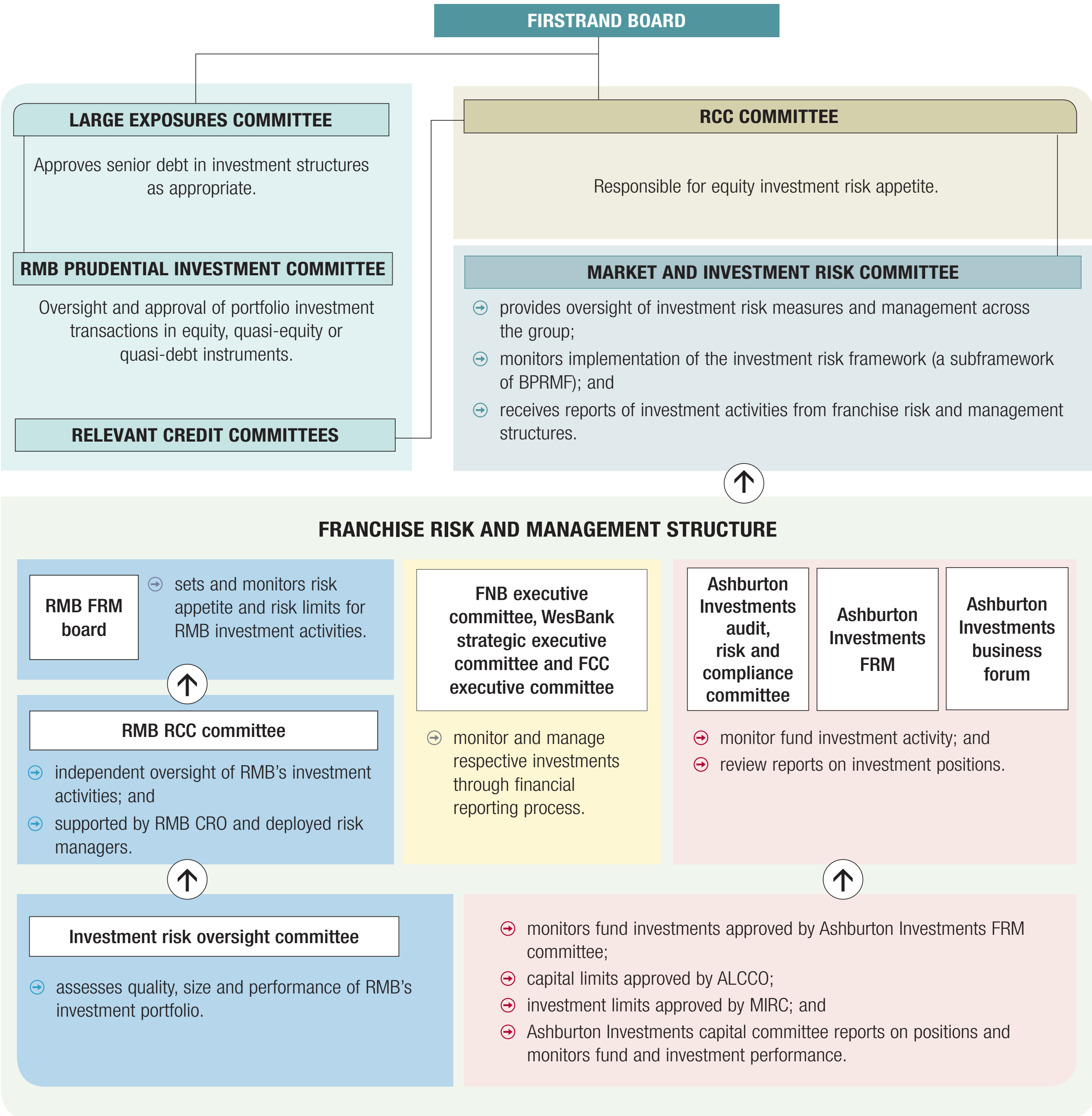
To ensure that banks have appropriate incentives to enhance the management of exposures, the degree of conservatism increases with each successive approach. The BCBS also incorporated a leverage adjustment to RWAs derived from the above approaches to appropriately reflect a fund's leverage. The date 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.

Period under review and focus areas

PERIOD UNDER REVIEW	RISK MANAGEMENT FOCUS AREAS
• Private Equity made several investments and had a few small realisations in the six months to December 2017. • The unrealised value of RMB Private Equity's portfolio declined to R3.4 billion (December 2016: R4.4 billion; June 2017: R3.7 billion) due to the recent realisations.	• Opportunities to exit the last remaining non-performing exposure in the RMB Resources portfolio continue to be explored. • Prepare for the introduction of the new BCBS standard for 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 period under review, the private equity portfolio made several investments and had several small realisations. The unrealised value of the private equity investments at 31 December 2017 was R3.4 billion (December 2016: R4.4 billion; June 2017: R3.7 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

R million	As at 31 December 2017	As at 31 December 2016	As at 30 June 2017
Listed investment risk exposure included in the equity investment risk ETL process	**55**	64	21
ETL on above equity investment risk exposures	**–**	4	–
Estimated sensitivity of remaining investment balances			
Sensitivity to 10% movement in market value on investment fair value	**217**	343	367
Cumulative gains realised from sale of positions in the banking book during the period*	**437**	125	1 416

* *The cumulative gains realised from sale of positions in the banking book is related to the private equity realisations during the period under review.*

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

	As at 31 December 2017				
R million	**On-balance sheet amount**	**Off-balance sheet amount**	**Risk weight**	**Exposure amount**	**RWA**
Categories					
Exchange-traded equity exposures*	**318**	**–**	**300%**	**318**	**1 011**
Private equity exposures*	**5 765**	**215**	**400%**	**5 980**	**25 357**
Subtotal**	**6 083**	**215**		**6 298**	**26 368**
Financial and insurance entities	**3 599**	**–**	**250%**	**3 599**	**8 998**
Total	**9 682**	**215**		**9 897**	**35 366**

* *Includes 6% scalar.*
** *Line 7 of table OV1: Overview of RWA includes R3 489 million of other assets and therefore differs from subtotal.*

	As at 31 December 2016				
R million	On-balance sheet amount	Off-balance sheet amount	Risk weight	Exposure amount	RWA
Categories					
Exchange-traded equity exposures*	654	–	300%	654	2 080
Private equity exposures*	5 439	534	400%	5 973	25 327
Subtotal	6 093	534		6 627	27 407
Financial and insurance entities	3 501	–	250%	3 501	8 753
Total	9 594	534		10 128	36 160

* *Includes 6% scalar.*

	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.*

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

Investment valuations and associated regulatory capital requirements

R million	As at 31 December 2017		
	Publicly quoted investments	**Privately held investments**	**Total**
Carrying value of investments	**318**	**9 579**	**9 897**
Per risk bucket			
250% – Basel III investments in financial entities	**–**	**3 599**	**3 599**
300% – listed investments	**318**	**–**	**318**
400% – unlisted investments	**–**	**5 980**	**5 980**
Latent revaluation gains not recognised in the balance sheet*	**–**	**607**	**607**
Fair value	**318**	**10 186**	**10 504**
Total unrealised gains recognised directly in the balance sheet through equity instead of the income statement*	**–**	**–**	**–**
Capital requirement**	**112**	**3 822**	**3 934**

* *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.*

R million	As at 31 December 2016		
	Publicly quoted investments	Privately held investments	Total
Carrying value of investments	654	9 474	10 128
Per risk bucket			
250% – Basel III investments in financial entities	–	3 501	3 501
300% – listed investments	654	–	654
400% – unlisted investments	–	5 973	5 973
Latent revaluation gains not recognised in the balance sheet*	–	1 516	1 516
Fair value	654	10 990	11 644
Total unrealised gains recognised directly in the balance sheet through equity instead of the income statement*	–	170	170
Capital requirement**	216	3 536	3 752

* *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.*

R million	As at 30 June 2017		
	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.*

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, accidental death plans, risk policies, credit life policies (against FNB credit products) and health cash plans. These policies are all originated through the FNB franchise.

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. Health cash plans pay a benefit per day that a policyholder is hospitalised. 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.

Policies underwritten by FirstRand Life are 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 these are not guaranteed.

Period under review and focus areas

PERIOD UNDER REVIEW	RISK MANAGEMENT FOCUS AREAS
• Approval was received to write fund business on FirstRand Life's long-term insurance licence. • The funeral product was revamped, introducing improved benefits and terms and conditions.	• Continue to monitor incidence rates, claims ratios and business mix of funeral sales. • Allocation of capital. • Operationalisation of risk appetite statements.

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 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 its insurance risk through monitoring incidence rates, claims ratios and business mix. Risk policies sold to its premium customer segment are underwritten. This allows underwriting limits and risk-based pricing to be applied to manage the insurance risk. Where specific channels introduce the risk of anti-selection, mix of business by channel is monitored. There are also reinsurance agreements in place to mitigate various insurance risks and 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 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 business needs, 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.

Period under review and focus areas

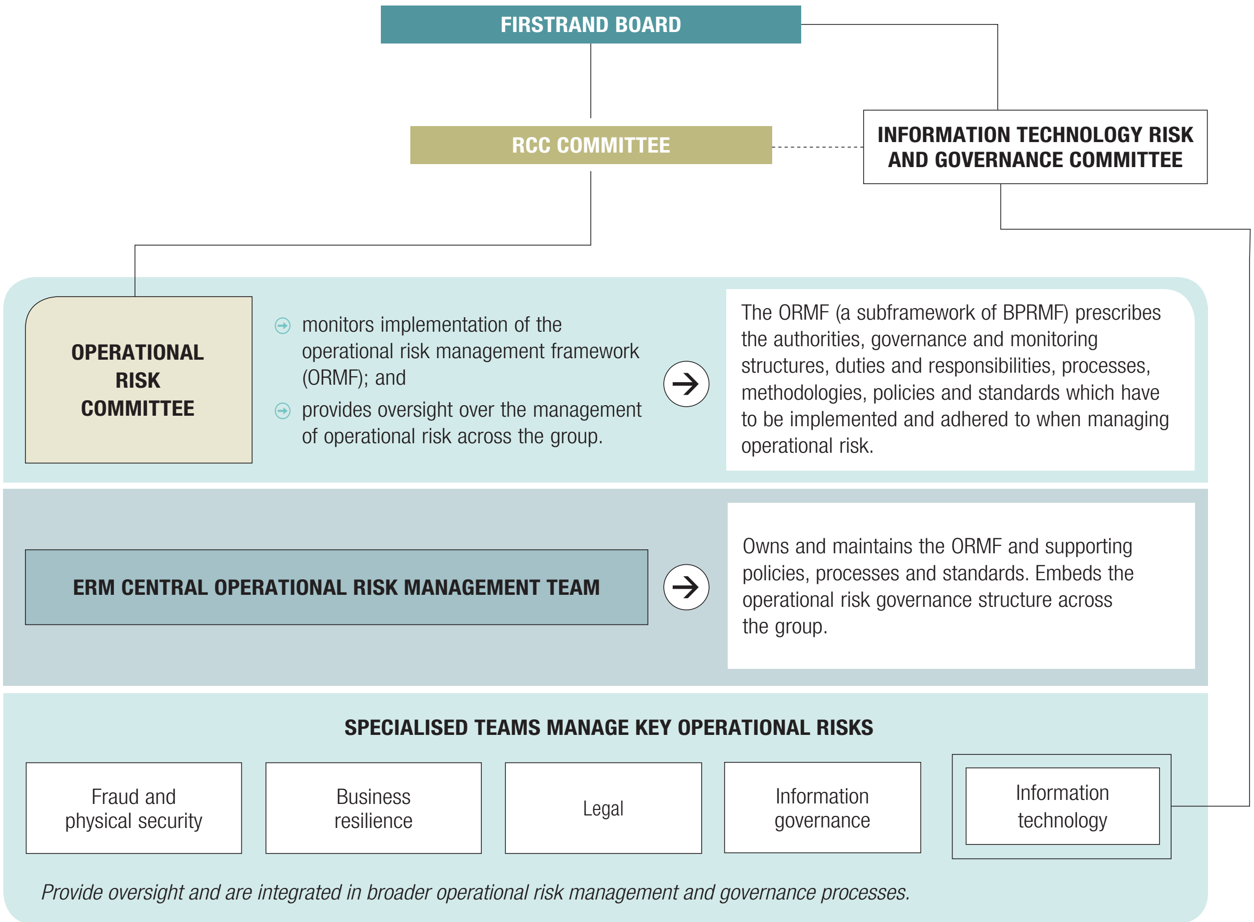
There are ongoing control improvement initiatives aimed at addressing key operational risk themes, mitigating emerging risks and improving operational risk maturity. The progress on these initiatives and impact on the operational risk profile is tracked and reported on regularly at franchise and group level through the management, combined assurance and risk governance processes 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:

- **cyber risk** (including information security), given the growing sophistication of cyberattacks locally and globally;
- **commercial and violent crime** (including internal fraud);
- **business disruption** due to external factors and the associated impact on operations;
- **execution, delivery and process management risk** (risk of process weaknesses and control deficiencies) as the business continues to grow and evolve; and
- **third-party risk** due to lack of direct control over external service providers.

PERIOD UNDER REVIEW	RISK MANAGEMENT FOCUS AREAS
• Assessed the risk management treatment of critical third-party service providers and key insourced arrangements against group defined minimum standards. • Monitored and reported risk acceptance through the risk governance process. • Continued to ensure compliance with Basel principles for risk data aggregation and reporting. • Reviewed and updated contingency plans to manage business resilience risks associated with water supply shortages and mass protest action, given the current external environment. • Enhanced review, governance and oversight of cloud services. • Assessed the impact on the group of the changes to the BCBS's operational risk capital approach. • Process automation projects continued to reduce manual processes and improve controls. • Upgraded key facilities and infrastructure with completion planned for 2018. • Continued to review, test 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.	• 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 (including cloud services) and key interfranchise insourcing. • Enhance value and use of operational risk management information and analysis to business. • Address gaps relating to BCBS 239. • Prioritise operational risk management activities to support execution of strategy and strengthen key controls. • Continuously assess the risks inherent in increasing digitisation and innovative business solutions. • 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, e.g. 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 drive certain types of operational risk (e.g. rising civil protest actions, water supply shortages, etc.).

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. Operational losses are measured against the agreed operational risk appetite levels on a regular basis.

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. • Ensures 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 RCRM. • 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 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 (employees) 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 already capitalised for 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 (this 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 CHANGES	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 risk exposure from volume and margin changes, the group performs trend analyses of its revenue volatility, pre-tax operating margin, cost-to-income ratio and 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 analysis of root causes that could lead to additional unexpected capital injections, as well as frequent monitoring and 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 risk types. Volume and margin changes, as well as expansion activities are considered as 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 lending due diligence 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 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, identification, management and mitigation of environmental, social and climate related risks and maximising 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, e.g. 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

INTRODUCTION AND OBJECTIVES

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.

Period under review and focus areas

PERIOD UNDER REVIEW	RISK MANAGEMENT FOCUS AREAS
• Completed rollout of model risk management software for credit risk regulatory capital and IFRS 9 models. • Commenced rollout of model risk management software for 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

FIRSTRAND BOARD

RCC COMMITTEE

Reviews reports on the adequacy and robustness of model risk management.

MODEL RISK AND VALIDATION COMMITTEE

- Considers and approves material aspects of model validation work including:
  - credit risk capital models, credit ratings and estimations;
  - internal models for market risk;
  - AMA operational risk models; and
  - economic capital models.
- Monitors implementation of model risk management principles and MRMF for credit, market, operational and other risks.

The model risk management framework (MRMF) for credit, market, operational and other risks prescribes the roles and responsibilities across the model life cycle and risk-sensitive model governance and validation requirements.

Retail and SME retail credit technical committee

Wholesale and SME corporate credit technical committee

Reviews and approves credit risk models for:

- application and behavioural scorecards;
- provisioning and impairment;
- regulatory and economic capital; and
- stress testing.

Market risk technical committee

Reviews and approves IMA market risk quantitative models, including models for instrument valuation, curve construction, and regulatory and economic capital.

Operational risk technical committee

Validates AMA capital model annually and performs additional validation of model changes.

Other risk technical committee

Reviews and approves economic capital for business risk, other asset risk, model risk, insurance risk, and post-retirement and medical aid risk.

Group Treasury model risk technical committee

Reviews and approves Group Treasury models including interest rate risk and foreign exchange risk in the banking book, liquidity risk, securitisation risk, funds transfer pricing and associated economic capital.

ERM

- Independent validation of credit risk, operational risk and economic capital models.

GIA

- Independent assurance of credit risk, operational risk and economic capital models.

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 simultaneously. 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 and conduct risk

INTRODUCTION AND OBJECTIVES

Regulatory and conduct 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.

Regulatory and conduct risk management 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 and conduct 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. - Ensure appropriate policies, standards and processes are in place to mitigate risk of abuse of the group's banking platforms for unlawful purposes. - Training of employees 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 RCRM 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 and Combatting 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. RCRM assists senior management in effectively and expeditiously resolving identified ethics, conduct and compliance issues. RCRM interacts and cooperates closely with other group and franchise functions, as well as the group's various regulatory and conduct authorities.

Period under review and focus areas

PERIOD UNDER REVIEW	RISK MANAGEMENT FOCUS AREAS
• The Financial Intelligence Centre Amendment Act was signed by the President on 26 April 2017 and gazetted on 2 May 2017. The Minister of Finance pronounced the operationalisation of various provisions thereof with different sections of the Act being operationalised on different dates. In this regard, amended regulations and new guidance were published. These inform the group's current initiatives designed to comply with this Act. • It is expected that the Minister of Finance will make further announcements to when the provisions of the Financial Sector Regulation Act, 2017 will take effect. • It is expected that the Regulations relating to Banks will be 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 FIC Act, NCA, FAIS Act 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 risks posed by clients and other external stakeholders. • Continue to focus on managing organisational culture risk detection, prevention and remediation, which supports regulatory and conduct risk management. • Ongoing focus on remediation actions required in respect of identified regulatory and conduct 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 Financial Sector Regulation Act, 2017, which was signed into law on 21 August 2017, will give effect to government's 2011 decision to implement a twin peaks system of financial sector regulation in South Africa. In this regard, the Prudential Authority will take effect on 1 April 2018.

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 and conduct risks. The group will continue to work closely with its regulators on matters pertaining to the above.

Some of the policy priorities identified in 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
Enhancement of safety and soundness of financial institutions
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 completed; and
- it is expected that the Minister of Finance will make further announcements on when the provisions of the FSR Act, 2017 will become effective.

↓

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 period are described in the following diagram.

Regulatory developments and RCRM focus areas

PROTECTION OF PERSONAL INFORMATION ACT (PoPIA)

- In South Africa, 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.
- In the group's offshore operations, various privacy laws apply and the most notable is the General Data Protection Regulations (GDPR), which come into effect on 25 May 2018. There is also a focus to adhere to the requirements from the GDPR by these operations, also devoting the necessary attention and resources to comply.
- Assessing impact of GDPR.

FINANCIAL CRIME RISK MANAGEMENT

- The group's objective is to ensure compliance with the provisions of AML/CFT legislation, the Financial Intelligence Centre Amendment Act and other requirements pertaining thereto.
- Leads the group's anti-bribery and corruption practices, including risk assessments, training and guidance, third-party anti-bribery and corruption risk management.
- A number of initiatives are underway in anticipation of changes required under new legislation.
- Ongoing focus on implementation of the Financial Intelligence Centre's AML system reporting requirements.
- Continued participation in industry engagements on various matters.

MARKET CONDUCT

- Informs the group's market conduct programme activity.
- Participation in industry and regulatory engagements regarding the implementation of Retail Distribution Review in respect of the Conduct of Financial Institutions Bill.
- Project planning to implement new FAIS fit-and-proper 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.
- Coordinates and provides advice on client desirability review processes.

THE NATIONAL CREDIT ACT

- Ongoing NCA compliance programme.
- Ongoing regulatory liaison and engagement.
- Ongoing reviews relating to topical credit risk areas.
- Participation in BASA workstreams and discussions in respect of the Draft National Credit Amendment Bill.

Conduct risk

INTRODUCTION AND OBJECTIVES

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.

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.

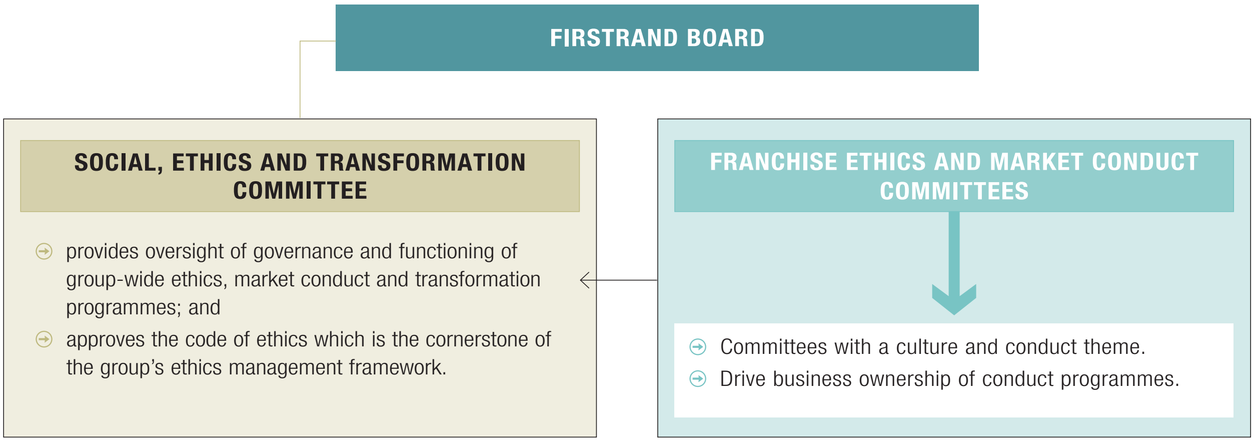
Leadership is required to integrate ethics and conduct risk objectives, especially in respect of market conduct, into commercial strategies. For this reason, strategy and leadership and the intersect with culture and conduct are continuously evaluated.

Period 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 period.

PERIOD 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 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.

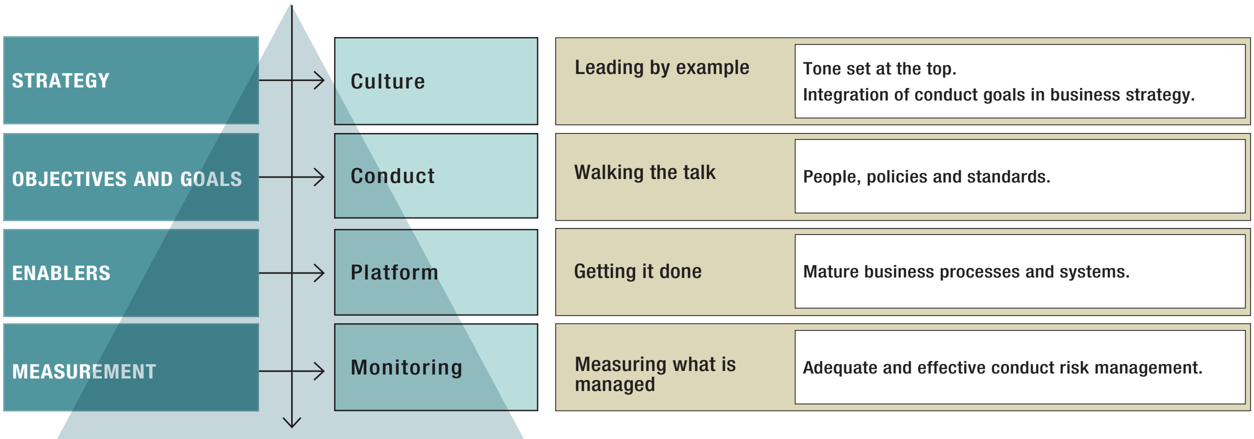
ORGANISATIONAL STRUCTURE AND GOVERNANCE



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.

ORGANISATIONAL STRUCTURE AND GOVERNANCE

Regulatory and conduct risk governance structure

FIRSTRAND BOARD

RCC COMMITTEE | **AUDIT COMMITTEE**

- receive regular reports on levels of compliance and instances of material non-compliance.

SOCIAL, ETHICS AND TRANSFORMATION COMMITTEE

- provides oversight of governance and functioning of group-wide ethics programme;
- approves the code of ethics which is the cornerstone of the group's ethics management framework; and
- oversight of business and market conduct risk management.

COMPLIANCE AND CONDUCT RISK COMMITTEE

- provides oversight over regulatory as well as conduct risk management, including AML/CFT, in line with recent amendments to the committee's terms of reference; and
- monitors implementation of the regulatory risk management framework.

FRANCHISE COMPLIANCE OFFICERS

- implement and monitor compliance policies and procedures related to the relevant franchise.

RCRM FUNCTION

RCRM has an independent reporting line to the group deputy CEO, and the relevant executive and board oversight committees.

- coordinates management of group regulatory risk;
- monitors, assesses and reports on the level of compliance to senior management and the board; and
- fulfils duties and responsibilities in line with requirements prescribed in Regulation 49.

RCRM's board mandate is to facilitate the management of compliance with statutes and regulations. To achieve this, RCRM has implemented appropriate governance arrangements, including structures, policies, processes and procedures to identify and manage regulatory and supervisory risks. RCRM 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 RCRM 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 deputy CEO and indirectly, through designated subcommittees, to the board and maintains close working relationships with RCRM, ERM and business units where specific technical expertise resides.

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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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
AML/CFT	Anti-money laundering and combatting the financing of terrorism
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
FAIS Act	Financial Advisory and Intermediary Serices Act
FIC Act	Financial Intelligence Centre Act
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
NCA	National Credit Act
NSFR	Net stable funding ratio
PD	Probability of default
PoPIA	Protection of Personal Information Act
RWA	Risk weighted assets
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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