FirstRand

’18 basel pillar 3 disclosure

for the year ended 30 June

contents

FirstRand

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

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

overview of firstrand

FirstRand's portfolio of integrated financial services businesses comprises FNB, RMB, WesBank, Aldermore and Ashburton Investments. The group operates in South Africa, certain markets in sub-Saharan Africa and the UK, and offers 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:

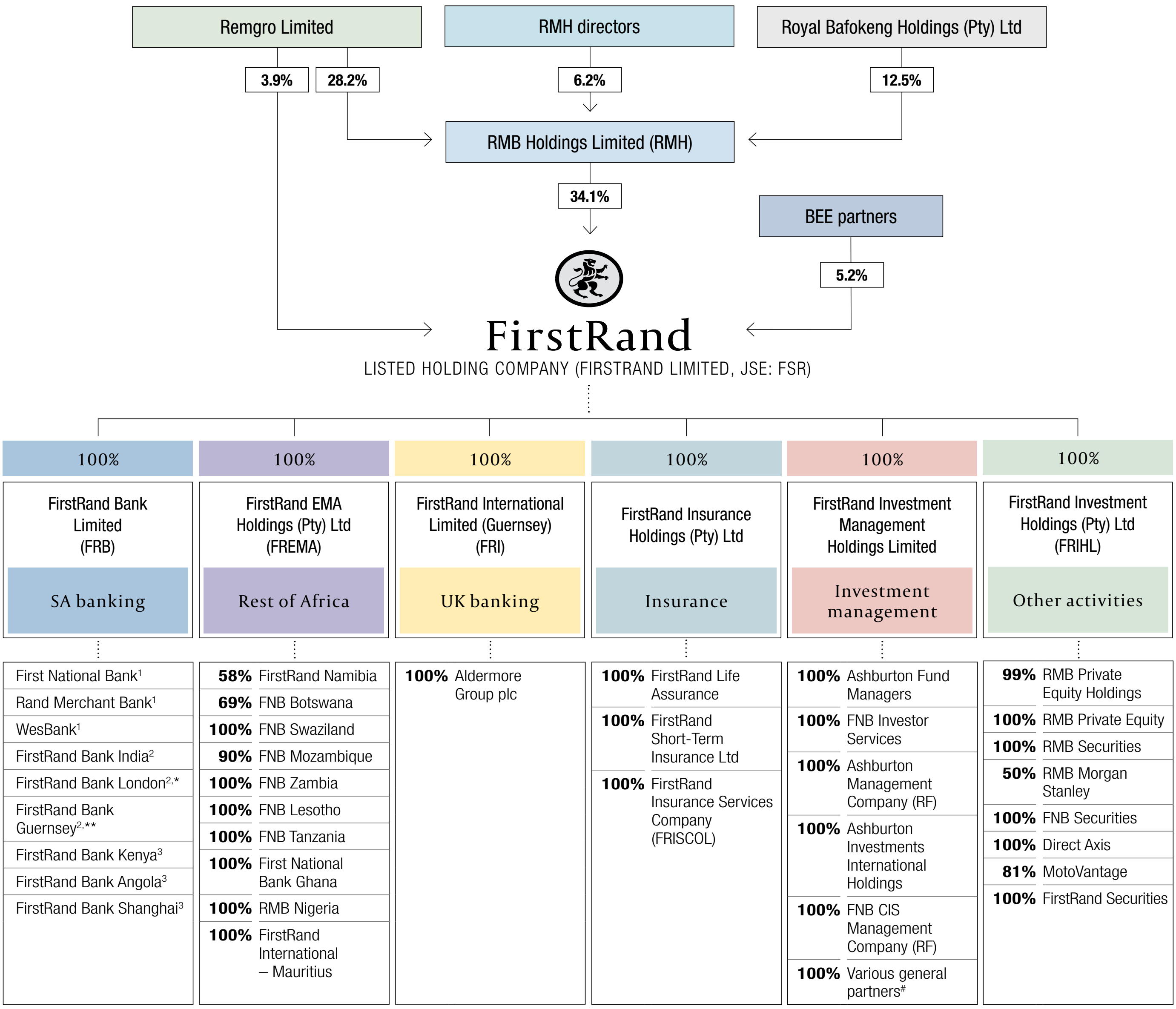
- the Basel Committee on Banking Supervision's (BCBS) revised Pillar 3 disclosure requirements (Pillar 3 standard), BCBS 309 published in January 2015, and the consolidated and enhanced framework, BCBS 400 published in March 2017; and
- Regulation 43 of the *Regulations relating to Banks* (Regulations), issued in terms of the Banks Act 94 of 1990), and all Pillar 3 related directives issued by the Prudential Authority (PA).

Some differences exist between the practices, approaches, processes and policies of FirstRand Bank Limited (the bank or FRB) and its fellow FirstRand wholly-owned subsidiaries. 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 and the board is satisfied that this report has been prepared in accordance with the requirements of this 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.*

Structure shows effective consolidated shareholding

For segmental analysis purposes, entities included in FRIHL, FREMA, FirstRand Investment Management Holdings Limited and FirstRand Insurance Holdings (Pty) Ltd are reported as part of the results of the managing business (i.e. FNB, RMB, WesBank or FCC). The group's securitisations and conduits are in FRIHL, FRI and FirstRand Bank Ltd.

FirstRand strategy

FirstRand Limited 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 leaders in their respective segments and markets, and offer 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 and enabled by disruptive digital and data platforms, allows the group to fully optimise the franchise 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 towards South Africa and are generated by FirstRand's large lending and transactional franchises, which have resulted in deep and loyal customer and client bases, and the group remains focused on protecting and growing these valuable banking businesses. FirstRand also believes that through the utilisation of the origination capabilities, operating platforms and distribution networks of these businesses, it can diversify through capturing a larger share of profits from providing savings, insurance and investment products.

The growth opportunity is significant given the annual flows to other providers from FNB's customer base alone. Through the manufacture and sale of its own insurance, savings and investment products, the group will, over time, offer differentiated value propositions for customers and generate new and potentially meaningful revenue streams.

The group's strategy outside of its domestic market includes growing its presence and offerings in nine markets in the rest of Africa where it believes it can organically build competitive advantage and scale over time.

In the UK, the group has, over the past eight years, focused on organically transforming its existing business, MotoNovo, into the UK's third-largest independent used vehicle financier. In the year under review, the group took the decision to acquire Aldermore Group plc (Aldermore), a UK specialist lender, and is in the process of integrating the two businesses. FirstRand believes this will result in an appropriately diversified UK business, with an established and scalable local funding platform, that represents a more sustainable and less volatile business model. The group can also extract additional value for shareholders over the medium to longer term through introducing its successful financial resource management methodology, unlocking synergies between MotoNovo and Aldermore, and over the longer term, potentially building a transactional offering.

BUSINESS ACTIVITIES AND RESULTANT RISKS

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

	FNB	RMB	WesBank	Aldermore	Ashburton Investments	FCC
Key activities	**Retail and commercial banking, insurance, and wealth and investment management**	**Corporate and investment banking**	**Instalment finance and short-term insurance (VAPS)****	**Asset and invoice finance, commercial and residential mortgages, and deposit taking**	**Asset management**	**Group-wide functions**
Market segments	> consumer > small business > agricultural > medium corporate > public sector	> financial institutions > large corporates > public sector	> retail and commercial	> retail and commercial	> retail and institutional	> institutional (and internal/ intragroup)
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)	> asset finance > invoice finance > commercial, buy-to-let and residential mortgages > deposits	> traditional and alternative investment solutions	> group asset/ liability management > funding instruments > funding and liquidity management > capital issuance > capital management > foreign exchange management > tax risk management
Risks	Retail and commercial credit risk Insurance risk	Corporate and counterparty credit risk Traded market risk	Retail, commercial and corporate credit risk	Retail and commercial credit risk Interest rate risk in the banking book Funding and liquidity risk		Interest rate risk in the banking book Funding and liquidity risk Foreign exchange risk
Risks (all businesses)	Equity investment risk					
Risks (all businesses)	Operational risk					
Other risks	Strategic, business, reputational, model, environmental and social, regulatory and conduct 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 FirstRand's risk profile in relation to its quantitative return and risk appetite measures.

	YEAR ENDED 30 JUNE 2018	RETURN AND RISK APPETITE – QUANTITATIVE MEASURES	2018 IN REVIEW
GROWTH AND RETURNS	**Normalised ROE** **23.0%** 2017: 23.4%	**Normalised ROE** Long-term target **18% – 22%**	The quality of the group's operating businesses' growth strategies and disciplined allocation of financial resources has over time enabled the group to deliver on its earnings growth and return targets. The *CFO's report* in the FirstRand annual integrated report provides an overview of the group's financial position and performance for the year ended 30 June 2018.
	Normalised earnings growth **+8%** 2017: +7%	**Normalised earnings growth** Long-term target **Nominal GDP plus >0% – 3%**	
SOLVENCY	**Capital adequacy** **14.7%** 2017: 17.1%	**Capital adequacy** Target **>14%**	The group's Common Equity Tier 1 (CET1) position was impacted by the acquisition of Aldermore in April 2018, which resulted in a reduction in the CET1 ratio of 240 bps. The decrease in the CET1 position relates mainly to the payment of goodwill and identified intangible assets, as well as the consolidation of Aldermore risk weighted assets (RWA). Post the acquisition of Aldermore, FirstRand operated above its stated capital targets. The group continues to actively manage its capital composition given the grandfathering and redemption of old-style Tier 2 instruments. During the year under review, the group issued R2.75 billion Basel III-compliant Tier 2 instruments in the domestic market, as well as \$500 million in the international market. This resulted 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 its internal targets.
	Tier 1 **12.1%** 2017: 14.9%	**Tier 1** Target **>12%**	
	CET1 **11.5%** 2017: 14.3%	**CET1** Target **10% – 11%**	
	Leverage **7.1%** 2017: 8.6%	**Leverage** Target **>5%**	

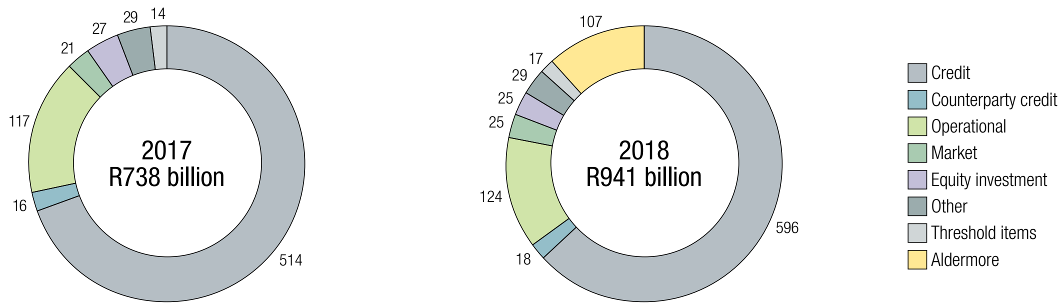
Note: Capital and leverage ratios include unappropriated profits.

LIQUIDITY	**LCR** **115%** 2017: 97%	**LCR** Minimum regulatory requirement: **90%** (2017: 80%)	FirstRand continued to actively manage liquidity buffers through high quality, highly liquid assets that are available as protection against unexpected events or market disruptions. The group exceeded the 90% minimum liquidity coverage ratio (LCR) with an average LCR of 115% over the quarter ended 30 June 2018. At 30 June 2018, the group's average available high quality liquid assets (HQLA) holdings amounted to R203 billion.
	NSFR **112%** 2017: n/a	**NSFR** Minimum regulatory requirement: **100%**	The net stable funding ratio (NSFR) became effective on 1 January 2018 with a minimum regulatory requirement of 100%. The group exceeded the 100% minimum requirement with an NSFR of 112% at 30 June 2018.

	RISK TYPE	YEAR ENDED 30 JUNE 2018	2018 IN REVIEW
EXPOSURES PER RISK TYPE	**Credit risk**	**Normalised NPLs** **2.36%** 2017: 2.41% **Normalised credit loss ratio** **84 bps** **90 bps** (excluding Aldermore) 2017: 91 bps Long-run average (excluding Aldermore) **100 – 110 bps**	The group's credit loss ratio of 84 bps (90 bps excluding Aldermore) was down year-on-year and remains well below the group's through-the-cycle threshold, reflecting the positive impact of the group's origination strategies and provisioning policies over the past two financial years and the acquisition of Aldermore.
	Market risk	**10-day expected tail loss** **R464 million** 2017: R350 million	The foreign exchange asset class represents the most significant traded market risk exposure as at 30 June 2018. The group's market risk profile remained within risk appetite.
	Equity investment risk	**Equity investment risk carrying value as % of Tier 1** **11.7%** 2017: 10.1%	The year was characterised by some realisations and new investments added to the private equity portfolio. The quality of the investment portfolio remains acceptable and within risk appetite.
	Interest rate risk in the banking book	**Net interest income sensitivity** **Down 200 bps** **-R3.4 billion** 2017: -R2.1 billion **Up 200 bps** **R3.1 billion** 2017: R1.4 billion	Assuming no change in the balance sheet nor any 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 R3.4 billion. A similar increase in interest rates would result in an increase in projected 12-month NII of R3.1 billion. The group's average endowment book was R223 billion for the year. The year-on-year increase in NII sensitivity was largely driven by the inclusion of Aldermore and the transitioning of RMB's investment banking advances from fair value to amortised cost in preparation for IFRS 9.

The group's RWA distribution below shows that credit risk remains the most significant risk type that the group is exposed to.

RWA ANALYSIS



Current and emerging challenges and opportunities

Identifying and monitoring challenges emerging in the wider operating environment and risk landscape 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.

These challenges and associated risks are continuously identified, potential impacts determined, reported to and debated by appropriate risk committees and management.

CURRENT AND EMERGING CHALLENGES	OPPORTUNITIES AND RISK MANAGEMENT FOCUS AREAS
Strategic and business risks	
> Global pressure on emerging markets. > Intensifying competition in banking profit pools from non-traditional competitors (specifically those with low-cost infrastructures) and insurance players. > Policy uncertainty with challenges, remaining around the mining charter, state-owned enterprises' (SOEs) financial stability and labour markets. > In the UK, uncertainty relating to Brexit dominates the macroeconomic outlook and will continue to weigh on business and consumer confidence, which in turn is expected to suppress investment spending to a certain degree.	> Developments in South Africa and other key markets are monitored with appropriate responses, strategic adjustments and proactive financial resource management actions implemented, where required. > Refer to the *CEO's report* in FirstRand's annual integrated report for detail on the group's strategic responses to intensifying competition from non-traditional competitors. > Credit origination and funding strategies are assessed and adjusted considering macroeconomic conditions and market liquidity. > In the UK, uncertainty over the outcome of Brexit continues to dominate the macroeconomic outlook and will continue to weigh on business and consumer confidence, which in turn will suppress investment spending to a certain degree. These ongoing headwinds were all anticipated when FirstRand acquired Aldermore and, as indicated previously, the group expects the growth trajectory to slow relative to the previous year, owing to competitive margin pressure and normalisation of credit costs.
Funding, liquidity and capital	
> The current environment of increasing cost and scarcity of financial resources, and greater potential for global financial market volatility, pose risks for FirstRand's funding, liquidity and capital profile. > The impact of PA transitional regulatory requirements, which include buffer add-ons for domestic systemically important banks, the countercyclical buffer, and capital conservation requirements, are incorporated in the targets set for the group, but regulatory reforms such as ongoing Basel III pronouncements may pose further risks for capital levels.	> The group continues to focus on growing its deposit franchise through innovative products and improving the risk profile of institutional funding. > FirstRand has continued to exceed internal capital targets, with ongoing focus on optimising the capital stack. > The impact of the proposed regulatory reforms continues to be assessed and incorporated into the group's capital planning.
Credit and counterparty credit risk	
> Credit risk remains high due to a macroeconomic environment characterised by low economic growth, structural constraints, high structural unemployment, and rising income and wealth disparity. > Credit and counterparty credit risks are impacted by the sovereign rating, policy uncertainty and financial distress of several large SOEs.	> Despite challenging economic conditions, the group is benefiting from prudent risk mitigation measures in place. > Developments in the corporate and public sector are closely monitored and managed. > The group reviews risk appetite and credit origination strategies on an ongoing basis. > Sovereign rating actions are also monitored, together with the ratings of associated entities, with proactive revisions, where required. > The group worked towards finalising its implementation of IFRS 9 impairment models. IFRS 9 came into effect on 1 July 2018.

CURRENT AND EMERGING CHALLENGES	OPPORTUNITIES AND RISK MANAGEMENT FOCUS AREAS
Traded market risk	
> The overall diversified level of market risk increased over the year. There were no significant concentrations in the portfolio.	> Given the impending regulatory changes outlined in the BCBS's documents, *Fundamental review of the trading book* and *The principles for effective risk data aggregation and risk reporting* (BCBS 239), RMB is reviewing the current target operating platform for market risk activities, considering platform capabilities across both front office and risk management areas, and aligning market risk processes, analyses and reporting in line with these requirements.
Interest rate risk in the banking book (IRRBB) and structural foreign exchange risk	
> The SARB is expected to begin a shallow interest rate hiking cycle from 2019. > The next hike could come sooner if inflation is stronger than expected, or if the rand depreciates further than expected.	> The group is addressing the new BCBS requirements for IRRBB. > FirstRand actively manages the endowment book, monitors the net open forward position in foreign exchange against limits, assesses and reviews the group's foreign exchange exposures and enhances the quality and frequency of reporting.
Operational, IT and information governance risk	
> Operational risk is driven by ongoing challenges in the IT environment, growing sophistication of cybercrime, operational challenges in meeting various regulatory requirements across multiple jurisdictions, current group-wide projects to replace key legacy systems, risk of process breakdowns and organisational change. > The impact of external factors on business operations, such as disruptive protest actions, water and electricity supply shortages and interruptions, pose a risk to operations and require management to continuously review contingency plans to ensure minimal business disruption. > Increased business digitisation (including robotics and artificial intelligence) introduces additional IT risk due to the demand and speed of digital technology adoption.	> Continue to address possible control weaknesses, improve system security, IT risk processes and operational business resilience capability. > Integrated group cybercrime strategy and cyber incident response planning. > Continue to improve risk data management, aggregation and reporting. > Align IT and related frameworks and risk management practices with changing business models and the technology landscape. > Improve information management capabilities and the control environment, and roll out awareness programmes on records management, data quality and data privacy management.
Regulatory and conduct risk	
> The Twin Peaks system of financial regulation was implemented in April 2018. This has resulted in the creation of the PA and the Financial Sector Conduct Authority (FSCA) to govern prudential regulation and market conduct, respectively. > Regulatory and conduct risk management is impacted by the changing regulatory landscape and the ongoing introduction of new/amended regulations and legislation (particularly in banking activities) and the pressure on resources which could impact profitability over the medium to long term. > Heightened scrutiny and monitoring by regulators and other stakeholders on regulatory compliance and ethical conduct.	> Continue to make significant investments in people, systems and processes to manage risks emanating from the large number of new and amended local and international regulatory requirements, market conduct reforms, data privacy and financial crime legislation. > Focus on monitoring the risk culture with clear prevention and remediation frameworks. > Risk mitigation strategies will focus on the integration of conduct risk controls into business-as-usual processes, the repositioning of some programmes to cater for regulatory changes, the active management of conflicts of interest and creating greater awareness of these matters at every level of the organisation.

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 certain 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 frameworks set at the centre to ensure financial discipline. These frameworks include:

RISK MANAGEMENT FRAMEWORK	PERFORMANCE MANAGEMENT FRAMEWORK	RISK/RETURN AND FINANCIAL RESOURCE MANAGEMENT FRAMEWORKS
Key principles: > ensure material risks are identified, measured, monitored, mitigated and reported; > assess impact of the cycle on the group's portfolio; > understand and price appropriately for risk; and > originate within cycle-appropriate risk appetite and volatility parameters.	**Key principles:** > allocate capital appropriately; > ensure an efficient capital structure with appropriate/conservative gearing; and > ensure economic value creation, which is measured as net income after capital charge (NIACC), the group's key performance measure.	**Key principles:** > execute sustainable funding and liquidity strategies; > protect credit ratings; > preserve a "fortress" balance sheet that can sustain shocks through the cycle; and > ensure the group remains appropriately capitalised.

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

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 include identifying, assessing, monitoring and managing risk, and are integrated in all management functions and business areas across the group.

They provide the checks and balances necessary 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 associated with its activities if these 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 across all risk types and businesses through the application of the risk appetite framework. The group's risk appetite framework enables organisational decision-making and is aligned with FirstRand's strategic objectives. Refer to page 23 for more on the group's return and risk appetite framework.

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

- Identification
- Assessment
- Monitoring
- Management

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

Risk limits established across risk types are an integral part of managing risk and are instrumental in constraining risk taking within risk appetite. 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 risk management structure and approach to risk management. Effective risk management requires multiple points of control or safeguards that should consistently be applied at various levels throughout the organisation. There are three lines of control across the group's operations, which are recognised in the BPRMF along with the business functions, committee structures and risk universe as illustrated in the diagram below.

Aldermore employs the three lines of control model in managing its risks in line with the FirstRand model. Its risk and governance committees report to the group's risk and governance committees. Aldermore's executive committee reports to the Aldermore board.

LINES OF RISK CONTROL

FIRST LINE OF CONTROL

RISK OWNERSHIP
Risk inherent in business activities

Business unit head
Reports to operating business CEO

Group Treasury in FCC
Supports business owners, the board and the strategic executive committee

Operating business executive committees

FirstRand strategic executive committee
- Group CEO (chair)
- Group CFO
- Group COO
- Group Treasurer
- CEOs of FNB, RMB, WesBank, Aldermore and Ashburton Investments
- Head: Investor Relations
- Head: Social Investing
- Head: Organisational Development and Human Capital

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 the group CRO, represented on platform and conduct executive committees

Regulatory and Conduct Risk Management (RCRM)
- Head of regulatory and conduct risk is represented on platform and conduct executive committees
- Heads of business compliance functions have functional reporting lines to the head of RCRM

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

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

BOARD

Risk, capital management and compliance (RCC) committee

Specialised risk committees

Business and subsidiary/ statutory risk committees

Business CROs
Report to business 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, businesses, records, property and personnel

External advisors

Audit committee

Business and subsidiary/ statutory audit committees

RISK GOVERNANCE STRUCTURE

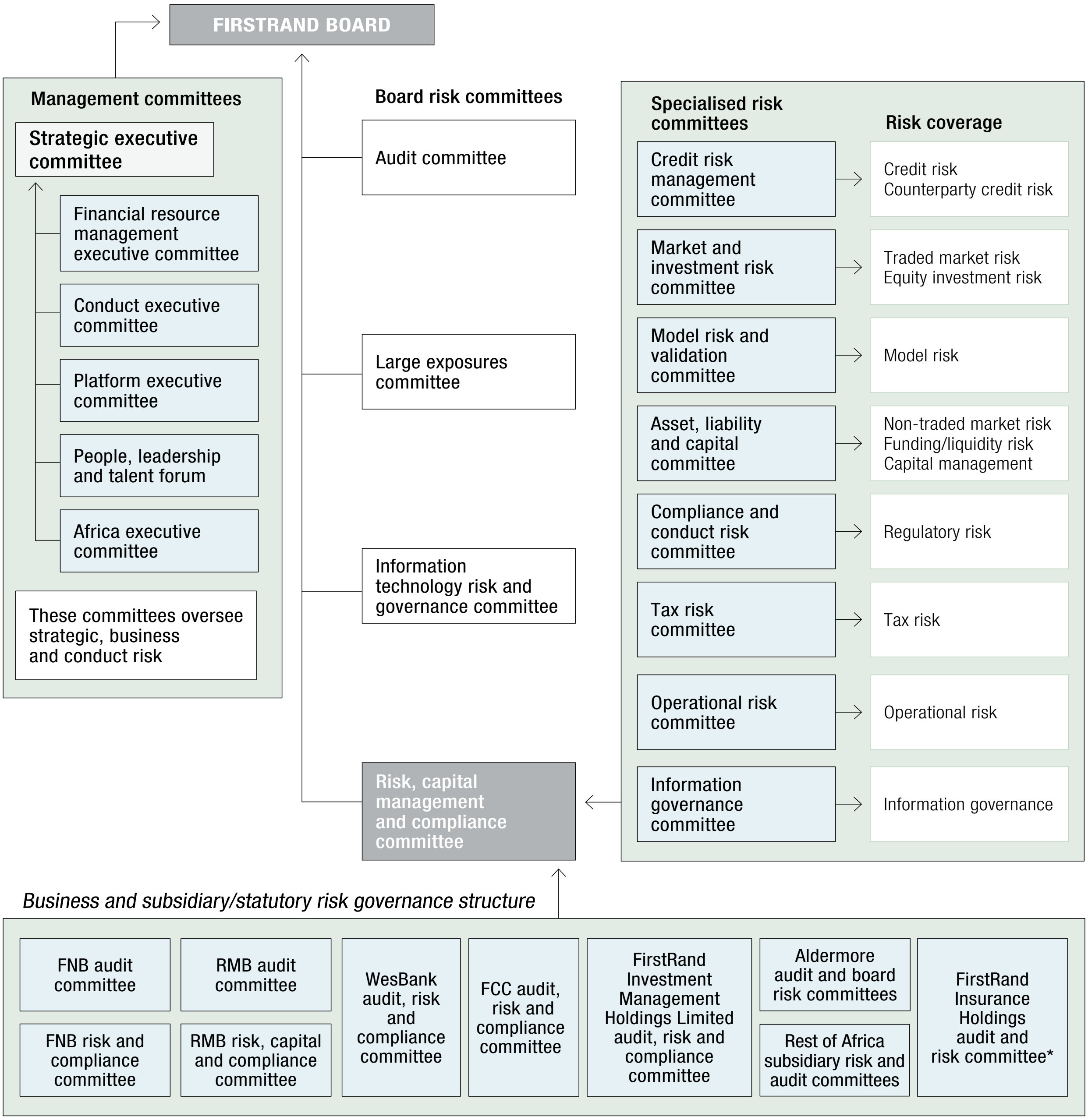
The risk management structure is set out in the group's BPRMF. As a policy of the board, the BPRMF delineates the roles and responsibilities of key stakeholders in business, support and control functions across the group.

The primary board committee overseeing risk matters across the group is the FirstRand 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 operating business, the governance structures of which align closely with that of the group, as illustrated in the risk governance structure diagram. With the acquisition of Aldermore during the year, its audit and board risk committees have been integrated in the group's governance structure. 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 business audit, risk and compliance committees support the board risk committees and RCC subcommittees in the third line of control. The diagram on the next page 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 group board committees comprise members of business advisory boards, audit and risk committees to ensure a common understanding of the challenges businesses face and how these are addressed across the group. The strategic executive committee ensures alignment of business strategies, implements the risk/return framework and is responsible for optimal deployment of the group's resources.

RISK GOVERNANCE STRUCTURE



BOARD RISK COMMITTEES' RESPONSIBILITIES

COMMITTEE	RESPONSIBILITY
Audit committee	> assists the board with its duties relating to the safeguarding of assets, the operation of adequate systems and controls, assessment of going concern status and ensuring that relevant compliance and risk management processes are in place; > oversees and reviews work performed by the external auditors and internal audit function; and > oversees financial risks and internal financial controls including the integrity, accuracy and completeness of the financial information and annual integrated report, which is provided to shareholders and other stakeholders.
Risk, capital management and compliance committee	> approves risk management policies, frameworks, strategies and processes; > monitors containment of risk exposures within the risk appetite framework; > reports on the assessment of the adequacy and effectiveness of risk appetite, risk management, the group's internal capital adequacy assessment process (ICAAP) and compliance processes to the board; > monitors the implementation of the group's risk management strategy, risk appetite limits and effectiveness of risk management; > initiates and monitors corrective action, where appropriate; > monitors that the group takes appropriate action to manage its regulatory and supervisory risks, and complies with applicable laws, rules, codes and standards; > approves regulatory capital models, risk and capital targets, limits and thresholds; and > monitors capital adequacy and ensures that a sound capital management process exists.
Large exposures committee (LEC)	> reviews and approves applications or renewals for investments, advances or other credit instruments in excess of 10% of the group's qualifying capital and reserves; > reviews and approves transactions with a related party and the write-off of any related-party exposure exceeding 1% of the group's qualifying CET1 capital and reserve funds; and > delegates the mandate for approval of group and individual facilities to the FirstRand wholesale credit approval committee, FirstRand commercial credit approval committee and the FirstRand retail credit policy, risk appetite and mandate approval committee, as appropriate.
Information technology risk and governance committee	> approves and monitors the implementation of IT risk and governance principles, policies, standards, frameworks and plans; > monitors the availability, security and continuity of IT services, as well as the remediation of identified key IT risks and initiates corrective action, where required; > escalates key IT risk and governance matters to the board; and > ensures that IT has appropriately skilled risk and management resources to deliver on the business mandate.

SUBCOMMITTEES OF THE RCC COMMITTEE RESPONSIBILITIES

RCC SUBCOMMITTEE	RESPONSIBILITY
Credit risk management committee	> approves credit risk management and risk appetite policies as well as forward-looking credit risk indicators developed by retail, commercial and corporate portfolio management; > monitors the credit risk profile including performance relative to credit risk appetite thresholds, quality of the in-force business and business origination in terms of the group's view of credit economic outlook; > monitors scenario and sensitivity analysis, stress tests, credit economic capital utilisation, credit pricing and credit concentrations; > ensures uniform interpretation of credit regulatory requirements and credit reporting; and > monitors corrective actions, where appropriate.
Market and investment risk committee	> approves market and investment risk management frameworks, policies, standards and processes; > monitors the market and investment risk profile and the effectiveness of market and investment risk management processes; > monitors implementation of corrective action, where required; and > approves market and investment risk-related limits.
Model risk and validation committee	> approves or recommends for approval by the RCC committee, all material aspects of model validation work including credit ratings and estimations, internal models for market risk and advanced measurement operational risk models for regulatory capital calculations.
Asset, liability and capital committee (ALCCO)	> approves and monitors effectiveness of management policies, assumptions, limits and processes for liquidity and funding risk, capital and non-traded market risk; > monitors the group's funding management; > monitors capital management including level, composition, supply and demand of capital, and capital adequacy ratios; and > approves frameworks and policies relating to internal funds transfer pricing for the group.
Compliance and conduct risk committee	> approves regulatory and conduct risk management frameworks, including anti-money laundering and combating the financing of terrorism (AML/CFT) minimum policies, standards and monitoring plans; > monitors, evaluates and assesses effectiveness of regulatory and conduct risk management across the group; > monitors compliance with the Regulations and supervisory requirements relating to banks; and > reviews regulatory compliance matters relating to financial crime, market conduct, prudential regulations, anti-bribery and corruption.
Tax risk committee	> sets tax strategy and tax risk appetite; > approves tax risk management frameworks and policies; > monitors tax risk assessments and risk profiles; and > escalates relevant risk items to the RCC committee.
Operational risk committee	> provides governance, oversight and coordination of relevant operational risk management practices, and initiates corrective action, where required; > recommends the group's operational risk appetite for approval by RCC committee; > monitors the group, subcommittee and business risk profiles against operational risk appetite; and > approves operational risk management framework and all its subpolicies/frameworks, including fraud risk, legal risk, business resilience and physical security.
Information governance committee	> monitors the development and implementation of an appropriate information governance framework (including policies, standards and guidelines) and recommends the framework for approval at RCC committee; > reports to RCC committee on the level of information governance for the group; > initiates such actions and issuing of instructions as may be appropriate, in order to improve group information governance; and > monitors development and implementation of the group data strategy and provides feedback to RCC committee on implementation status.

COMBINED ASSURANCE

The audit committee oversees formal enterprise-wide governance structures for enhancing the practice of combined assurance at group and business 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 functions.

The group established a combined assurance forum, supported by business 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 the strategic executive committee) to get an accurate, complete and reliable view of the group's financial and non-financial risk profile and enables management to make appropriate strategic and business decisions.

Reporting of risk information follows the governance structure illustrated on page 14. Specialised risk committees and business 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 position, 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 the RCC committee.

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

SCOPE AND CONTENT OF RISK REPORTING

Risk reports to the board, board risk committees, business 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;
- tracking of 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 business.

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 BCBS239 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 business 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 PA.

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 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 management 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 conduct risk programmes, with appropriate levels of employee training and communication to ensure responsible 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 / **ACTIVITIES**

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

Risk measurement approaches

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

RISK TYPE	FRB SA (i.e. FRB excluding foreign branches)	PA APPROVAL DATE	REMAINING FIRSTRAND SUBSIDIARIES AND FRB FOREIGN BRANCHES
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 branches:** > The standardised approach for operational risk (TSA) **FRIHL entities:** > Basic indicator approach (BIA), TSA, AMA **Ashburton Investments:** > BIA **Aldermore:** > 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).*

CREDIT RISK

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

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

SECURITISATIONS

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

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

Under the supervisory formula approach, the capital requirement for any retained securitisation exposure is determined using the credit parameters for the underlying assets. Capital is determined using a standard formula taking into account the size of the tranche and credit enhancement. Unrated exposures are risk weighted at 1250%. Capital for unrated exposures is determined using the size of the tranche and credit enhancement.

COUNTERPARTY CREDIT RISK

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

These three EAD approaches to measure the exposure of derivative transactions are based on current regulations and are outlined in the table below:

Current exposure method (CEM)	CEM is the simplest approach, and is based on a replacement cost plus add-on formula dependent on potential future exposure that accounts for the potential change in the value of the contract until a hypothetical default of the counterparty. This method is applied to all group entities except for FRB SA.
Standardised method	The standardised method is applied for FRB SA. This method is more sophisticated than the CEM approach as it factors in the non-linearity features of derivatives, risk sensitivity such as PV01s and is based on the concept of hedging sets. EAD under the standardised method is quantified by scaling either the current credit exposure less collateral or the net potential future exposure by a factor of 1.4.
Internal model method	The internal model method is the third and most complex method and is not applied by the group.

MARKET RISK IN THE TRADING BOOK

Regulatory capital for domestic trading units is based on the internal Value-at-Risk (VaR) model supplemented with a stressed VaR (sVaR). Both VaR and sVaR is calculated at the 99%, 10-day actual holding period level using 250 scenarios each. VaR is calculated using the last 260 trading days' data and sVaR using 260 trading days during a pre-defined static stress period (2008/2009). For internal risk reporting purposes, an expected shortfall methodology calculated at a 99%, 10-day actual holding period is used over the same periods as VaR and sVaR. 1-day VaR calculations are also used as an additional tool in the assessment of market risk. VaR calculations over a holding period of one day are used as an additional tool in the assessment of market risk.

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

EQUITY INVESTMENT RISK

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

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

OPERATIONAL RISK

The group applies AMA for its domestic operations. Offshore subsidiaries and operations use TSA and all previously unregulated entities (prior to 2010) in FRIHL use BIA. Ashburton Investments and Aldermore also follow BIA. Under AMA, the group uses a sophisticated statistical model for the calculation of capital requirements, which enables more accurate, risk-based measures of capital for business units on this approach. Operational risk scenarios and internal loss data (operational risk measurement tools) are used as direct inputs into this model, while risk and control assessments, key risk indicators and external data are used to inform the operational risk scenario analysis process. TSA and BIA capital calculations are based on a multiplication factor applied to gross income, as specified by Basel and PA regulations. No risk-based information is used in these capital calculations and allocations.

OTHER ASSETS

The group applies the standardised approach to property, plant and equipment, accounts receivable and other assets. Deferred tax assets relating to temporary differences, and investment in financial, banking and insurance entities are also included under other assets, and are risk weighted at 250%, subject to meeting the threshold requirements rules as per Regulation 38.

Risk mitigation

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

INTEREST RATE RISK IN THE BANKING BOOK

The internal funds transfer pricing process is used to transfer IRRBB from the operating businesses to Group Treasury. This process allows risk to be managed centrally and holistically in line with the group's macroeconomic outlook.

Group Treasury is mandated by the board to manage the group's IRRBB and operates within a set of risk limits aligned to the group's risk appetite. The exposures against these limits are monitored daily with oversight by FCC Risk Management and ALCCO.

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

Fixed-rate book	Interest rate risk from the net fixed rate asset/liability position is managed to low levels with residual risk stemming from timing mismatches and basis risk.
Endowment effect	The endowment effect is the most significant driver of IRRBB and is a result of the use of large portfolios of low/non-rate liabilities to fund variable-rate assets. Consequently, the group's margins naturally expand in a rate-hiking cycle, but contract in a rate-cutting cycle. Group Treasury employs a combination of structural and tactical hedging strategies to manage the endowment effect. Group Treasury actively monitors the macroeconomic environment to assess the stage of the cycle and hedges this risk from an earnings perspective. Only instruments for which a liquid market exists are used for hedging purposes and, where possible, hedge accounting is used to minimise accounting mismatches.

CREDIT RISK

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

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

Credit risk mitigation instruments

- Mortgage and instalment sale finance portfolios in FNB HomeLoans, FNB Wealth, WesBank and Aldermore are secured by the underlying assets financed.
- FNB and Aldermore commercial credit exposures are secured by the assets of the small and medium enterprises (SMEs) 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 can be secured or unsecured.

The group employs strict policies governing the valuation and management of collateral across all business areas. Collateral is managed internally to ensure that title is retained over collateral taken over the life of the transaction. Collateral is valued at inception of the credit agreement and subsequently where necessary through physical inspection or index valuation methods. For corporate and commercial counterparties, collateral is reassessed during the annual review of the counterparty's creditworthiness to ensure that proper title is retained. For mortgage portfolios, collateral is revalued on an ongoing basis using an index model and physical inspection is performed at the beginning of the recovery process. For asset finance, the total security reflected represents only the realisation value estimates of the vehicles repossessed at the date of repossession. Where the repossession has not yet occurred, the realisation value of the vehicle is estimated using internal models and is included as part of total recoveries.

Concentrations in credit risk mitigation types, such as property, are monitored and managed at a product and segment level, in line with the requirements of the group credit risk appetite framework. Collateral is taken into account for capital calculation purposes through the determination of LGD. Collateral reduces LGD, and LGD levels are determined through statistical modelling techniques based on historical experience of the recovery processes.

COUNTERPARTY CREDIT RISK

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

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

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

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

RISK INSURANCE

The group's insurance buying philosophy is to self-insure as much as is economically viable in line with its risk appetite and to only protect itself again catastrophic risks through the use of third-party insurers. The insurance programme includes, *inter alia*, cover for key insurable operational risk exposures, such as professional indemnity, directors' and officers' liability, crime, cyber liability, public and general liability, property, etc. The group does not consider insurance as a mitigant in the calculation of capital for operational risk purposes.

Risk appetite

Risk appetite is set by the board. The group's return and risk appetite statement informs 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. Limits are also set for stressed cyclical downturns. 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 risk appetite is the aggregate level and type of risks the group is willing and able to accept within its overall risk capacity. It 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 risks it assumes in the normal course of business.

This ensures that the group maintains an appropriate balance between risk and reward. Risk/return targets and appetite limits are set to enable the group to achieve 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.

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 return and risk appetite statement aims to drive the discipline of balancing risk, return and sustainable growth across the portfolio. 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 shareholders.

The group's risk/return profile is monitored regularly, using risk appetite limits, which are measured on a point-in-time and forward-looking basis.

Risk appetite influences business plans and informs risk-taking activities and strategies.

The following diagram illustrates the risk/return appetite metrics and processes, which aim to align risk and return metrics with the group's strategic objectives, commitments to stakeholders, performance measurement objectives and the financial resource management process. It also informs the medium to long-term targets and strategies in terms of return, growth and risk appetite.

FIRSTRAND RISK AND RETURN METRICS

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

RETURN AND RISK APPETITE FRAMEWORK

QUANTITATIVE MEASURES

Normal cycle

Performance targets		Resource objectives and constraints		
Returns	ROE **18% – 22%**	**Solvency**	CET1 capital **10% – 11%**	Leverage **>5%**
Earnings growth	Normalised 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

Limits set for earnings fall under stressed conditions,
as well as 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 activities, products, segments, markets and geographies.
Do not implement business models with excessive gearing through either on- or off-balance sheet leverage.	

Financial resource management

The management of the group's financial resources, which it defines as capital, funding and liquidity, and risk capacity, is a critical to the achievement of its 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 compared to the group's 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 businesses. This ensures the required level of discipline is applied in the allocation and pricing of financial resources. This also ensures that Group Treasury's mandate is aligned with the portfolio's growth, return and volatility targets to deliver shareholder value. The group continues to monitor the regulatory environment and ongoing macroeconomic challenges.

The group adopts a disciplined approach to the management of its foreign currency balance sheet. The framework for the management of external debt takes into account sources of sovereign risk and foreign currency funding capacity, as well as the macroeconomic vulnerabilities of South Africa. The group employs a self-imposed structural borrowing limit and a liquidity risk limit more onerous than required in terms of regulations.

FirstRand uses the group's house view for budgeting, forecasting and business origination strategies. The house view focuses on the key macroeconomic variables that impact the group's financial performance and risk 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. The house views for 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 group will remain within the constraints that have been set. These 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 value drivers, markets and macroeconomic environment also inform portfolio optimisation decisions as well as the price and allocation of financial resources.

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 analysis. The group evaluates the impact of various macroeconomic scenarios on the business and considers the need for adjustment to origination and takes appropriate actions. More severe macroeconomic scenarios are run less frequently, but are critical to determine or test capital buffers and other risk appetite measures, 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 legal entities in the group. 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 testing principles*, to enhance and streamline the principles agreed in its earlier 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 but has, for some time, incorporated such principles 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, over time, influence the allocation of financial resources across businesses and impact performance measurement.

From a regulatory perspective, stress testing and scenario analysis feed into the group's 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 processes are submitted to the PA 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 year, FirstRand participated in a supervisory stress test to allow the regulator to assess financial stability of the South African banking sector. In line with a request to the bank industry, the group assisted the regulator with the collection of common stress test data that will be modelled top down, and the banks are have modelled a similar scenario bottom up during the year.

Application of the return and risk appetite framework and risk limits

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 business plans and informs risk-taking activities and strategies. The risk/return framework provides for a structured approach to define risk appetite, targets and limits that apply to each key resource as well as the level of risk that can be assumed in this context. The group cascades overall appetite into targets and limits at risk type, business and activity level, and these represent the constraints the group imposes to ensure its commitments are attainable. Risk management roles and responsibilities are outlined in the BPRMF. Risk appetite measures and risk limits per risk type are provided below.

FUNDING AND LIQUIDITY RISK

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

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

The funds transfer pricing framework incorporates liquidity costs and benefits as well as regulatory friction costs into product pricing and performance measurement for all on- and off-balance sheet activities. The funds transfer pricing process is a key management tool for funding appetite allowing for pricing of products within the group's desired risk appetite levels.

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

CREDIT RISK

The group aims to manage credit such that it can achieve its overall earnings growth target and within acceptable volatility levels. The group's credit risk appetite, aligned to the group's overall risk appetite, is determined through supplementing a top-down group credit risk appetite with an aggregated bottom-up assessment of business unit-level credit risk appetite. Stress testing is used to enable measurement of financial performance and the credit volatility profile of the different credit business units at a portfolio, segment, business, and ultimately at a diversified group-wide level.

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

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

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

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

COUNTERPARTY CREDIT RISK

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

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

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

TRADED MARKET RISK

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

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

Qualitative risk appetite measures include business mandates, specific product and trading strategies, and process breakdown tolerance levels. There is zero tolerance for operating outside of any legislation or supervisory regulations in respect of market risk.

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

INTEREST RATE RISK IN THE BANKING BOOK

A change in interest rates impacts the group's short-term financial performance (earnings) and its long-term economic value. The group has both earnings sensitivity and net asset value (NAV) sensitivity limits in place to protect against volatility in the income statement and balance sheet, respectively. Since earnings volatility and NAV volatility are inversely related, the group's risk appetite seeks to optimise these two measures.

EQUITY INVESTMENT RISK

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

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

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

OPERATIONAL RISK

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

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

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

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

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 K*ey Attributes of Effective Resolution Regimes*. The PA adopted this requirement and has, as part of the first phase, required D-SIBs to develop their own recovery plans. Improving the stability of the banking system by strengthening banks' ability to manage themselves through a potentially severe stress situation is of national importance. Guidance issued by the FSB and PA has been incorporated into the group's comprehensive recovery plan.

RECOVERY PLANNING

The purpose of the recovery plan is to document how FirstRand's board and management, including its operating businesses and key subsidiaries, FirstRand Bank, Aldermore Bank, FNB Namibia and FNB Botswana, will recover from a severe stress event/scenario that threatens their commercial viability. The recovery plan:

- analyses the potential for severe stress in the group that could cause material disruption to the financial system;
- considers the type of stress event(s) that would be necessary to trigger its activation;
- analyses how the entity 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 entity 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 undergoing significant transformation to create a regulatory framework that will support an effective resolution regime. The country has adopted a twin peaks supervisory framework model that has reduced the number of agencies involved in supervision. On 21 August 2017, the Financial Sector Regulation Act was signed into law with the establishment of two new regulatory agencies: the PA contained in the SARB, and the FSCA. 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 following the approval of the pending resolution framework.

In January 2018, a draft resolution framework was released to the banking industry for initial review after which it will be released to the public for general comment. This draft framework establishes SARB as the resolution authority and sets out the broad principles for the resolution of banks, systemically important non-bank financial institutions and holding companies of banks, and also highlights the various legislative amendments that are required to be made to ensure the framework is enforceable.

The resolution framework outlines the broad resolution principles proposed to govern future bank resolutions whilst much of the detail of all the key elements of this resolution framework are still in the process of being defined and will be released in time via resolution directives or addendum to this framework. These details include the resolution planning requirements that will be placed on banks. The resolution plans will allow the resolution authority 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 resolution authority, but will require a significant amount of bilateral engagement and input from the individual banks to enable the resolution authority to develop a customised plan that is most appropriate to each bank.

Link between financial statements and regulatory exposures

BASIS OF CONSOLIDATION

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

REGULATORY CONSOLIDATION TREATMENT

<table>
<tr><th rowspan="2">SHAREHOLDING</th><th colspan="3">REGULATORY</th><th rowspan="2">IFRS</th></tr>
<tr><th>BANKING, SECURITY FIRM, FINANCIAL</th><th>INSURANCE</th><th>COMMERCIAL</th></tr>
<tr><td>Less than 10%</td><td colspan="2">Aggregate of investments (CET1, Additional Tier 1 (AT1) and Tier 2):
> amount exceeding 10% CET1 capital – deduction against corresponding component of capital; and
> up to 10% – risk weight based on nature of instrument and measurement approach.</td><td rowspan="2">Standardised approach:
> minimum risk weight of 100%.
Internal rating-based approach:
> maximum risk weight of 1250%.</td><td rowspan="2">Financial assets at fair value (held for trading, designated at fair value through profit or loss or available-for-sale). Where the substance of the transaction indicates that the group is able to exercise significant influence or joint control over the entity, equity accounting is applied.</td></tr>
<tr><td>Between 10% and 20%</td><td colspan="2">CET1 capital:
> individual investments in excess of 10% CET1 – deduction against CET1 capital; and
> individual investments up to 10% apply threshold rules.
AT1 and Tier 2:
> deduct against corresponding component of capital.</td></tr>
<tr><td>Between 20% and 50%</td><td>Legal or de facto support (other significant shareholder):
> proportionately consolidate.
No other significant shareholder:
> apply threshold rules.</td><td rowspan="2">> Apply deduction methodology, with 100% derecognition of IFRS NAV.
> Cost of investment subject to threshold rules.</td><td rowspan="2">Standardised and internal rating based approach:
> individual investment greater than 15% of CET1, AT1 and Tier 2: risk weight at 1250%.
> individual investment up to 15% of CET1, AT1 and Tier 2: risk weight at no less than 100%.
> aggregate of investments exceeding 60% of CET1, AT1 and Tier 2: excess risk weighted at 1250% (standardised only).</td><td>Equity accounting where the substance of the transaction indicates that the group has the ability to exercise significant influence or joint control, but does not control the entity.</td></tr>
<tr><td>Greater than 50%</td><td>Entity conducting trading activities/other bank, security firm or financial entity:
> consolidate.</td><td>Consolidate, unless the substance of the transaction indicates that the group does not control the entity, in which case equity accounting will apply.</td></tr>
</table>

THRESHOLD RULES

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

INSURANCE ENTITIES

Under the insurance category, material wholly-owned insurance subsidiaries incorporated in South Africa include FirstRand Life Assurance Limited (2018: R930 million NAV) and FirstRand Insurance Services Company Limited (FRISCOL) (2018: R461 million NAV).

MAPPING OF FINANCIAL STATEMENT CATEGORIES TO REGULATORY RISK CATEGORIES

Pillar 3 disclosure is prepared in accordance with the regulatory frameworks applicable to the group while the annual financial statements are prepared in accordance with IFRS. The amount included under regulatory scope excludes balances related to insurance entities. The amounts from different balance sheet line items included in the risk frameworks are described in the following table.

LIA: EXPLANATION OF DIFFERENCE BETWEEN ACCOUNTING AND REGULATORY EXPOSURE AMOUNTS

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

The risk measurement approaches to calculate regulatory capital, applicable to each of the risk frameworks, are described on page 19. The following table provides the differences between the amounts included in the balance sheet and the amounts included in the regulatory frameworks.

LI1: MAPPING OF FINANCIAL STATEMENT CATEGORIES WITH REGULATORY FRAMEWORKS – ASSETS

	As at 30 June 2018							
	Carrying values							
			Items under regulatory frameworks					
R million	Statement of financial position	Regulatory scope	Credit risk	Counterparty credit risk	Securitisation	Market risk	Equity investment risk	No capital/ deducted from capital
Assets								
Cash and cash equivalents	96 024	95 898	71 868	21 648	2 382	–	–	–
Derivative financial instruments*	42 499	42 499	–	42 499	313	42 499	–	–
Commodities	13 424	13 424	2 566	–	–	10 858	–	–
Investment securities**	208 937	203 400	127 692	–	101	65 722	23 225	–
Advances#	1 121 227	1 121 227	1 026 370	26 930	67 927	–	–	–
Accounts receivable	9 884	9 707	9 707	–	–	–	–	–
Current tax asset	378	364	364	–	–	–	–	–
Non-current assets and disposal groups held for sale	112	112	–	–	–	–	112	–
Reinsurance assets	84	–	–	–	–	–	–	–
Investments in associates	5 537	5 537	–	–	–	–	5 537	–
Investments in joint ventures	1 726	1 726	–	–	–	–	1 726	–
Property and equipment	17 936	17 930	17 930	–	–	–	–	–
Intangible assets	10 847	10 336	–	–	–	–	–	10 336
Investment properties	754	754	754	–	–	–	–	–
Defined benefit post-employment asset	36	36	–	–	–	–	–	36
Deferred income tax asset	2 884	2 880	2 434	–	–	–	–	446
Investment in subsidiaries	–	757	–	–	–	–	757	–
Total assets	**1 532 289**	**1 526 587**	**1 259 685**	**91 077**	**70 723**	**119 079**	**31 357**	**10 818**
Liabilities								
Short trading positions	9 999	9 999	–	–	–	9 999	–	–
Derivative financial instruments	50 954	50 954	–	50 954	313	50 954	–	–
Creditors, accruals and provisions	19 620	19 525	–	–	–	–	–	19 525
Current tax liability	438	416	–	–	–	–	–	416
Deposits	1 267 448	1 267 427	–	14 288	31 662	–	–	1 221 477
Employee liabilities	11 534	11 460	–	–	–	–	–	11 460
Other liabilities	6 989	6 989	–	–	–	–	–	6 989
Policyholder liabilities	4 593	–	–	–	–	–	–	–
Tier 2 liabilities	28 439	22 426	–	–	–	–	–	22 426
Deferred income tax liability	1 477	797	–	–	–	–	–	797
Liabilities directly associated with disposal groups held for sale	–	–	–	–	–	–	–	–
Amounts due to holding company and fellow subsidiary company	–	362	–	–	–	–	–	362
Total liabilities	**1 401 491**	**1 390 355**	**–**	**65 242**	**31 975**	**60 953**	**–**	**1 283 452**

* *The amounts shown in the regulatory scope column in the table above do not equal the sum of the amounts shown in the remaining columns due to derivative financial instruments subject to regulatory capital for counterparty credit risk, securitisations and market risk (trading book).*

** *The amounts shown in the regulatory column do not equal the sum of the amounts shown in the remaining columns due to investment securities subject to regulatory capital under credit and market risk frameworks, notes under the securitisation framework, and listed and unlisted equities under the equity investment risk framework.*

\# *Advances net of impairments.*

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

	As at 30 June 2018				
	Items subject to regulatory frameworks				
R million	**Credit risk**	**Counter-party credit risk**	**Securiti-sation**	**Market risk**	**Equity investment risk**
Assets carrying value per regulatory scope of consolidation	1 259 685	91 077	70 723	119 079	31 357
Liabilities carrying value per regulatory scope of consolidation	–	(65 242)	(31 975)	(60 953)	–
Total net amount under regulatory scope of consolidation	1 259 685	25 835	38 748	58 126	31 357
Off-balance sheet amounts	177 897	–	4 205	–	198
Differences in valuations	228 896	12 701	–	–	–
Difference due to potential future exposure for CCR	–	8 481	–	–	–
Differences due to netting rules and credit risk mitigation	(179 813)	(23 062)	–	–	–
Differences due to provisions	16 532	–	–	–	–
Differences due to prudential filters	(76 601)	–	(10 016)	–	(21 844)
Exposure amounts considered for regulatory purposes	1 426 596	23 955	32 937	58 126	9 711
Reconciliation to regulatory amounts in Pillar 3 tables					
CR6: Exposure post-credit conversion factors and credit risk mitigation AIRB to FRB SA	1 048 964				
CR4: Standardised approach on- and off-balance sheet amount	357 418				
CR10: Specialised lending exposures under slotting on- and off-balance sheet amount	20 214				
CCR1: Exposure at default post credit risk mitigation		21 372			
CCR3: Standardised approach for derivatives subsidiaries in the rest of Africa and foreign branches		2 583			
SEC1: Total securitisation exposures in the banking book			32 937		
Carrying value of investments*					9 711
Total	1 426 596	23 955	32 937	58 126	9 711

* *For the carrying value of investments refer to page 168 of this report.*

Prudent valuations

VALUATION METHODOLOGY

The group measures certain assets and liabilities at fair value.

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

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

RECURRING FINANCIAL INSTRUMENTS

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

NON-RECURRING FAIR VALUE MEASUREMENTS

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

- the classification of assets and liabilities as non-current assets or disposal groups held for sale under IFRS 5 where the recoverable amount is based on the fair value less costs to sell;
- IFRS 3 where assets and liabilities are measured at fair value at acquisition date; and
- IAS 36 where the recoverable amount is based on fair value less costs to sell.

VALUATION PROCESS

The group classifies assets and liabilities measured at fair value using a fair value hierarchy that reflects whether observable or unobservable inputs are used in determining the fair value of the item. Fair value may be determined using unadjusted quoted prices in active markets for identical assets and liabilities where it is readily available and the price represents actual and regularly occurring market transactions. If this information is not available, fair value is measured using another valuation technique that maximises the use of relevant observable inputs and minimises the use of unobservable inputs.

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

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

FINANCIAL INSTRUMENTS

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

Non-financial assets

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

VALIDATION PROCESS

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

PRUDENT VALUATION ADJUSTMENTS

Capital regulatory frameworks require financial institutions to apply prudent valuation to all fair value assets and liabilities. The difference between the prudent value and the fair value in terms of IFRS, called prudent valuation adjustments (PVAs), is directly deducted from CET1 capital. The following table provides descriptions of the different PVAs.

PVA	DESCRIPTION
Close-out uncertainty, of which:	
Mid-market value: market price uncertainty	This adjustment is required should there be uncertainty around the absolute level at which positions are fair-valued under financial reporting standards.
Close-out costs	A close-out cost PVA is calculated at a defined valuation exposure level (price or curve bucketing segment). This adjustment is incremental to any exit price provisions or adjustments already considered in financial reporting.
Concentration	This PVA is an estimate of the valuation impact arising from concentrated valuation positions that a bank may have at any point in time. It should capture the risk associated with holding a relatively large position in relation to the market liquidity.
Early termination	Banks will estimate an early termination PVA that considers the potential losses arising from the early termination of client trades.
Model risk	This PVA considers the variation in valuation estimates arising due to the potential existence of a range of models or model calibrations and the lack of a firm exit price for the specific product.
Operational risk	This PVA considers the potential losses that may be incurred as a result of operational risk related to valuation processes.
Investing and funding costs	Reflects the valuation uncertainty in the funding costs that other users of Pillar 3 data would factor into the exit prices for a position or portfolio. It includes funding valuation adjustments or derivative exposures.
Unearned credit spreads	PVA to take account of the valuation uncertainty in the adjustment necessary to include the current value of expected losses due to counterparty default on derivative positions, including the valuation uncertainty on CVAs.
Future administrative costs	This adjustment considers the administrative costs and future hedging costs over the expected life of the exposures for which a direct exit price is not applied for the close-out costs. This valuation adjustment has to include the operational costs arising from hedging, administration and settlement of contracts in the portfolio. The future administrative costs are incurred by the portfolio or position but are not reflected in the core valuation model or the prices used to calibrate inputs to that model.
Other	Other PVAs which are required to take into account factors that will influence the exit price but which do not fall in any of the categories listed above.

The types of financial instruments for which the highest amounts of PVA are observed are interest rate-related financial instruments including investment securities and derivatives. The following table provides a breakdown of the different PVAs as at 30 June 2018.

PV1: PRUDENT VALUATION ADJUSTMENTS

	As at 30 June 2018							
R million	Equity	Interest rates	Foreign exchange	Credit	Commo-dities	Total	Of which: In the trading book	Of which: In the banking book
1. Close-out uncertainty, of which:	–	349	6	12	3	370	314	56
2. *Mid-market value*	–	133	(1)	3	–	135	119	16
3. *Close-out cost*	–	216	7	10	2	235	195	40
12. **Total adjustment**	–	349	6	12	3	370	314	56

Mid-market value and close-out cost are the most significant PVAs for the group. Other PVAs namely concentration, early termination, model risk, and future administrative costs are considered in the calibration of these PVAs and balance sheet reserves, although not separately disclosed.

The group does not calculate the PVA for operational risk, investing and funding costs or unearned credit spreads. Lines 4-11 of PV1: *Prudent valuation adjustments* have, therefore, been omitted.

Capital management

The group actively manages its capital base commensurate with its strategy, risk appetite and risk profile. The optimal level and composition of capital and leverage is determined after taking the following 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 capital instruments

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 PA 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 year.

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

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** + **TIER 2 CAPITAL**

TIER 1 CAPITAL

CET1 CAPITAL

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

Deductions

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

AT1 CAPITAL

- NCNR preference shares;
- contingent convertible securities; 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

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

CAPITAL RATIOS

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

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.

YEAR UNDER REVIEW

The acquisition of Aldermore reduced the group's CET1 ratio by 240 bps, and the capitalisation of the underlying regulated entities did not change materially. The decrease in the CET1 position of the group relates mainly to the payment of goodwill and identified intangible assets, as well as the consolidation of Aldermore RWA (without a commensurate increase in the capital base as this is eliminated at group level from an IFRS perspective). Post the Aldermore acquisition, the group operated above its internal capital targets.

FRB's capital position was also impacted by the Aldermore acquisition, reducing its CET1 ratio by 110 bps. The reduction relates to the payment of a dividend to the legal entity which acquired Aldermore to fund the goodwill and intangibles, as well as providing funding for the net asset value acquired.

One of the group's key principles is that entities must be adequately capitalised on a standalone basis. As at 30 June 2018, the standalone capitalisation of all regulated entities remained strong, with FRB's CET1 ratio of 12.7% well in excess of the internal targets.

The decrease in the leverage ratio as at 30 June 2018 primarily relates to the decrease in the Tier 1 capital measure, which also decreased due to the impact of the Aldermore acquisition on CET1 capital.

The capital and leverage positions as at 30 June 2018 are summarised in the following table.

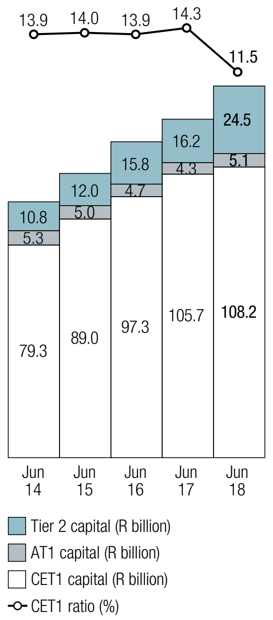
CAPITAL ADEQUACY AND LEVERAGE POSITIONS

	Capital			Leverage
%	**CET1**	**Tier 1**	**Total**	**Total**
Regulatory minimum*	7.5	9.0	11.2	4.0
Internal target	10.0 – 11.0	>12.0	>14.0	>5.0
Actual				
– Including unappropriated profits	**11.5**	**12.1**	**14.7**	**7.1**
– Excluding unappropriated profits	11.0	11.6	14.2	6.9

* *Excluding the bank-specific capital requirements, however, includes the countercyclical buffer requirement.*

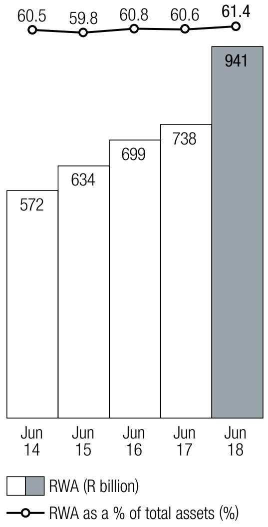
The graphs below show the historical overview of capital adequacy, RWA and leverage.

CAPITAL ADEQUACY*

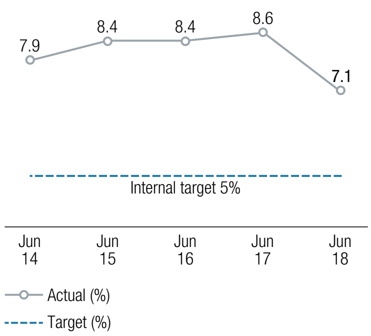


* *Includes unappropriated profits.*

RWA HISTORY



LEVERAGE*



* *Includes unappropriated profits.*

REGULATORY UPDATE

South Africa transitional arrangements

The group is currently subject to the PA transitional capital requirements, which include a 75% phased-in requirement for the capital conservation, countercyclical (CCyB) and D-SIB buffer add-ons. The PA has not implemented any CCyB requirement for South African exposures, however, the group is required to calculate the CCyB requirement on private sector exposures in foreign jurisdictions where these buffers are applicable. Effective 27 June 2018, the Prudential Regulatory Authority implemented a 0.5% CCyB requirement for UK exposures. The CCyB requirement for the group as at 30 June 2018 was 8 bps and is included in the disclosed minimum requirement. For additional disclosure, refer to the CCYB1 common disclosure templates on the FirstRand website.

The PA 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 impact 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. The group has adopted the transitional phase-in. Once implemented, both the phased-in and fully-loaded impact on capital will be disclosed on a quarterly basis.

The PA further issued Guidance Note 3 of 2018, *Proposed implementation dates in respect of the specified regulatory reforms*, which includes the Basel reforms finalised by the BCBS in December 2017. The impact on the group's capital position depends on the final implementation by the PA given the level of national discretion. The group continues to participate in the BCBS quantitative impact studies to assess the impact of such reforms. The proposed reforms and implementation dates are set out in the following table.

SUMMARY OF FINAL BASEL III REFORMS

REGULATORY REFORM	PROPOSED IMPLEMENTATION DATE
Capital requirements for equity investments in funds	1 September 2018
Capital requirements for bank exposures to central counterparties	1 September 2018
Revisions to securitisation framework	1 March 2019
Standardised approach for measuring counterparty credit risk exposures	1 March 2019
Total loss-absorbing capacity holdings	1 March 2019
Large exposures framework	1 March 2019
Interest rate risk in the banking book	1 January 2020
Interest rate risk in the banking book: disclosure requirements	1 January 2021
Minimum capital requirements for market risk	1 January 2022
Revised standardised approach for credit risk framework	1 January 2022
Revised internal ratings based approach framework	1 January 2022
Revised credit valuation adjustment framework	1 January 2022
Revised operational risk framework	1 January 2022
Leverage ratio – revised exposure definition	1 January 2022
Output floor	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%

SUPPLY OF CAPITAL

The tables below summarise FirstRand's qualifying capital components and related movements.

COMPOSITION OF CAPITAL ANALYSIS

	As at 30 June	
R million	**2018**	2017
Including unappropriated profits		
CET1	**108 226**	105 737
Tier 1	**113 342**	110 035
Total qualifying capital	**137 796**	126 191
Excluding unappropriated profits		
CET1	**103 724**	92 490
Tier 1	**108 840**	96 788
Total qualifying capital	**133 294**	112 944

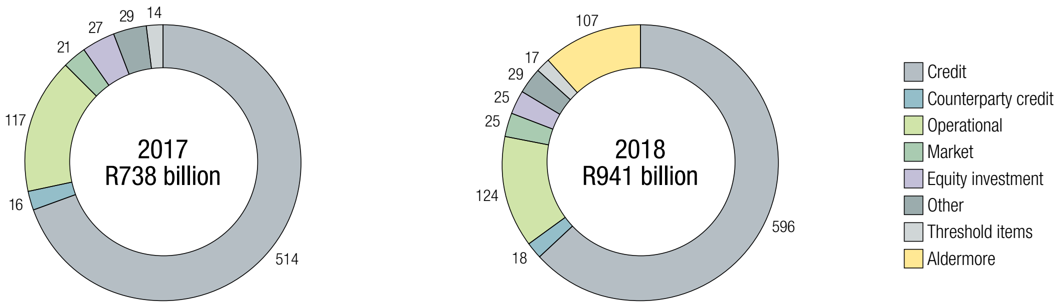
KEY DRIVERS: June 2018 *vs* June 2017

CET1 capital	> Ongoing internal capital generation through earnings coupled with sustainable dividend payout, offset by impairment of goodwill and intangibles relating to the Aldermore acquisition (R8.3 billion).
AT1 capital	> Increase in third-party capital, primarily impacted by the Basel III-compliant AT1 instruments issued by Aldermore, partly offset by the additional 10% haircut on FirstRand's AT1 instruments not compliant with Basel III.
Tier 2 capital	> Issuance of Basel III-compliant instruments in September 2017 (R2.75 billion) and April 2018 ($500 million), as well as Tier 2 instruments issued by Aldermore. > The overall increase was partly offset by an 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. > Tier 2 mix comprises R24.6 billion Basel III-compliant instruments and R3 billion old-style instruments.

DEMAND FOR CAPITAL

RWA as at 30 June 2018 was impacted by the take-on of RWA relating to Aldermore. The tables below summarises the year-on-year movements.

RWA ANALYSIS



RWA growth excluding Aldermore: +13%
RWA growth including Aldermore: +28%

KEY DRIVERS: June 2018 *vs* June 2017	
Credit	> Organic growth, model recalibrations and exchange rate movements. > Incorporates the impact of the downgrade of the South African sovereign, state-owned entities and large corporates.
Counterparty credit	> Volumes and mark-to-market movements, as well as refinement of data. > Incorporates the impact of the downgrade of the South African sovereign, state-owned entities and large corporates.
Operational	> Recalibration of risk scenarios subject to the advanced measurement approach. > Increase in gross income for entities on the standardised approach.
Market	> Volume and mark-to-market movements.
Equity investment	> Disposal of investments.
Threshold items	> Movement in deferred tax assets and investments in financial, banking and insurance entities (subject to 250% risk weighting).
Aldermore	> Relates to the Aldermore Bank (regulated bank) RWA and includes credit risk, operational risk and other risks.

OV1: OVERVIEW OF RWA

	RWA			Minimum capital requirements†
R million	**As at 30 June 2018**	As at 31 March 2018	As at 30 June 2017	**As at 30 June 2018**
1. **Credit risk (excluding counterparty credit risk)**	**648 668**	517 788	489 712	**72 703**
2. – Standardised approach	**221 218**	108 917	113 930	**24 794**
3. – AIRB	**427 450**	408 871	375 782	**47 909**
12. **Securitisation exposures in banking book**	**43 291**	34 484	24 071	**4 852**
13. – IRB ratings-based approach	**64**	17	17	**7**
14. – IRB supervisory formula approach	**1 888**	2 060	1 525	**212**
15. – Standardised approach/simplified supervisory formula approach	**41 339**	32 407	22 529	**4 633**
Total credit risk	**691 959**	552 272	513 783	**77 555**
4. **Counterparty credit risk***	**17 624**	26 812	15 718	**1 975**
5. – Standardised approach	**17 624**	26 812	15 718	**1 975**
11. **Settlement risk**	**–**	–	–	**–**
7. **Equity positions in banking book under market-based approach****	**25 201**	24 927	26 624	**2 825**
16. **Market risk**	**24 773**	23 778	21 459	**2 777**
17. – Standardised approach	**9 707**	9 879	11 263	**1 088**
18. – Internal model approach	**15 066**	13 899	10 196	**1 689**
19. **Operational risk**	**124 158**	110 155	108 440	**13 915**
20. – Basic indicator approach	**15 356**	6 037	7 547	**1 721**
21. – Standardised approach	**24 234**	22 960	21 531	**2 716**
22. – Advanced measurement approach	**84 568**	81 158	79 362	**9 478**
23. **Amounts below the thresholds for deduction (subject to 250% risk weight)**	**17 069**	14 432	14 240	**1 913**
24. **Floor adjustment**	**10 151**	10 919	9 047	**1 138**
Other assets	**29 634**	47 972	29 075	**3 321**
25. **Total**	**940 569**	811 267	738 386	**105 419**

* *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) is March 2019.*

** *The simple risk weighted method is applied to equity investment risk. The BCBS standard on equity investment in funds proposed implementation date was September 2018, rows 8 – 10 of the OV1 template have, therefore, been excluded from this table.*

Capital requirement calculated at 11.208% of RWA (June 2017: 10.75%). The minimum requirement excludes the bank-specific capital requirements, but includes the CCyB requirement. The difference to the BCBS base minimum (8%) relates to the buffer add-ons for Pillar 2A, CCyB 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

	Year ended 30 June 2018			
	RWA			
R million	Advanced approach	Standardised approach	Total	Capital requirement*
– Corporate, banks and sovereigns	204 449	153 425	357 874	40 111
– SMEs	51 822	23 855	75 677	8 482
– Residential mortgages	64 043	7 506	71 549	8 019
– Qualifying revolving retail	29 514	7 766	37 280	4 178
– Other retail	77 622	28 666	106 288	11 913
– Securitisation exposure	1 953	41 338	43 291	4 852
Total credit risk	429 403	262 556	691 959	77 555

* *Capital requirement calculated at 11.208% of RWA (June 2017: 10.75%). The minimum requirement excludes the bank-specific capital requirements, but includes the CCyB requirement. The difference to the BCBS base minimum (8%) relates to the buffer add-ons for Pillar 2A, CCyB and capital conservation buffer as prescribed in the Regulations.*

CAPITAL ADEQUACY POSITION FOR THE GROUP, ITS REGULATED SUBSIDIARIES AND THE BANK'S FOREIGN BRANCHES

The group's registered banking subsidiaries must comply with PA 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 in-country regulatory minimum.

Adequate controls and processes are in place to ensure that each entity is adequately capitalised to meet local and PA regulatory requirements. Capital generated by subsidiaries/branches in excess of targeted levels is returned to FirstRand, usually in the form of dividends/return of profits. During the year, no restrictions were experienced on the repayment of such dividends or profits to the group.

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

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

	As at 30 June			
	2018			2017
	RWA R million	**Tier 1 %**	**Total capital adequacy %**	Total capital adequacy %
Basel III (PA regulations)				
FirstRand*	**940 570**	**12.1**	**14.7**	17.1
FirstRand Bank*,**	**675 384**	**12.8**	**16.8**	17.3
FirstRand Bank South Africa*	**621 428**	**12.8**	**16.7**	17.2
FirstRand Bank London#	**52 499**	**9.4**	**14.8**	17.8
FirstRand Bank India#	**1 613**	**39.4**	**39.9**	31.7
FirstRand Bank Guernsey#, †	**192**	**15.3**	**15.3**	37.9
Basel III (local regulations)				
Aldermore Bank	**99 083**	**13.1**	**14.5**	n/a
Basel II (local regulations)				
FNB Namibia	**27 943**	**16.3**	**18.7**	17.2
FNB Mozambique	**2 062**	**13.3**	**13.3**	15.6
RMB Nigeria	**2 703**	**48.1**	**48.1**	43.4
FNB Botswana	**23 629**	**14.0**	**17.9**	17.7
Basel I (local regulations)				
FNB Swaziland	**4 086**	**23.4**	**23.4**	28.3
FNB Lesotho	**939**	**15.0**	**18.0**	17.6
FNB Zambia	**4 631**	**18.1**	**22.6**	21.2
FNB Tanzania	**991**	**38.6**	**38.6**	41.9
First National Bank Ghana	**469**	**59.0**	**59.0**	>100

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

ICAAP

ICAAP is key to the group's risk and capital management processes as it continues to evolve into an integral part of the business decision-making process which is deeply embedded in the group. Best practice, standards and methodologies are adopted on an ongoing basis to assess the overall risk profile of the group, and embedding a responsible risk culture across all levels in the group.

ICAAP impacts the following:

- Strategy and risk appetite
- Risk assessment and management
- Forward-looking capital planning:
  - budget and earnings volatility;
  - stress and scenario analysis;
  - informs capital target; and
  - dividend decision.
- Performance measurement
- Recovery planning, being an extension to ICAAP

A key input into ICAAP is an assessment of economic risk, with the outcome used to assess the group's capital position and targeted level of capitalisation, i.e. higher of economic and regulatory capital. Economic capital is also used in strategic capital planning, risk measurement and portfolio management.

The assessment of economic risk aligns with the group's economic capital framework that sets out the following:

- the risk universe;
- consistent standards and measurement for each risk type;
- continuous refinement of risk drivers, sensitivities and correlations;
- transparency and verifiable results, subject to rigorous governance processes; and
- alignment and integration with the group's risk and capital frameworks.

Available financial resources comfortably exceed the economic capital requirements as assessed in the latest ICAAP.

Common disclosures

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

- Key prudential supervisory measures:
  - key metrics (at consolidated level).
- Capital:
  - composition of regulatory capital;
  - reconciliation of regulatory capital to balance sheet; and
  - main features of regulatory capital instruments.
- Macroprudential supervisory measures:
  - geographical distribution of credit exposures used in the countercyclical capital buffer.
- Leverage:
  - summary comparison of accounting assets *vs* leverage ratio exposure measure; and
  - leverage ratio common disclosure template.
- Liquidity
  - LCR; and
  - NSFR.

Refer to www.firstrand.co.za/investorcentre/pages/commondisclosures.aspx.

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

Regulatory update

REGULATORY UPDATE

BASEL III REFORMS	The BCBS finalised the Basel III reforms in December 2017, with a specific focus on reducing the variability of RWA. The BCBS has agreed a five-year transitional period, beginning 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 used within internal models for regulatory capital purposes. The impact on the group capital position depends on the final implementation by the PA 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 bank is expected to comfortably meet these requirements over the transitional period.
LIQUIDITY COVERAGE RATIO	The LCR has been fully adopted by the PA 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 90%, with a final 10% incremental step-up to 100% due on 1 January 2019. The group remains focused on building a diversified pool of HQLA, which is somewhat constrained by the limited availability of these assets in the South African market. The BCBS published the LCR disclosure standards in March 2014 with the objective to reduce market uncertainty around liquidity positions. The standardised templates are completed semi-annually and the group publishes the quarterly disclosure templates on its website.
NET STABLE FUNDING RATIO	The NSFR is a structural balance sheet funding ratio focusing on promoting a more resilient banking sector. The ratio calculates the amount of available stable funding (ASF) relative to the amount of required stable funding (RSF). The ratio came into full effect as of 1 January 2018. Replacing *Directive 4 of 2016, Directive 8 of 2017* sets out the elements of national discretion exercised by the PA in relation to the calibration of the NSFR framework for South Africa. The PA, after due consideration and noting that rand funding is contained in the financial system, concluded it to be appropriate to apply a 35% ASF factor to deposits from financial institutions with a residual maturity of less than six months as opposed to 0% originally proposed by BCBS. In line with several other international regulators, the PA has also provided clarity on the alignment of the CLF and NSFR, applying a 5% RSF factor to the assets (post haircut) eligible for CLF purposes. These changes are anchored in the assessment of the true liquidity risk and assist the South African banking sector in meeting the NSFR requirements.
FINANCIAL CONGLOMERATES	The Financial Sector Regulation Act further empowers the PA to designate a group of companies as a financial conglomerate as well as to regulate and supervise such designated financial conglomerates. The PA has released the following: > draft set of financial conglomerate supervision prudential standards; > draft criteria for the designation of financial conglomerates, and > draft reporting template for an informal consultation process with the industry. The draft standards provide an early signal to the industry and affected stakeholders on the approach to the regulation and supervision of designated financial conglomerates. Comments were due by the end of August 2018 and standards are expected to be implemented during the first half of 2019.

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.

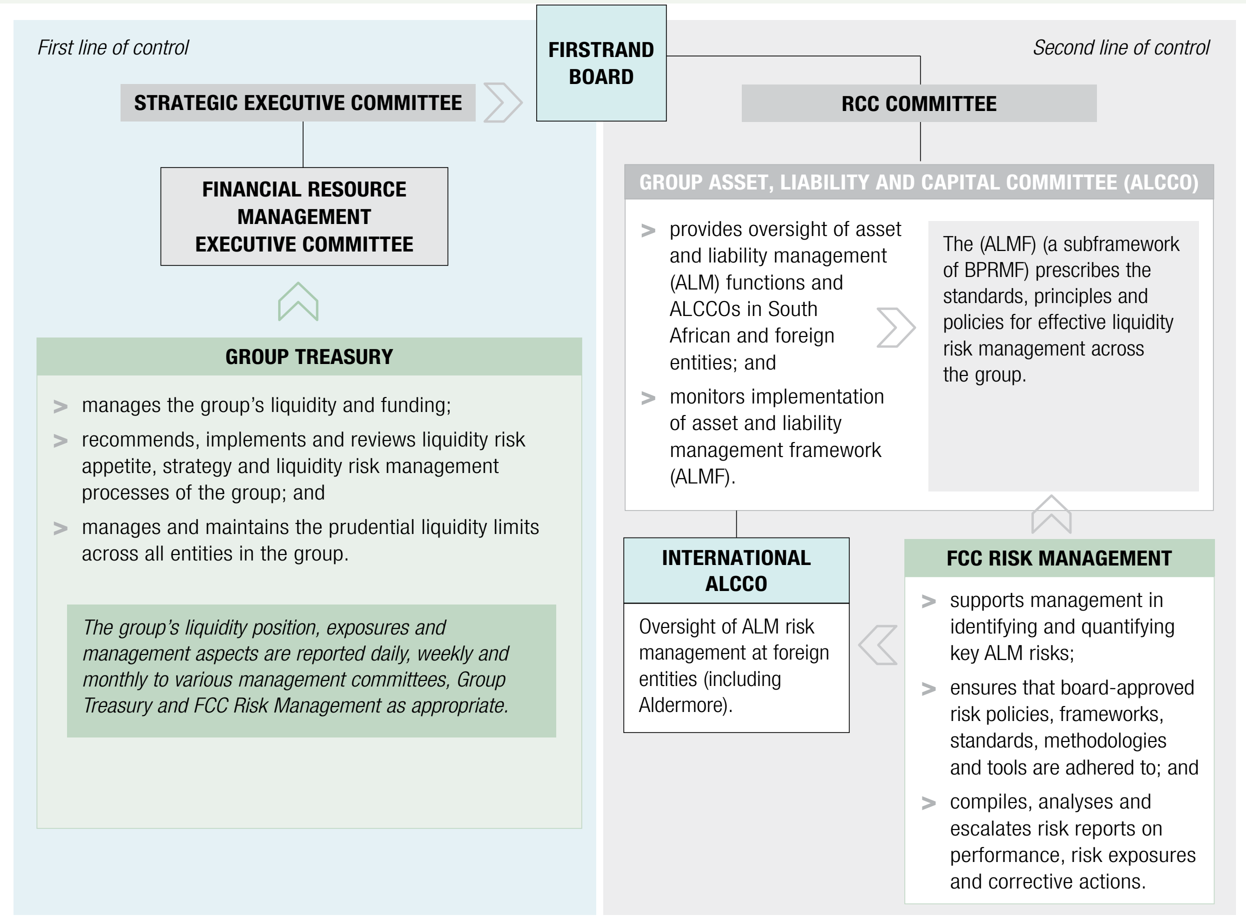
As a consequence of the liquidity risk introduced by its business activities across various currencies and geographies, the group's objective is to optimise its funding profile within structural and regulatory constraints to enable its businesses to operate in an efficient and sustainable manner.

Compliance with the Basel III liquidity ratios influences the group's funding strategy, particularly as it seeks to price appropriately for liquidity on a risk-adjusted basis. The group is actively building its deposit franchise through innovative and competitive products and pricing, while also optimising the 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 sought to increase its holdings of available liquidity in accordance with risk appetite over the year. The group utilised new and existing market structures, platforms and the PA committed liquidity facility to efficiently increase available liquidity holdings.

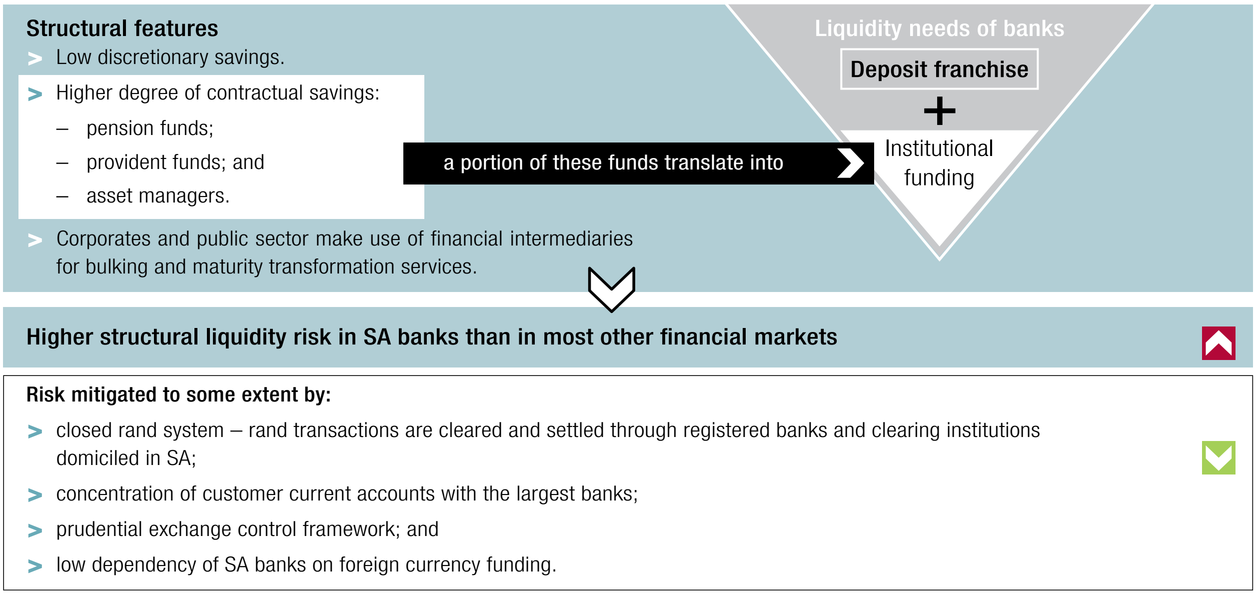
ORGANISATIONAL STRUCTURE AND GOVERNANCE

GROUP AND BANK



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. Considering the structural features discussed above, the group's focus remains on achieving an improved risk-adjusted and diversified funding profile, which is also supportive of the Basel III liquidity requirements.

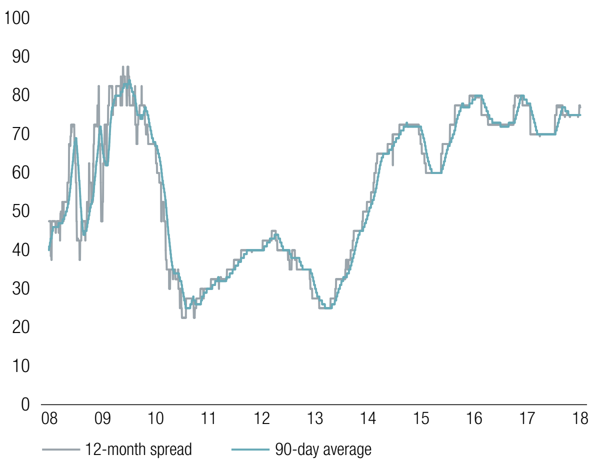
The group's aim is to fund the balance sheet in the most efficient manner, taking into account its ALMF, as well as regulatory and rating agency requirements.

To ensure maximum efficiency and flexibility in accessing funding opportunities, a range of debt programmes have been established. The group's strategy for domestic vanilla public issuances is to create actively-traded benchmark issuances which facilitate secondary market liquidity in both domestic and offshore markets. The inherent value of this strategy is the ability to identify cost-effective funding opportunities whilst maintaining an understanding of available 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 12-month NCD, the most actively-traded money market instrument currently issued by banks. The graph shows that liquidity spreads continue to remain elevated.

12-MONTH MID-MARKET FUNDING SPREAD

bps

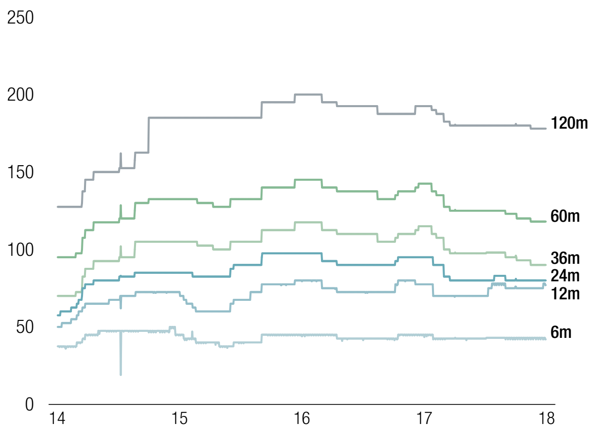


Source: Bloomberg (RMBP screen) and Reuters.

The following graph shows that long-term funding spreads remain elevated from a historical perspective and still appear to be reflecting a high liquidity premium. The liquidity spreads for instruments with maturities less than 12 months in particular are still high.

LONG-TERM FUNDING SPREADS

bps



Source: Bloomberg (RMBP screen) and Reuters.

FUNDING MEASUREMENT AND ACTIVITY

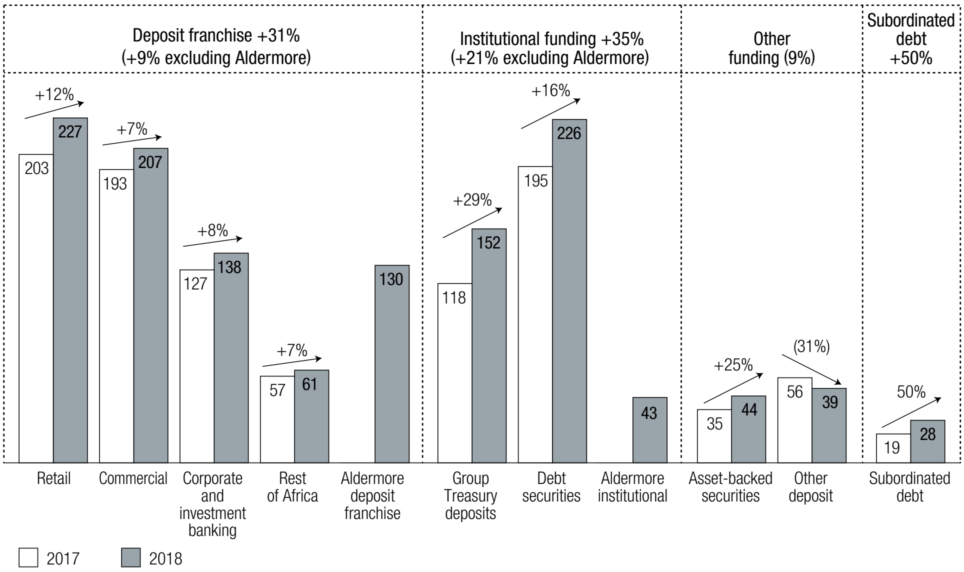
FirstRand Bank, FirstRand's wholly owned subsidiary and debt issuer, generates a larger proportion of its funding from deposits compared to the South African aggregate, however, its funding profile also reflects the structural features described previously.

The group manages its funding structure by source, counterparty type, product, currency and market. The deposit franchise is the most efficient source of funding and represented 59% of total group funding liabilities as at 30 June 2018 (2017: 59%).

The group continued to focus on growing its deposit franchise across all segments, with increased 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 deposit franchise focus.

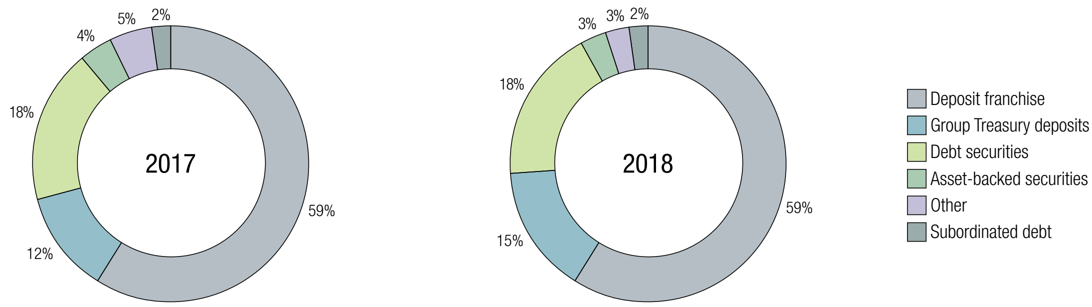
FUNDING PORTFOLIO GROWTH
R billion



Note 1: Percentage growth is based on actual, rather than rounded numbers shown in the bar graphs.
Note 2: 2017 figures differ from those previously disclosed due to the restatement of the BA900 return.

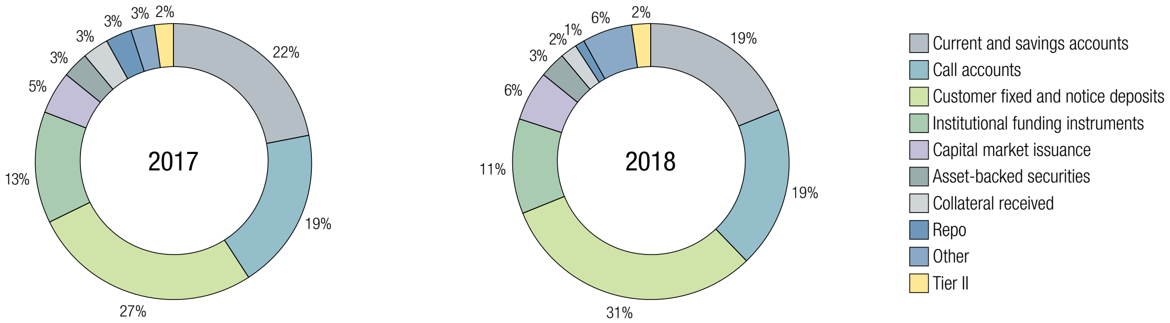
The graphs below show that the group's funding mix has remained stable over the last 12 months.

GROUP'S FUNDING MIX



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

GROUP'S FUNDING ANALYSIS BY INSTRUMENT TYPE



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

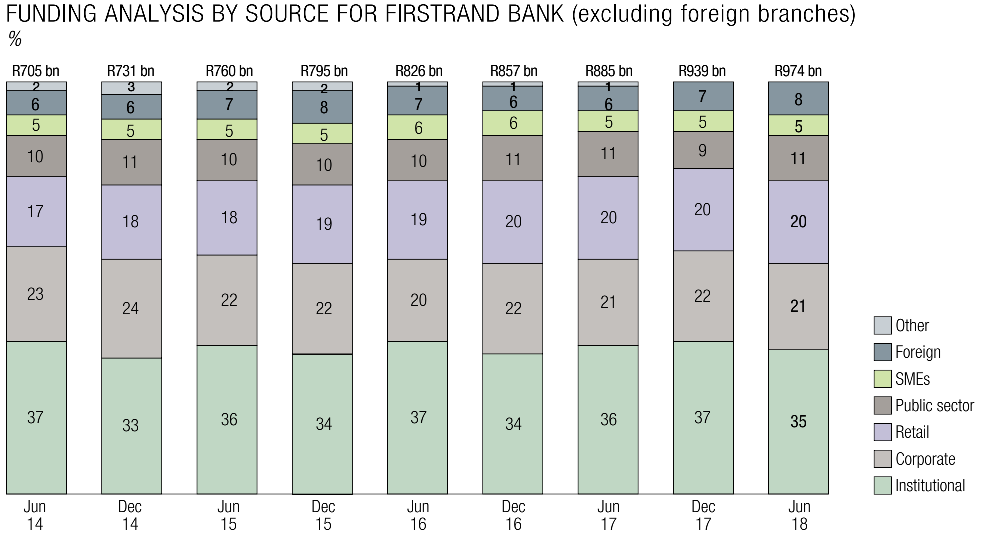
The table below provides an analysis of the bank's funding sources per counterparty type as opposed to the FirstRand segment view.

	June 2018				June 2017*
% of funding liabilities	**Total**	**Short term**	**Medium term**	**Long term**	Total
Institutional funding	**35.0**	**9.0**	**4.1**	**21.9**	37.0
Deposit franchise	**65.0**	**50.4**	**8.1**	**6.5**	63.0
Corporate	**20.6**	**17.4**	**2.3**	**0.9**	20.1
Retail	**20.3**	**15.7**	**3.2**	**1.4**	19.2
SMEs	**5.3**	**4.4**	**0.6**	**0.3**	5.5
Governments and parastatals	**11.0**	**8.8**	**1.5**	**0.7**	10.2
Foreign	**7.8**	**4.1**	**0.5**	**3.2**	6.9
Other	**–**	**–**	**–**	**–**	1.1
Total	**100.0**	**59.4**	**12.2**	**28.4**	100.0

* *2017 figures above differ from those previously disclosed due to the restatement of the BA900 return.*

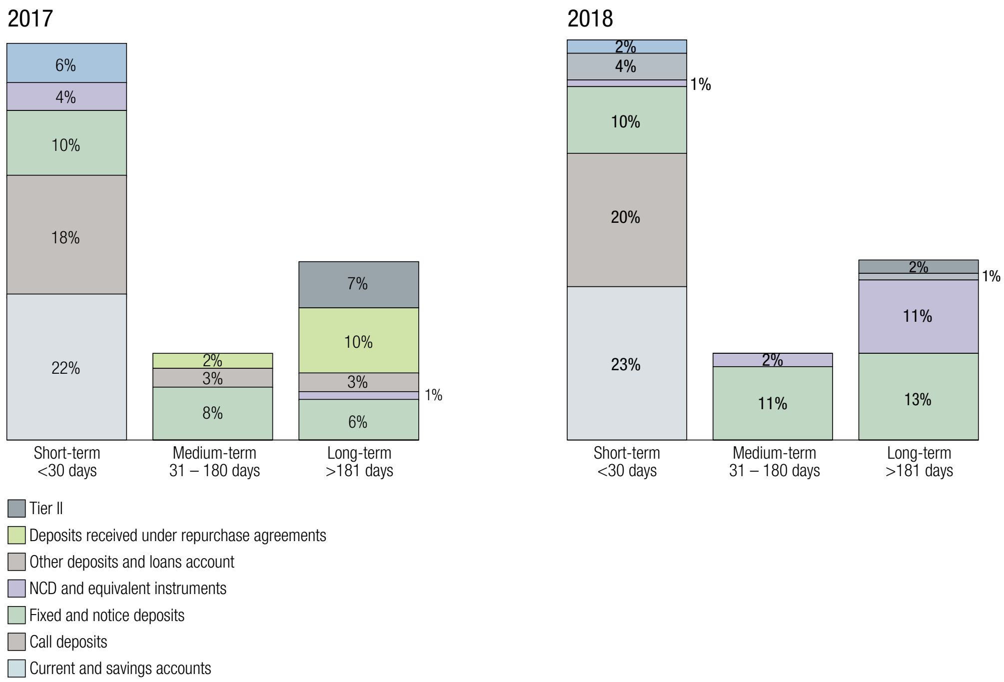
The following chart provides an analysis of the bank's funding composition by source.

FUNDING ANALYSIS BY SOURCE FOR FIRSTRAND BANK (excluding foreign branches)



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

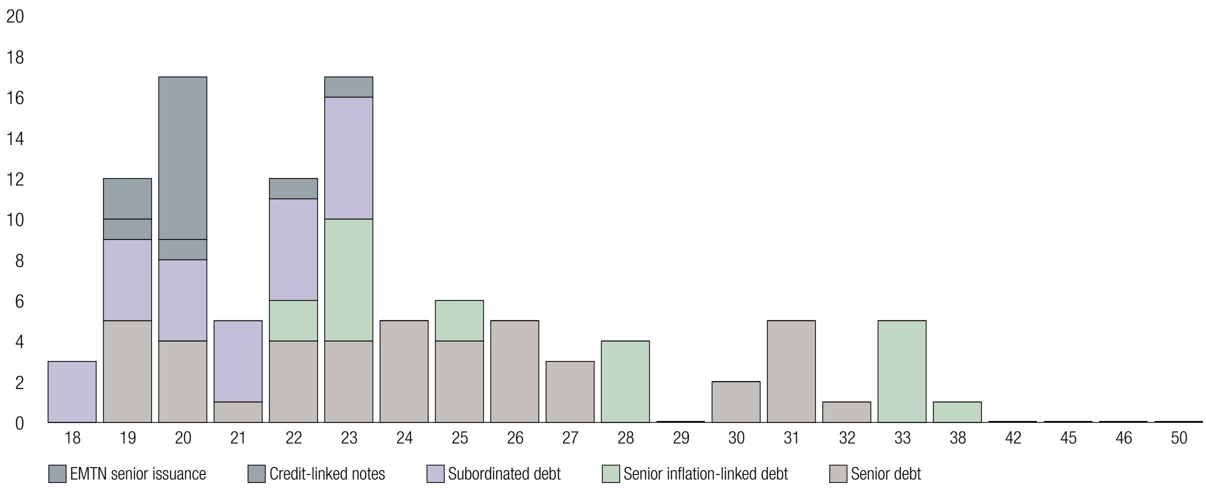
GROUP'S FUNDING LIABILITIES BY INSTRUMENT TYPE AND TENOR



The maturity profile of all the bank's issued capital markets instruments is shown in the following chart. The bank does not have significant concentration risk in any one year and seeks to efficiently issue across the maturity spectrum, taking investor demand into consideration.

MATURITY PROFILE OF CAPITAL MARKET INSTRUMENTS OF THE BANK (including foreign branches)

R billion



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. The active management of foreign currency liquidity risk remains a strategic focus given the group's growth strategy. Where fixed-rate commitments are undertaken (fixed-rate loans or fixed deposits), transfer pricing will also include the interest rate transfer price. Business are incentivised to:

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

FOREIGN CURRENCY BALANCE SHEET

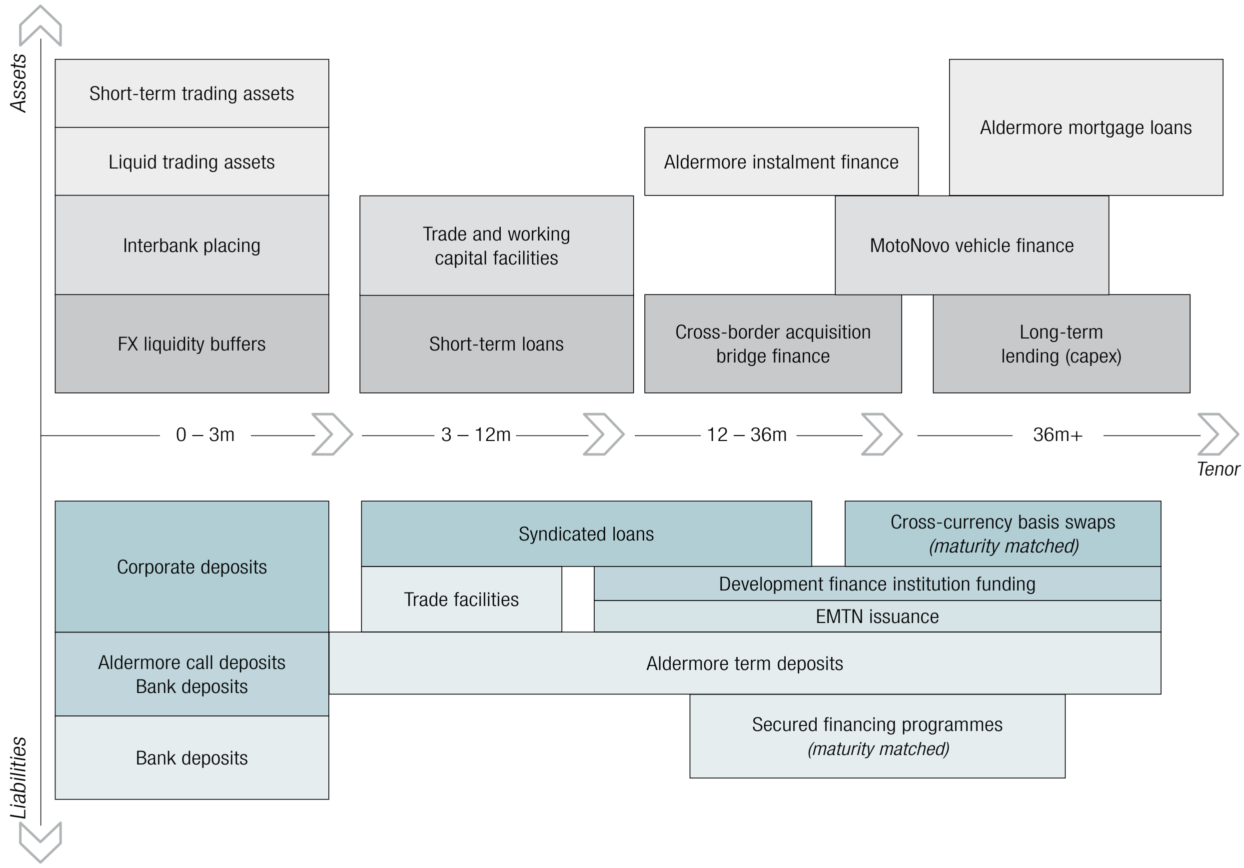
The acquisition of Aldermore alleviates some pressure on the group's foreign currency funding capacity. Once integrated, MotoNovo will be supported by Aldermore's funding platform through which all new business will be funded through a combination of on-balance sheet deposits, wholesale and structured funding. MotoNovo's back book, which currently forms part of the bank's London branch and which continues to be funded through existing funding mechanisms will, over time, be run down. Consequently, the funding capacity currently allocated to MotoNovo from the group's domestic balance sheet can be redeployed into other growth strategies. The group seeks to avoid undue liquidity risk exposure and thus maintains liquidity risk within the risk appetite approved by the board and risk committee. The PA via *Exchange Control Circular 6/2010* introduced macro-prudential limits applicable to authorised dealers. The group utilises its own foreign currency balance sheet measures based on economic risk and has set internal limits below those allowed by the macro-prudential limits framework.

FirstRand's foreign currency activities, specifically lending and trade finance, have steadily increased over the past six 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 group's exposure to branches, foreign currency assets and guarantees.

PHILOSOPHY ON FOREIGN CURRENCY EXTERNAL DEBT

The key determinant in an institution's ability to fund and refinance foreign currency exposures is the sovereign risk and the associated external financing requirement. The group's framework for the management of external debt considers 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 takes into account 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 thus employs a self-imposed structural borrowing limit and a liquidity risk limit more onerous than that required by regulations.

GRAPHICAL REPRESENTATION OF THE FOREIGN CURRENCY BALANCE SHEET



LIQUIDITY RISK MANAGEMENT

OVERVIEW

Liquidity risk is 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, therefore, continuously monitors and analyses the potential impact of other risks and events on its funding and liquidity position to ensure business activities preserve and improve funding stability. This ensures that the group is able to operate through periods of stress when access to funding could be 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 to 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 of 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 countries; > ensuring adequate liquidity ratios; > ensuring an appropriate structural liquidity gap; and > maintaining a funds transfer pricing methodology and process.	> managing intraday liquidity positions; > managing the 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 analyses 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 position 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 composition of liquid assets.

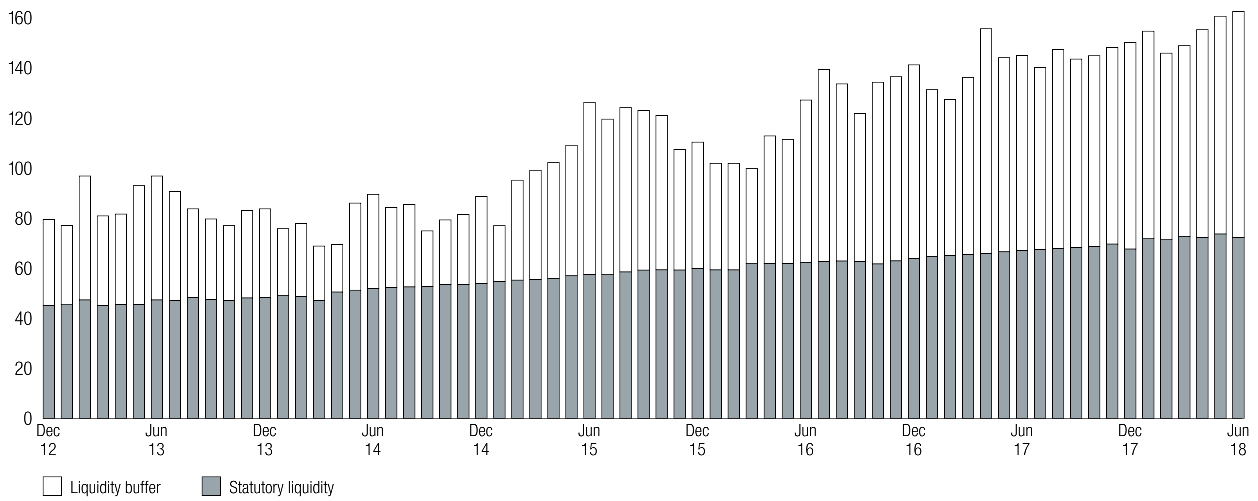
GROUP'S COMPOSITION OF LIQUID ASSETS*

	As at 30 June	
R million	**2018**	2017
Cash and deposits with central banks	**41**	34
Government bonds and bills	**120**	99
Other liquid assets	**42**	32
Total FirstRand group liquid assets	**203**	165

* *This represents the average HQLA for the quarter ended 30 June.*

Liquidity buffers are actively managed via the group's pool of high quality, highly liquid assets that are available as protection against unexpected stress events or market disruptions, as well as to facilitate the variable liquidity needs of the operating businesses. The composition and quantum of available liquid resources are defined behaviourally, considering both the funding liquidity-at-risk and the market liquidity depth of these 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)
R billion



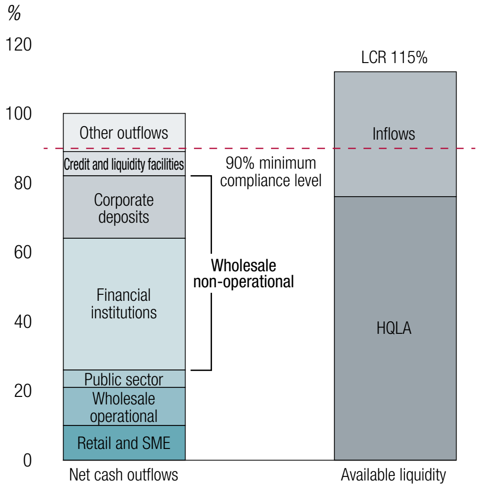
The group's liquidity ratios at 30 June 2018 are summarised below.

	Liquidity			
	Group		Bank	
	LCR*	**NSFR**	**LCR***	**NSFR**
Regulatory minimum	90%	100%	90%	100%
Actual	115%	112%	118%	111%

* *LCR is calculated as a simple average of 91 calendar days' LCR observations over the preceding quarter.*

The following graph illustrates the group's LCR position and demonstrates compliance with the 90% (2017: 80%) minimum requirement.

GROUP LCR



* *HQLA held by subsidiaries and foreign branches in excess of the required LCR minimum of 90% have been excluded on consolidation as per Directive 11 of 2014.*

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

The NSFR became effective on 1 January 2018 with a minimum requirement of 100%. At 30 June 2018, the group's NSFR was 112%. The bank's NSFR was 111%.

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, WesBank and Aldermore to individuals and SMEs with a turnover of up to R12.5 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 businesses, 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, business and ultimately a diversified group-wide level.

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 business 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 sub-portfolios subject to excessive loss volatility.	

YEAR UNDER REVIEW AND FOCUS AREAS

YEAR UNDER REVIEW	RISK MANAGEMENT FOCUS AREAS
> Aligned credit origination strategies to the group's macroeconomic outlook with particular reference to low economic growth and lack of employment growth. > Finalisation of the group's IFRS 9 programme, concluding model developments and validation against established group frameworks. > Focused on integration and alignment of credit risk management practices of Aldermore. > 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. > Continue to monitor sovereign rating outlook, and the ratings of associated entities, with proactive revisions where required. > Optimise production environments for newly developed IFRS 9 credit models. > Continue to invest in people, systems and processes related to credit model risk management to ensure appropriate governance with increasing model complexity. > Continue to rollout data architecture refinements related to BCBS 239 to further enhance credit risk aggregation and reporting.

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

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

Business CROs report quarterly on the credit risk profile including a high-level overview of advances split by portfolio to business 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 the group's qualifying capital.

RCC COMMITTEE

Reviews reports on:

- the adequacy and robustness of credit risk identification, management and control; and
- the 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 committee
- Commercial credit policy and risk appetite approval committee
- FirstRand credit impairments committee
- 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

BUSINESS CREDIT RISK FUNCTIONS

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 PA APPROACH

	As at 30 June				
	2018				2017
		AIRB approach	Standardised approach subsidiaries		
R million	Total	FRB SA	Regulated bank entities in the rest of Africa	Other subsidiaries	Total
On-balance sheet exposures	1 390 746	992 518	88 068	310 160	1 092 294
Cash and short-term funds	87 592	63 562	8 372	15 658	59 813
– Money at call and short notice	50 612	40 316	4 119	6 177	34 015
– Balances with central banks	36 980	23 246	4 253	9 481	25 798
Gross advances*	1 140 062	810 533	61 951	267 578	909 646
Less: impairments	18 835	14 504	2 253	2 078	16 540
Net advances	1 121 227	796 029	59 698	265 500	893 106
Debt investment securities (excluding non-recourse investments)**	181 927	132 927	19 998	29 002	139 375
Off-balance sheet exposures	177 896	150 967	13 781	13 148	164 209
Total contingencies	47 658	41 275	5 417	966	40 737
– Guarantees	36 977	32 055	4 175	747	34 006
– Letters of credit#	10 681	9 220	1 242	219	6 731
Irrevocable commitments	126 631	106 085	8 364	12 182	119 325
Credit derivatives	3 607	3 607	–	–	4 147
Total	1 568 642	1 143 485	101 849	323 308	1 256 503

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

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

\# *Includes acceptances.*

CREDIT QUALITY OF ASSETS

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

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

	As at 30 June 2018						
	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**	**26 947**	**1 092 816**	**13 530**	**6 769**	**1 140 062**	**18 835**	**1 121 227**
FNB	**14 066**	**379 960**	**6 955**	**3 373**	**404 354**	**8 772**	**395 582**
– Retail	**8 485**	**249 891**	**4 456**	**2 290**	**265 122**	**5 364**	**259 758**
– Commercial	**2 714**	**90 752**	**221**	**300**	**93 987**	**1 552**	**92 435**
– Rest of Africa	**2 867**	**39 317**	**2 278**	**783**	**45 245**	**1 856**	**43 389**
WesBank	**9 760**	**203 467**	**5 168**	**2 838**	**221 233**	**5 436**	**215 797**
RMB investment banking	**2 299**	**241 946**	**690**	**159**	**245 094**	**2 999**	**242 095**
RMB corporate banking	**206**	**49 537**	**37**	**27**	**49 807**	**994**	**48 813**
Aldermore	**616**	**162 208**	**680**	**372**	**163 876**	**459**	**163 417**
FCC (including Group Treasury)	**–**	**55 698**	**–**	**–**	**55 698**	**175**	**55 523**
2. **Debt investment securities**	**–**	**181 927**	**–**	**–**	**181 927**	**–**	**181 927**
3. **Off-balance sheet exposures**	**38**	**177 858**	**–**	**–**	**177 896**	**–**	**177 896**
4. **Total**	**26 985**	**1 452 601**	**13 530**	**6 769**	**1 499 885**	**18 835**	**1 481 050**

* *Gross exposures exclude recoverable loan commitments.*

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

	As at 30 June 2017						
	Gross exposures*						
		Non-defaulted exposures					
R million	Net defaulted exposures (NPLs)	Neither past due nor impaired	One instalment past due	Two instalments past due	Total	Allowances/ Impairments	Net value
1. **Gross advances**	21 905	869 432	11 749	6 560	909 646	16 540	893 106
FNB	12 228	354 550	6 743	4 048	377 569	7 905	369 664
– Retail	7 571	235 014	4 008	2 506	249 099	4 982	244 117
– Commercial	2 280	80 625	175	500	83 580	1 558	82 022
– Rest of Africa	2 377	38 911	2 560	1 042	44 890	1 365	43 525
WesBank	7 931	193 086	4 944	2 509	208 470	4 329	204 141
RMB investment banking	1 706	238 962	37	3	240 708	2 966	237 742
RMB corporate banking	40	42 171	25	–	42 236	935	41 301
FCC (including Group Treasury)	–	40 663	–	–	40 663	405	40 258
2. **Debt investment securities**	–	139 375	–	–	139 375	–	139 375
3. **Off-balance sheet exposures**	1	164 209	–	–	164 210	1	164 209
4. **Total**	21 906	1 173 016	11 749	6 560	1 213 231	16 541	1 196 690

* *Gross exposures exclude recoverable loan commitments.*

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**	**21 905**
2. Advances defaulted	**25 873**
3. Return to not defaulted status	**(10 400)**
4. Amounts written off	**(8 788)**
5. Other changes	**(1 605)**
6. **Defaulted credit exposures at 30 June 2018**	**26 985**

PAST DUE EXPOSURES

Advances are considered past due in the following circumstances:

- loans with a specific expiry date (e.g. term loans and vehicle and asset finance (VAF)) and consumer loans repayable by regular instalments (e.g. mortgage loans and personal loans) are treated as overdue where one full instalment is in arrears for one day or more and remains unpaid as at the reporting date; or
- loans payable on demand (e.g. credit cards) are treated as overdue where a demand for repayment was served on the borrower, but repayment has not been made in accordance with the stipulated requirements; or
- revolving facilities are treated as past due when the actual exposure is in excess of approved limits.

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

PAST DUE BUT NOT SPECIFICALLY IMPAIRED

Advances past due but not specifically impaired include accounts in arrears by one or two full repayments. For the year ended 30 June 2018 exposures to technical and partial arrears of R20.3 billion (2017: R20.9 billion) were classified as neither past due nor impaired in accordance with FirstRand's impairment methodology, primarily driven by retail exposures. There are no past due exposures (more than 90 days) that are not considered to be impaired.

AGE ANALYSIS OF CREDIT EXPOSURES

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

AGE ANALYSIS OF CREDIT EXPOSURES

	As at 30 June 2018				
		Past due but not specifically impaired			
R million/%	Neither past due nor impaired	One full instalment past due	Two full instalments past due	Impaired (NPLs)	Total
FNB	379 960	6 955	3 373	14 066	404 354
– Retail	249 891	4 456	2 290	8 485	265 122
– Commercial*	90 752	221	300	2 714	93 987
– Rest of Africa**	39 317	2 278	783	2 867	45 245
WesBank	203 467	5 168	2 838	9 760	221 233
RMB investment banking	241 946	690	159	2 299	245 094
RMB corporate banking	49 537	37	27	206	49 807
Aldermore	162 208	680	372	616	163 876
FCC (including Group Treasury)	55 698	–	–	–	55 698
Total	**1 092 816**	**13 530**	**6 769**	**26 947**	**1 140 062**
Percentage of total book	**95.9**	**1.2**	**0.6**	**2.4**	**100.0**

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

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

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

IMPAIRMENT OF FINANCIAL ASSETS

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

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

IMPAIRMENT CLASSIFICATION

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

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

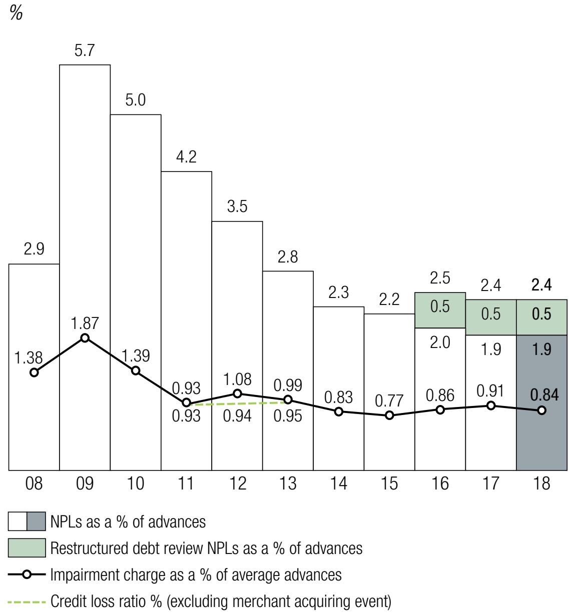
IMPAIRMENT ASSESSMENT

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

INCOME STATEMENT IMPAIRMENT CHARGE

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

NPL AND IMPAIRMENT HISTORY ON A NORMALISED BASIS*



* *Refer to pages 115 – 116 of the group's Analysis of financial results for the year ended 30 June 2018 for a description of normalised performance.*

SECTOR AND GEOGRAPHICAL ANALYSIS OF DEFAULTED ADVANCES

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

SECTOR DEFAULTED ADVANCES

	As at 30 June 2018			
R million	**Defaulted advances before write-offs**	**Less: write-offs excluding interest in suspense**	**Defaulted advances net of write-offs**	**Specific impairments**
Agriculture	**1 334**	**26**	**1 308**	**255**
Banks	**–**	**–**	**–**	**–**
Financial institutions	**511**	**40**	**471**	**279**
Building and property development	**1 608**	**417**	**1 191**	**546**
Government, Land Bank and public authorities	**329**	**8**	**321**	**12**
Individuals	**25 494**	**7 208**	**18 286**	**6 313**
Manufacturing and commerce	**3 670**	**414**	**3 256**	**1 562**
Mining	**178**	**8**	**170**	**116**
Transport and communication	**433**	**91**	**342**	**178**
Other services	**2 178**	**576**	**1 602**	**731**
Total	**35 735**	**8 788**	**26 947**	**9 992**

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

GEOGRAPHIC DEFAULTED ADVANCES*

	As at 30 June 2018			
R million	**Defaulted advances before write-offs**	**Less: write-offs excluding interest in suspense**	**Defaulted advances net of write-offs**	**Specific impairments**
South Africa	**30 235**	**8 115**	**22 120**	**7 821**
Rest of Africa	**3 455**	**25**	**3 430**	**1 607**
UK	**1 841**	**648**	**1 193**	**480**
Other Europe	**75**	**–**	**75**	**75**
North America	**–**	**–**	**–**	**–**
Australasia	**128**	**–**	**128**	**9**
Asia	**1**	**–**	**1**	**–**
Total	**35 735**	**8 788**	**26 947**	**9 992**

* *There were no exposures in South America during the year.*

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

* *There were no exposures in South America during the year.*

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

	As at 30 June 2018		
R million	**Defaulted advances before write-offs**	**Less: write-offs excluding interest in suspense**	**Defaulted exposures net of write-offs**
Off-balance sheet items			
Sector	**38**	**–**	**38**
– Government, Land Bank and public authorities	**22**	**–**	**22**
– Mining	**16**	**–**	**16**
Manufacturing and commerce	**–**	**–**	**–**
Geography – South Africa	**38**	**–**	**38**

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

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

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

RESTRUCTURED EXPOSURES

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

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

Distressed restructuring is regarded as objective evidence of impairment. Classification of distressed restructures adheres to the relevant regulatory requirements. Restructured exposures shown below are applicable to South African operations. Retail restructured exposures include loans under debt review of R5.7 billion. Restructured exposures are classified as impaired once the group determines it is probable that it will be unable to collect all principal and interest due according to the new terms and conditions of the restructured agreement. Unimpaired restructures include those that are considered performing and not distressed.

RESTRUCTURED EXPOSURES SPLIT BETWEEN IMPAIRED AND NOT IMPAIRED

	As at 30 June 2018		
R million	**Impaired**	**Not impaired**	**Total**
Advances	**5 695**	**5 277**	**10 972**

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

MONITORING OF WEAK EXPOSURES

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

MANAGEMENT OF CONCENTRATION RISK

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

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

Geographic, industry and residual maturity concentration risk

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

BREAKDOWN OF EXPOSURES ACROSS GEOGRAPHICAL AREAS

	As at 30 June 2018		As at 30 June 2017	
R million	**Gross advances and debt investment securities***	**Off-balance sheet exposures****	Gross advances and debt investment securities*	Off-balance sheet exposures**
South Africa	**916 863**	**137 664**	865 237	136 911
Rest of Africa	**115 606**	**20 596**	101 579	15 321
United Kingdom	**245 988**	**13 615**	61 214	4 813
Other Europe	**21 442**	**1 384**	6 728	3 450
North America	**12 244**	**1 143**	3 518	439
South America	**260**	**24**	434	–
Australasia	**631**	**128**	1 474	129
Asia	**8 954**	**3 342**	8 837	3 146
Total	**1 321 988**	**177 896**	1 049 021	164 209

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

** *Significant off-balance sheet exposures.*

BREAKDOWN OF EXPOSURES ACROSS INDUSTRIES

	As at 30 June 2018		As at 30 June 2017	
R million	**Gross advances and debt investment securities***	**Off-balance sheet exposures****	Gross advances and debt investment securities*	Off-balance sheet exposures**
Agriculture	**37 323**	**3 010**	33 147	2 542
Banks and financial services	**186 584**	**32 665**	151 094	32 286
Building and property development	**63 898**	**5 846**	48 744	5 605
Government, Land Bank and public authorities	**178 040**	**5 599**	145 815	10 171
Individuals	**564 685**	**57 732**	434 188	41 818
Manufacturing and commerce	**128 018**	**21 012**	105 607	19 128
Mining	**13 077**	**24 905**	19 018	26 453
Transport and communication	**26 406**	**9 570**	20 467	10 713
Other services	**123 958**	**17 557**	90 941	15 493
Total	**1 321 989**	**177 896**	1 049 021	164 209

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

** *Significant off-balance sheet exposures.*

BREAKDOWN OF EXPOSURES PER RESIDUAL MATURITY

	As at 30 June 2018		As at 30 June 2017	
R million	**Gross advances and debt investment securities***	**Off-balance sheet exposures****	Gross advances and debt investment securities*	Off-balance sheet exposures**
Less than one year (including call)	**427 964**	**174 272**	388 916	160 762
Between 1 year and 5 years	**446 376**	**2 060**	358 963	2 375
Over 5 years	**418 575**	**1 564**	280 856	1 072
Non-contractual amounts	**29 074**	**–**	20 286	–
Total	**1 321 989**	**177 896**	1 049 021	164 209

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

** *Significant off-balance sheet exposures.*

CREDIT RISK MITIGATION (CRM)

The group's credit risk mitigation approach is described on page 21.

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

	As at 30 June 2018				
	Exposures*				
		Secured by collateral		**Secured by financial guarantees**	
R million	**Unsecured carrying value**	**Carrying value**	**Secured amount**	**Carrying value**	**Secured amount**
Advances	**181 942**	**939 781**	**939 781**	**5 300**	**5 300**
Debt securities	**65 001**	**116 926**	**116 926**	**–**	**–**
Total advances and debt securities	**246 943**	**1 056 707**	**1 056 707**	**5 300**	**5 300**
Of which defaulted:	**5 046**	**11 909**	**11 909**	**–**	**–**

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

	As at 30 June 2017				
	Exposures*				
		Secured by collateral		Secured by financial guarantees	
R million	Unsecured carrying value	Carrying value	Secured amount	Carrying value	Secured amount
Advances	164 041	729 065	729 065	4 398	4 398
Debt securities	27 010	112 365	112 365	–	–
Total advances and debt securities	191 051	841 430	841 430	4 398	4 398
Of which defaulted:	3 137	10 279	10 279	–	–

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

CREDIT RISK UNDER AIRB APPROACH

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	FRB SA	Remaining FirstRand entities
AIRB	✓	
Standardised approach		✓

The following table provides the EAD composition per major portfolio within the group (including Aldermore), for each of the credit approaches.

EAD % per portfolio	AIRB	Standardised approach
Retail	68	32
Commercial	62	38
Corporate	73	27

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	> Probability of default is used in the 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+, AA, AA-, A+, A, A-
15 – 25	0.29%	BBB+, BBB(upper) BBB, BBB-(upper), BBB-, BB+(upper)
26 – 32	0.77%	BB+, BB(upper), BB, BB-(upper)
33 – 39	1.44%	BB-, B+(upper)
40 – 53	2.52%	B+
54 – 83	6.18%	B(upper), B, B-(upper)
84 – 90	13.68%	B-
91 – 99	59.11%	CCC
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 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 regulatory parameters, through-the-cycle PD and downturn LGD, whilst impairment calculations are driven by IFRS requirements.

CREDIT RISK MODEL DEVELOPMENT AND APPROVAL

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

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

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

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

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

MODEL GOVERNANCE AND VALIDATION IN THE CREDIT MODEL LIFE CYCLE

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

AIRB MODELS

AIRB models are developed in alignment with regulatory requirements for measurement of credit risk regulatory capital. Models used within retail portfolios are developed using methodologies described in the retail AIRB model development and validation framework. Corporate models are developed using statistical, expert judgement, hybrid and simulation approaches, with the approach selected according to the characteristics of the exposures modelled.

Parameter floors are applied to the models outputs as follows, in accordance with regulatory requirements:

- PDs – 0.3%;
- Residential mortgage LGDs – 10%; and
- EADs – 100% of drawn exposure.

The time-lapse between the default event and closure the of exposure depends on the type of collateral (if any) assigned to the underlying exposure. Within secured portfolios, write-off takes place once collateral perfection has occurred, or once it has been subjectively established that asset recovery will not be possible. Within unsecured portfolios, write-off occurs once an exposure has been in default for a specified period of time or has missed a specified number of payments, as articulated in product-level write-off policies.

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

PORTFOLIO	NUMBER OF MODELS	Model type	MODEL DESCRIPTION
Large corporate portfolios (RMB and WesBank) Private sector counterparties including corporates and securities firms, and public sector counterparties. Products include loan facilities, structured finance facilities, contingent products and derivative instruments.	14	**PD**	> Internally developed statistical rating models using internal and external data covering full economic cycles are used and results supplemented with qualitative assessments based on international rating agency methodologies. > All ratings (and associated PDs) are reviewed by the wholesale credit committee and, if necessary, final adjustments made to ratings to reflect information not captured by the models.
		LGD	> LGD estimates are based on modelling a combination of internal and suitably adjusted international data with the wholesale credit committee responsible for reviewing and approving LGDs. The LGD models consider the type of collateral underlying the exposure.
		EAD	> EAD estimates are based on suitably adjusted international data. The credit conversion factor approach is typically used to inform the EAD estimation process. The same committee process responsible for reviewing and approving PDs is applied to the review and approval of EADs.
Low default portfolios: sovereign and bank exposures South African and non-South African banks, local and foreign currency sovereign and sub-sovereign exposures.	10	**PD**	> PDs are based on internally-developed statistical and expert judgement models, which are used in conjunction with external rating agency ratings and structured peer group analysis to determine final ratings. PD models are calibrated using external default data and credit spread market data. > All ratings (and associated PDs) are reviewed by the wholesale credit committee and, if necessary, final adjustments made to ratings to reflect information not captured by the models.
		LGD	> LGD estimates are based on modelling a combination of internal and suitably adjusted international data which are reviewed by the same committee process responsible for reviewing and approving PDs. The LGD models consider the type of collateral underlying the exposure.
		EAD	> Estimation is based on regulatory guidelines with credit conversion factors used, as appropriate. External data and expert judgement are used due to the low default nature of the exposures.
Specialised lending portfolios (RMB, FNB commercial) Exposures to private-sector counterparties for the financing of project finance, high volatility commercial real estate, and income-producing real estate.	4	**PD**	> The rating systems are based on hybrid models using a combination of statistical cash flow simulation models and qualitative scorecards calibrated to a combination of internal data and external benchmarks. > All ratings (and associated PDs) are reviewed by the wholesale credit committee and, if necessary, final adjustments made to ratings to reflect information not captured by the models.
		LGD	> The LGD estimation process is similar to that followed for PD with simulation and expert judgement used as appropriate.
		EAD	> EAD estimates are based on internal as well as suitably adjusted external data. The credit conversion factor approach is typically used to inform the EAD estimation process.

PORTFOLIO	NUMBER OF MODELS	Model type	MODEL DESCRIPTION
Commercial portfolios (FNB commercial) Exposures to SME corporate and retail clients. Products include loan facilities, contingent products and term lending products.	12	**PD**	> **SME corporate** – counterparties are scored using financial statement information in addition to other internal risk drivers, the output of which is calibrated to internal historical default data. > **SME retail** – the SME retail portfolio is segmented into homogeneous pools and subpools through an automated scoring process using statistical models that incorporate product type, customer behaviour and delinquency status. PDs are estimated for each subpool based on internal product level history associated with the respective homogeneous pools and subpools.
		LGD	> **SME corporate** – recovery rates are largely determined by collateral type and these have been set with reference to internal historical loss data, external data and Basel guidelines. > **SME retail** – LGD estimates are applied on a portfolio level, estimated from internal historical default and recovery experience.
		EAD	> **SME corporate** – portfolio-level credit conversion factors are estimated on the basis of the group's internal historical experience and benchmarked against international studies. > **SME retail** – EAD estimates are applied on a portfolio level, estimated from internal historical default and recovery experience.
Residential mortgages (FNB retail) Exposures to individuals for financing of residential properties.	15	**PD**	> Portfolios/products are segmented into homogeneous pools and subpools through an automated scoring process using statistical models that incorporate product type, loan characteristics, customer behaviour, application data and delinquency status. > PDs are estimated for each subpool based on internal product level history associated with the respective homogeneous pools and subpools.
		LGD	> LGD estimates are based on subsegmentation with reference to collateral or product type, time in default and post-default payment behaviour. Final estimates are based on associated analyses and modelling of historical internal loss data.
		EAD	> EAD estimates are based on subsegmentation with reference to product-level analyses and modelling of historical internal exposure data.

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

Use of credit risk measures

Credit risk management encompasses the following:

- 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 IBNR 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 business and business unit risk committee meetings. > Quarterly portfolio reports submitted to credit risk management and RCC committees.	> Portfolio reports discussed at business 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 **FRB SA**, where AIRB models are applied. The information in the different columns is explained as follows:

- regulatory supplied credit conversion factors (CCF) are used;
- CRM measures applied are described on page 21;
- 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 – FRB SA CREDIT RISK EXPOSURES BY PORTFOLIO AND PD RANGE

	Total FRB SA					
	As at 30 June 2018					
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	50 646	30 292	46.15	67 487	0.04	236 206
0.15 to < 0.25	40 448	28 936	50.93	51 138	0.17	104 738
0.25 to < 0.50	349 932	82 812	42.90	345 001	0.38	341 988
0.50 to < 0.75	77 747	21 911	51.95	88 753	0.66	461 528
0.75 to < 2.50	272 178	62 060	54.03	292 640	1.57	2 273 148
2.50 to < 10.00	138 724	20 862	38.26	148 547	4.62	2 631 106
10.00 to < 100.00	32 355	3 073	53.20	34 259	26.34	1 090 725
100.00 (default)	20 815	125	60.22	21 139	100.00	1 298 987
Total	982 845	250 071	47.53	1 048 964	4.16	8 438 426

	Total FRB SA					
	As at 30 June 2018					
PD scale	Average LGD %	Average maturity Years	RWA R million*	RWA density %	Expected loss R million	Provisions R million
0.00 to < 0.15	30.86	0.65	2 941	4.36	10	
0.15 to < 0.25	30.95	1.25	11 144	21.79	26	
0.25 to < 0.50	21.73	1.96	92 728	26.88	281	
0.50 to < 0.75	26.35	0.96	28 682	32.32	158	
0.75 to < 2.50	27.64	1.04	129 576	44.28	1 308	
2.50 to < 10.00	36.43	1.11	101 908	68.60	2 567	
10.00 to < 100.00	38.86	0.87	39 707	115.90	3 594	
100.00 (default)	40.34	1.16	20 126	95.21	6 828	
Total	27.82	1.33	426 812	40.69	14 772	13 670

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

CR6: AIRB – FRB SA CREDIT RISK EXPOSURES BY PORTFOLIO AND PD RANGE continued

	Total FRB SA					
	As at 30 June 2017					
PD scale	Original on-balance sheet gross exposure R million	Off-balance sheet exposures pre CCF R million	Average CCF %	EAD post-CRM and post-CCF R million	Average PD %	Number of obligors
0.00 to < 0.15	153 312	28 845	39.70	149 364	0.02	205 679
0.15 to < 0.25	86 617	50 355	49.46	101 192	0.18	114 571
0.25 to < 0.50	158 064	66 025	43.12	174 022	0.36	327 244
0.50 to < 0.75	73 797	24 050	49.44	84 033	0.66	444 836
0.75 to < 2.50	249 161	51 953	53.04	256 941	1.54	1 683 646
2.50 to < 10.00	128 314	21 462	28.95	139 951	4.79	2 776 791
10.00 to < 100.00	31 065	2 279	49.51	32 220	26.89	991 481
100.00 (default)	18 354	33	18.20	18 847	100.00	1 166 850
Total	898 684	245 002	45.56	956 570	4.14	7 711 098

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

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

CR6: AIRB – FRB SA CREDIT RISK EXPOSURES BY PORTFOLIO AND PD SCALE continued

	Corporate					
	As at 30 June 2018					
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	3 204	957	56.90	3 231	0.08	7
0.15 to < 0.25	14 902	16 942	54.89	23 956	0.17	28
0.25 to < 0.50	98 216	41 534	49.36	114 033	0.37	156
0.50 to < 0.75	19 831	8 749	55.72	23 409	0.74	95
0.75 to < 2.50	38 531	10 527	56.33	43 449	1.71	198
2.50 to < 10.00	5 855	2 346	51.39	6 994	4.32	90
10.00 to < 100.00	2 097	629	49.48	2 400	16.21	62
100.00 (default)	488	18	47.40	496	100.00	8
Total	183 124	81 702	52.24	217 968	1.18	644

	Corporate					
	As at 30 June 2018					
PD scale	Average LGD %	Average maturity Years	RWA R million	RWA density %	Expected loss R million	Provisions R million
0.00 to < 0.15	32.99	1.44	481	14.89	1	
0.15 to < 0.25	30.75	1.60	5 792	24.18	13	
0.25 to < 0.50	32.81	1.87	51 122	44.83	135	
0.50 to < 0.75	33.34	1.89	13 631	58.23	58	
0.75 to < 2.50	34.11	1.90	34 874	80.26	255	
2.50 to < 10.00	31.12	1.58	6 606	94.45	94	
10.00 to < 100.00	40.54	1.63	4 600	191.67	176	
100.00 (default)	78.45	1.00	–	–	389	
Total	33.04	1.83	117 106	53.73	1 121	2 247

CR6: AIRB – FRB SA CREDIT RISK EXPOSURES BY PORTFOLIO AND PD SCALE continued

	Corporate					
	As at 30 June 2017					
PD scale	Original on-balance sheet gross exposure R million	Off-balance sheet exposures pre-CCF R million	Average CCF %	EAD post-CRM and post-CCF R million	Average PD %	Number of obligors
0.00 to < 0.15	2 312	988	54.08	2 716	0.09	8
0.15 to < 0.25	50 411	35 113	52.80	63 850	0.17	68
0.25 to < 0.50	43 696	28 070	51.13	53 738	0.37	118
0.50 to < 0.75	19 809	8 850	53.35	23 116	0.74	107
0.75 to < 2.50	27 047	12 114	54.47	32 962	1.82	182
2.50 to < 10.00	2 567	1 834	51.20	3 533	4.08	74
10.00 to < 100.00	1 764	187	50.04	1 855	10.46	50
100.00 (default)	572	1	49.90	570	100.00	6
Total	148 178	87 157	52.52	182 340	1.09	613

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

CR6: AIRB – FRB SA CREDIT RISK EXPOSURES BY PORTFOLIO AND PD RANGE continued

	Specialised lending					
	As at 30 June 2018					
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	383	26	58.00	398	0.08	1
0.15 to < 0.25	1 061	63	–	1 061	0.17	2
0.25 to < 0.50	32 044	4 022	50.98	32 764	0.35	32
0.50 to < 0.75	9 171	1 564	58.26	9 755	0.74	61
0.75 to < 2.50	15 426	1 909	56.72	16 153	1.82	682
2.50 to < 10.00	5 802	166	58.00	5 918	4.39	380
10.00 to < 100.00	868	130	75.73	974	15.98	59
100.00 (default)	396	–	–	396	100.00	29
Total	65 151	7 880	53.99	67 419	1.92	1 246

	Specialised lending					
	As at 30 June 2018					
PD scale	Average LGD %	Average maturity Years	RWA R million	RWA density %	Expected loss R million	Provisions R million
0.00 to < 0.15	28.79	1.30	44	11.06	–	
0.15 to < 0.25	21.57	4.67	321	30.25	–	
0.25 to < 0.50	17.77	2.24	7 786	23.76	21	
0.50 to < 0.75	25.84	2.10	4 573	46.88	19	
0.75 to < 2.50	29.10	0.94	11 861	73.43	92	
2.50 to < 10.00	28.14	0.99	5 640	95.30	73	
10.00 to < 100.00	21.90	0.13	1 155	118.58	35	
100.00 (default)	43.87	4.98	–	–	113	
Total	22.90	1.82	31 380	46.54	353	392

CR6: AIRB – FRB SA CREDIT RISK EXPOSURES BY PORTFOLIO AND PD RANGE continued

	Specialised lending					
	As at 30 June 2017					
PD scale	Original on-balance sheet gross exposure R million	Off-balance sheet exposures pre-CCF R million	Average CCF %	EAD post-CRM and post-CCF R million	Average PD %	Number of obligors
0.00 to < 0.15	156	–	–	156	0.07	8
0.15 to < 0.25	8 108	1 210	58.00	8 131	0.17	24
0.25 to < 0.50	23 403	3 805	49.77	24 302	0.34	67
0.50 to < 0.75	6 925	552	56.97	7 226	0.73	73
0.75 to < 2.50	12 662	1 311	57.66	13 279	1.33	667
2.50 to < 10.00	2 895	580	58.00	3 185	5.10	236
10.00 to < 100.00	286	–	–	286	25.66	57
100.00 (default)	779	–	–	779	100.00	28
Total	55 214	7 458	53.67	57 344	2.34	1 160

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

CR6: AIRB – FRB SA CREDIT RISK EXPOSURES BY PORTFOLIO AND PD RANGE continued

	Sovereign					
	As at 30 June 2018					
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	8 393	–	–	8 436	0.04	2
0.15 to < 0.25	47	–	–	16	0.17	2
0.25 to < 0.50	131 634	3 818	52.54	123 409	0.40	145
0.50 to < 0.75	462	248	0.09	584	0.67	35
0.75 to < 2.50	3 698	3 184	50.19	5 341	2.28	42
2.50 to < 10.00	476	68	29.96	510	3.53	105
10.00 to < 100.00	85	302	47.95	258	17.98	16
100.00 (default)	437	46	40.00	446	100.00	1
Total	145 232	7 666	49.41	139 000	0.81	348

	Sovereign					
	As at 30 June 2018					
PD scale	Average LGD %	Average maturity Years	RWA R million	RWA density %	Expected loss R million	Provisions R million
0.00 to < 0.15	20.92	0.83	377	4.47	1	
0.15 to < 0.25	42.16	0.40	5	31.25	–	
0.25 to < 0.50	9.13	2.80	16 668	13.51	45	
0.50 to < 0.75	26.36	2.68	283	48.46	1	
0.75 to < 2.50	16.63	3.62	2 913	54.54	19	
2.50 to < 10.00	40.82	2.27	624	122.35	8	
10.00 to < 100.00	25.02	1.84	353	136.82	18	
100.00 (default)	24.20	1.16	–	–	108	
Total	10.41	2.70	21 223	15.27	200	165

CR6: AIRB – FRB SA CREDIT RISK EXPOSURES BY PORTFOLIO AND PD RANGE continued

	Sovereign					
	As at 30 June 2017					
PD scale	Original on-balance sheet gross exposure R million	Off-balance sheet exposures pre-CCF R million	Average CCF %	EAD post-CRM and post-CCF R million	Average PD %	Number of obligors
0.00 to < 0.15	102 397	–	–	87 060	0.01	2
0.15 to < 0.25	1 190	10	57.97	594	0.17	19
0.25 to < 0.50	12 891	5 238	51.39	15 120	0.33	26
0.50 to < 0.75	2 234	3 955	49.31	3 888	0.73	33
0.75 to < 2.50	3 835	298	35.71	2 989	1.51	46
2.50 to < 10.00	482	81	10.27	526	3.90	203
10.00 to < 100.00	134	23	–	147	21.40	6
100.00 (default)	–	–	–	–	–	–
Total	123 163	9 605	49.59	110 324	0.17	335

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

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

CR6: AIRB – FRB SA CREDIT RISK EXPOSURES BY PORTFOLIO AND PD RANGE continued

	Banks and securities firms					
	As at 30 June 2018					
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	**27 364**	**9 151**	**53.49**	**35 581**	**0.02**	**56**
0.15 to < 0.25	**9 518**	**5 513**	**51.37**	**8 556**	**0.16**	**51**
0.25 to < 0.50	**49 574**	**4 273**	**46.67**	**20 958**	**0.40**	**86**
0.50 to < 0.75	**1 095**	**213**	**22.65**	**826**	**0.74**	**22**
0.75 to < 2.50	**22 836**	**364**	**50.73**	**1 926**	**1.66**	**63**
2.50 to < 10.00	**2 184**	**1 618**	**20.31**	**1 724**	**4.25**	**52**
10.00 to < 100.00	**93**	**274**	**31.25**	**106**	**15.01**	**37**
100.00 (default)	**–**	**–**	**–**	**–**	**–**	**–**
Total	**112 664**	**21 406**	**48.43**	**69 677**	**0.33**	**367**

	Banks and securities firms					
	As at 30 June 2018					
PD scale	Average LGD %	Average maturity Years	RWA R million	RWA density %	Expected loss R million	Provisions R million
0.00 to < 0.15	**30.36**	**0.89**	**1 382**	**3.88**	**2**	
0.15 to < 0.25	**31.63**	**0.95**	**2 203**	**25.75**	**4**	
0.25 to < 0.50	**32.25**	**0.97**	**8 687**	**41.45**	**27**	
0.50 to < 0.75	**14.30**	**1.78**	**254**	**30.75**	**1**	
0.75 to < 2.50	**55.57**	**0.79**	**2 613**	**135.67**	**18**	
2.50 to < 10.00	**46.93**	**1.07**	**2 347**	**136.14**	**34**	
10.00 to < 100.00	**29.31**	**0.98**	**132**	**124.53**	**6**	
100.00 (default)	**–**	**–**	**–**	**–**	**–**	
Total	**32.00**	**0.93**	**17 618**	**25.29**	**92**	**197**

CR6: AIRB – FRB SA CREDIT RISK EXPOSURES BY PORTFOLIO AND PD RANGE continued

	Banks and securities firms					
	As at 30 June 2017					
PD scale	Original on-balance sheet gross exposure R million	Off-balance sheet exposures pre-CCF R million	Average CCF %	EAD post-CRM and post-CCF R million	Average PD %	Number of obligors
0.00 to < 0.15	37 691	9 281	52.59	41 705	0.02	52
0.15 to < 0.25	11 870	7 238	52.66	10 756	0.17	65
0.25 to < 0.50	41 093	2 404	46.99	31 250	0.35	69
0.50 to < 0.75	1 455	314	26.05	468	0.74	28
0.75 to < 2.50	24 694	142	23.47	939	1.66	60
2.50 to < 10.00	2 859	731	20.40	2 654	4.43	47
10.00 to < 100.00	298	183	39.24	112	18.18	37
100.00 (default)	–	–	–	–	–	–
Total	119 960	20 293	50.05	87 884	0.33	358

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

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

CR6: AIRB – FRB SA CREDIT RISK EXPOSURES BY PORTFOLIO AND PD RANGE continued

	SME corporate					
	As at 30 June 2018					
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	58.99	1	0.05	21
0.15 to < 0.25	10 312	269	5.08	10 326	0.16	389
0.25 to < 0.50	7 731	5 749	0.99	9 892	0.43	5 001
0.50 to < 0.75	4 574	2 702	0.38	5 781	0.62	2 412
0.75 to < 2.50	33 619	9 694	3.12	37 700	1.46	13 220
2.50 to < 10.00	11 424	3 049	13.90	13 092	4.17	3 223
10.00 to < 100.00	1 646	291	2.56	1 789	18.45	450
100.00 (default)	1 000	9	3.81	1 309	100.00	2 343
Total	70 306	21 764	3.75	79 890	3.55	27 059

	SME corporate					
	As at 30 June 2018					
PD scale	Average LGD %	Average maturity Years	RWA R million	RWA density %	Expected loss R million	Provisions R million
0.00 to < 0.15	73.83	2.50	–	–	–	
0.15 to < 0.25	26.44	1.18	2 312	22.39	4	
0.25 to < 0.50	22.44	2.25	2 919	29.51	10	
0.50 to < 0.75	21.05	2.19	1 871	32.36	8	
0.75 to < 2.50	20.73	2.07	16 280	43.18	115	
2.50 to < 10.00	22.04	2.00	7 864	60.07	118	
10.00 to < 100.00	22.27	1.78	2 198	122.86	72	
100.00 (default)	44.60	3.34	324	24.75	423	
Total	22.34	1.99	33 768	42.27	750	816

CR6: AIRB – FRB SA CREDIT RISK EXPOSURES BY PORTFOLIO AND PD RANGE continued

	SME corporate					
	As at 30 June 2017					
PD scale	Original on-balance sheet gross exposure R million	Off-balance sheet exposures pre-CCF R million	Average CCF %	EAD post-CRM and post-CCF R million	Average PD %	Number of obligors
0.00 to < 0.15	1	5	54.52	4	0.09	47
0.15 to < 0.25	10 379	361	5.81	10 400	0.20	532
0.25 to < 0.50	7 764	5 435	0.43	9 890	0.43	7 288
0.50 to < 0.75	4 592	1 992	0.38	5 454	0.62	3 869
0.75 to < 2.50	31 720	10 394	1.82	36 051	1.48	17 925
2.50 to < 10.00	12 787	3 163	21.43	14 542	4.40	6 100
10.00 to < 100.00	1 996	416	0.81	2 225	20.49	1 138
100.00 (default)	487	26	–	1 002	100.00	2 482
Total	69 726	21 792	4.24	79 568	3.43	39 381

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

CR6: AIRB – FRB SA CREDIT RISK EXPOSURES BY PORTFOLIO AND PD RANGE continued

	SME retail					
	As at 30 June 2018					
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	27	–	33	0.09	591
0.15 to < 0.25	39	66	–	63	0.20	1 891
0.25 to < 0.50	4 271	6 125	0.50	8 599	0.33	64 826
0.50 to < 0.75	1 688	500	11.79	1 995	0.60	12 698
0.75 to < 2.50	28 434	6 944	0.59	34 045	1.70	612 609
2.50 to < 10.00	19 019	1 897	0.49	20 446	3.75	666 692
10.00 to < 100.00	3 637	147	3.55	3 820	26.15	53 189
100.00 (default)	2 801	4	–	2 752	100.00	40 325
Total	59 909	15 710	0.92	71 753	7.16	1 452 821

	SME retail					
	As at 30 June 2018					
PD scale	Average LGD %	Average maturity Years	RWA R million	RWA density %	Expected loss R million	Provisions R million
0.00 to < 0.15	57.07	1.25	4	12.12	–	
0.15 to < 0.25	59.85	1.20	16	25.40	–	
0.25 to < 0.50	34.42	0.01	1 752	20.37	10	
0.50 to < 0.75	27.05	0.01	458	22.96	3	
0.75 to < 2.50	33.64	0.62	14 664	43.07	200	
2.50 to < 10.00	37.11	1.13	11 504	56.27	296	
10.00 to < 100.00	40.05	0.95	3 492	91.41	399	
100.00 (default)	50.64	0.97	2 650	96.29	963	
Total	35.56	0.71	34 540	48.14	1 871	1 489

CR6: AIRB – FRB SA CREDIT RISK EXPOSURES BY PORTFOLIO AND PD RANGE continued

	SME retail					
	As at 30 June 2017					
PD scale	Original on-balance sheet gross exposure R million	Off-balance sheet exposures pre-CCF R million	Average CCF %	EAD post-CRM and post-CCF R million	Average PD %	Number of obligors
0.00 to < 0.15	624	1 139	0.34	1 562	0.08	8 058
0.15 to < 0.25	562	1 134	–	1 536	0.25	17 592
0.25 to < 0.50	2 667	3 521	1.38	4 842	0.33	38 650
0.50 to < 0.75	1 538	538	11.00	1 881	0.60	11 501
0.75 to < 2.50	21 512	2 699	2.12	23 214	1.74	111 456
2.50 to < 10.00	19 455	5 204	0.22	24 150	4.60	1 024 285
10.00 to < 100.00	3 076	107	1.10	3 126	28.76	21 759
100.00 (default)	2 208	–	–	2 183	100.00	23 207
Total	51 642	14 342	1.26	62 494	7.41	1 256 508

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

CR6: AIRB – FRB SA CREDIT RISK EXPOSURES BY PORTFOLIO AND PD RANGE continued

	Retail mortgages					
	As at 30 June 2018					
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	**9 525**	**10 202**	**29.40**	**12 525**	**0.08**	**22 436**
0.15 to < 0.25	**3 425**	**2 622**	**29.36**	**4 194**	**0.18**	**8 175**
0.25 to < 0.50	**23 435**	**11 499**	**48.88**	**29 056**	**0.38**	**34 499**
0.50 to < 0.75	**35 615**	**2 348**	**60.51**	**37 035**	**0.61**	**57 417**
0.75 to < 2.50	**76 444**	**18 589**	**89.73**	**93 124**	**1.35**	**147 356**
2.50 to < 10.00	**35 024**	**6 679**	**26.69**	**36 807**	**4.97**	**59 026**
10.00 to < 100.00	**7 854**	**769**	**56.68**	**8 290**	**26.92**	**15 230**
100.00 (default)	**6 508**	**15**	**100.00**	**6 522**	**100.00**	**16 537**
Total	**197 830**	**52 723**	**56.38**	**227 553**	**5.36**	**360 676**

	Retail mortgages					
	As at 30 June 2018					
PD scale	Average LGD %	Average maturity Years*	RWA R million	RWA density %	Expected loss R million	Provisions R million
0.00 to < 0.15	**14.17**	**–**	**394**	**3.15**	**2**	
0.15 to < 0.25	**15.05**	**–**	**255**	**6.08**	**1**	
0.25 to < 0.50	**14.35**	**–**	**2 936**	**10.10**	**17**	
0.50 to < 0.75	**15.80**	**–**	**5 769**	**15.58**	**37**	
0.75 to < 2.50	**16.18**	**–**	**24 356**	**26.15**	**204**	
2.50 to < 10.00	**15.03**	**–**	**18 905**	**51.36**	**274**	
10.00 to < 100.00	**15.39**	**–**	**7 050**	**85.04**	**356**	
100.00 (default)	**18.69**	**–**	**4 378**	**67.13**	**993**	
Total	**15.61**	**–**	**64 043**	**28.14**	**1 884**	**1 438**

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

CR6: AIRB – FRB SA CREDIT RISK EXPOSURES BY PORTFOLIO AND PD RANGE continued

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

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

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

CR6: AIRB – FRB SA CREDIT RISK EXPOSURES BY PORTFOLIO AND PD RANGE continued

	Retail revolving					
	As at 30 June 2018					
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	1 753	9 899	55.64	7 261	0.07	212 958
0.15 to < 0.25	1 141	3 448	52.62	2 956	0.20	93 652
0.25 to < 0.50	2 731	5 709	56.27	5 943	0.35	230 004
0.50 to < 0.75	2 618	5 114	73.28	6 365	0.62	362 815
0.75 to < 2.50	12 476	10 470	70.93	19 903	1.49	1 103 791
2.50 to < 10.00	11 024	4 743	75.22	14 592	4.71	1 234 156
10.00 to < 100.00	3 335	501	75.39	3 713	26.35	729 430
100.00 (default)	1 408	33	100.00	1 441	100.00	1 122 453
Total	36 486	39 917	64.35	62 174	5.59	5 089 259

	Retail revolving					
	As at 30 June 2018					
PD scale	Average LGD %	Average maturity Years*	RWA R million	RWA density %	Expected loss R million	Provisions R million
0.00 to < 0.15	72.53	–	255	3.51	4	
0.15 to < 0.25	71.53	–	237	8.02	4	
0.25 to < 0.50	70.69	–	749	12.60	15	
0.50 to < 0.75	69.69	–	1 238	19.45	27	
0.75 to < 2.50	70.21	–	7 555	37.96	208	
2.50 to < 10.00	70.58	–	12 417	85.09	484	
10.00 to < 100.00	69.36	–	6 616	178.18	680	
100.00 (default)	69.05	–	447	31.02	1 028	
Total	70.55	–	29 514	47.47	2 450	1 788

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

CR6: AIRB – FRB SA CREDIT RISK EXPOSURES BY PORTFOLIO AND PD RANGE continued

	Retail revolving					
	As at 30 June 2017					
PD scale	Original on-balance sheet gross exposure R million	Off-balance sheet exposures pre-CCF R million	Average CCF %	EAD post-CRM and post-CCF R million	Average PD %	Number of obligors
0.00 to < 0.15	1 412	8 049	55.37	5 869	0.08	175 781
0.15 to < 0.25	1 042	3 144	52.31	2 686	0.20	88 230
0.25 to < 0.50	2 538	5 532	56.10	5 642	0.35	225 289
0.50 to < 0.75	2 362	4 810	72.06	5 828	0.62	352 778
0.75 to < 2.50	10 841	8 934	70.75	17 161	1.48	1 003 598
2.50 to < 10.00	9 964	4 386	71.48	13 099	4.85	1 084 300
10.00 to < 100.00	3 531	1 008	70.77	4 244	24.98	659 114
100.00 (default)	1 367	–	–	1 367	100.00	1 008 183
Total	33 057	35 863	63.69	55 896	6.05	4 597 273

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

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

CR6: AIRB – FRB SA CREDIT RISK EXPOSURES BY PORTFOLIO AND PD RANGE continued

	Other retail					
	As at 30 June 2018					
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	29	59.08	21	0.10	134
0.15 to < 0.25	3	13	59.13	10	0.20	548
0.25 to < 0.50	296	83	61.85	347	0.43	7 239
0.50 to < 0.75	2 693	473	65.66	3 003	0.55	25 973
0.75 to < 2.50	40 714	379	75.38	40 999	1.74	395 187
2.50 to < 10.00	47 916	296	185.19	48 464	4.92	667 382
10.00 to < 100.00	12 740	30	561.95	12 909	30.05	292 252
100.00 (default)	7 777	–	–	7 777	100.00	117 291
Total	112 143	1 303	106.61	113 530	13.01	1 506 006

	Other retail					
	As at 30 June 2018					
PD scale	Average LGD %	Average maturity Years*	RWA R million	RWA density %	Expected loss R million	Provisions R million
0.00 to < 0.15	74.86	–	4	19.05	–	
0.15 to < 0.25	76.42	–	3	30.00	–	
0.25 to < 0.50	44.65	–	109	31.41	1	
0.50 to < 0.75	24.82	–	605	20.15	4	
0.75 to < 2.50	27.05	–	14 460	35.27	197	
2.50 to < 10.00	47.37	–	36 001	74.28	1 186	
10.00 to < 100.00	48.42	–	14 111	109.31	1 852	
100.00 (default)	47.14	–	12 327	158.51	2 811	
Total	39.54	–	77 620	68.37	6 051	5 138

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

CR6: AIRB – FRB SA CREDIT RISK EXPOSURES BY PORTFOLIO AND PD RANGE continued

	Other retail					
	As at 30 June 2017					
PD scale	Original on-balance sheet gross exposure R million	Off-balance sheet exposures pre-CCF R million	Average CCF %	EAD post-CRM and post-CCF R million	Average PD %	Number of obligors
0.00 to < 0.15	1	6	57.28	4	0.07	143
0.15 to < 0.25	1	7	62.20	5	0.20	602
0.25 to < 0.50	2 097	180	58.31	2 202	0.43	21 442
0.50 to < 0.75	2 390	465	58.48	2 663	0.60	19 935
0.75 to < 2.50	43 427	389	76.57	43 724	1.67	403 354
2.50 to < 10.00	42 568	499	87.52	43 005	4.85	601 401
10.00 to < 100.00	13 028	4	2 720.28	13 149	30.85	292 467
100.00 (default)	6 954	–	–	6 954	100.00	116 642
Total	110 466	1 550	80.01	111 706	12.40	1 455 986

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

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

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

The following table illustrates the effect of credit derivatives on the capital requirement calculation under the AIRB approach. As the group does not apply the foundation internal ratings-based approach, the rows related to this approach have been excluded from the CR7 table. Pre-credit derivatives RWA (before taking credit derivatives' mitigation effect into account) has been selected to assess the impact of credit derivatives on RWA, irrespective of how the credit risk mitigation technique feeds into the RWA calculation. No credit derivatives were applied as credit risk mitigation during the year.

CR7: AIRB – EFFECT ON RWA OF CREDIT DERIVATIVES USED AS CREDIT RISK MITIGATION TECHNIQUES

	Pre-credit derivatives RWA	
R million	**As at 30 June 2018**	As at 30 June 2017
2. Sovereign	**21 193**	16 516
4. Banks and securities firms	**16 892**	19 743
6. Corporate	**99 492**	87 871
8. Specialised lending	**50 386**	36 072
SME corporate	**33 767**	27 951
9. Retail revolving	**29 515**	27 530
10. Retail mortgages	**64 043**	58 197
11. SME retail	**34 540**	29 949
12. Other retail	**77 622**	71 953
14. Equity	**–**	–
16. Purchased receivables	**–**	–
17. **Total**	**427 450**	375 782

RWA flow statement of credit risk exposure under AIRB

The calculation of credit RWA for FRB SA is based on internally-developed, quantitative models in line with the AIRB approach. The three credit risk measures, namely PD, EAD and LGD, are used along with prescribed correlations (dependent on the asset class) and estimates of maturity, where applicable, to derive credit RWA. The quantitative models also adhere to the AIRB requirements related to annual validation.

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

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

CR8: RWA FLOW STATEMENT OF CREDIT RISK EXPOSURES UNDER AIRB

R million	RWA
1. **RWA at 31 March 2018**	**408 871**
2. Asset size	**13 209**
3. Asset quality	**4 296**
4. Model updates	**1 074**
5. Methodology and policy	**–**
6. Acquisitions and disposals	**–**
7. Foreign exchange movements	**–**
8. Other	**–**
9. **RWA at 30 June 2018***	**427 450**

* *The RWA represents credit risk exposures excluding securitisation exposure per Overview of credit RWA table on page 44.*

Back testing of PD per portfolio

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

CR9: AIRB – BACKTESTING OF PD PER PORTFOLIO

	Corporate							
	As at 30 June 2018							
				Number of obligors		Defaulted obligors		
PD scale	External rating equivalent	**Weighted average PD %**	**Arithmetic average PD by obligors %***	**End of prior year**	**End of current year**	**During current year**	**New during current year**	**Average historical annual default rate %**
0.00 to < 0.12	AAA, AA, A	**0.08**	**–**	**8**	**7**	**–**	**–**	**–**
0.12 to < 0.45	BBB	**0.30**	**0.06**	**128**	**124**	**–**	**–**	**–**
0.45 to < 1.08	BB+, BB	**0.64**	**0.16**	**165**	**164**	**–**	**–**	**–**
1.08 to < 1.80	BB-	**1.22**	**0.19**	**81**	**100**	**–**	**–**	**–**
1.80 to < 3.23	B+	**2.45**	**0.34**	**101**	**89**	**–**	**–**	**–**
3.23 to < 9.12	B	**4.32**	**0.60**	**74**	**90**	**–**	**–**	**–**
9.12 to < 18.23	B-	**10.07**	**0.80**	**47**	**51**	**–**	**–**	**–**
18.23 to < 99.99	Below B-	**35.96**	**0.61**	**3**	**11**	**–**	**–**	**–**
100 (default)	Defaulted	**100.00**	**1.24**	**6**	**8**	**8**	**2**	**100.00**
Total		**1.18**	**0.35**	**613**	**644**	**8**	**2**	**0.29**

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

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

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

CR9: AIRB – BACKTESTING OF PD PER PORTFOLIO continued

	Specialised lending							
	As at 30 June 2018							
				Number of obligors		Defaulted obligors		
PD scale	External rating equivalent	**Weighted average PD %**	**Arithmetic average PD by obligors %***	**End of prior year**	**End of current year**	**During current year**	**New during current year**	**Average historical annual default rate %**
0.00 to < 0.12	AAA, AA, A	**0.08**	**–**	**8**	**1**	**–**	**–**	**–**
0.12 to < 0.45	BBB	**0.33**	**0.05**	**76**	**21**	**–**	**–**	**–**
0.45 to < 1.08	BB+, BB	**0.70**	**0.79**	**516**	**250**	**–**	**–**	**–**
1.08 to < 1.80	BB-	**1.31**	**1.33**	**212**	**293**	**7**	**7**	**1.18**
1.80 to < 3.23	B+	**2.47**	**2.44**	**117**	**432**	**–**	**–**	**–**
3.23 to < 9.12	B	**5.25**	**3.89**	**146**	**149**	**–**	**–**	**–**
9.12 to < 18.23	B-	**12.38**	**11.70**	**7**	**58**	**–**	**–**	**–**
18.23 to < 99.99	Below B-	**27.00**	**27.00**	**50**	**13**	**–**	**–**	**–**
100 (default)	Defaulted	**100.00**	**77.11**	**28**	**29**	**259**	**70**	**100.00**
Total		**1.92**	**5.90**	**1 160**	**1 246**	**266**	**77**	**1.23**

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

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

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

CR9: AIRB – BACKTESTING OF PD PER PORTFOLIO continued

	Sovereign							
	As at 30 June 2018							
				Number of obligors		Defaulted obligors		
PD scale	External rating equivalent	**Weighted average PD %**	**Arithmetic average PD by obligors %**	**End of prior year**	**End of current year**	**During current year**	**New during current year**	**Average historical annual default rate %**
0.00 to < 0.12	AAA, AA, A	**0.04**	**–**	**2**	**2**	**–**	**–**	**–**
0.12 to < 0.45	BBB	**0.40**	**0.32**	**41**	**140**	**–**	**–**	**–**
0.45 to < 1.08	BB+, BB	**0.57**	**0.53**	**48**	**52**	**–**	**–**	**–**
1.08 to < 1.80	BB-	**1.36**	**1.06**	**27**	**26**	**–**	**–**	**–**
1.80 to < 3.23	B+	**2.45**	**2.02**	**27**	**25**	**–**	**–**	**–**
3.23 to < 9.12	B	**3.92**	**4.81**	**184**	**86**	**–**	**–**	**–**
9.12 to < 18.23	B-	**10.12**	**10.01**	**1**	**6**	**–**	**–**	**–**
18.23 to < 99.99	Below B-	**34.67**	**32.18**	**5**	**10**	**–**	**–**	**–**
100 (default)	Defaulted	**100.00**	**2.00**	**–**	**1**	**1**	**1**	**100.00**
Total		**0.81**	**6.37**	**335**	**348**	**1**	**1**	**0.10**

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

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

CR9: AIRB – BACKTESTING OF PD PER PORTFOLIO continued

	Banks and securities firms							
	As at 30 June 2018							
				Number of obligors		Defaulted obligors		
PD scale	External rating equivalent	**Weighted average PD %**	**Arithmetic average PD by obligors %**	**End of prior year**	**End of current year**	**During current year**	**New during current year**	**Average historical annual default rate %**
0.00 to < 0.12	AAA, AA, A	**0.02**	**–**	**52**	**56**	**–**	**–**	**–**
0.12 to < 0.45	BBB	**0.32**	**0.10**	**109**	**113**	**–**	**–**	**–**
0.45 to < 1.08	BB+, BB	**0.53**	**0.07**	**53**	**46**	**–**	**–**	**–**
1.08 to < 1.80	BB-	**1.12**	**0.11**	**26**	**35**	**–**	**–**	**–**
1.80 to < 3.23	B+	**2.45**	**0.19**	**34**	**28**	**–**	**–**	**–**
3.23 to < 9.12	B	**4.25**	**0.60**	**47**	**52**	**–**	**–**	**–**
9.12 to < 18.23	B-	**10.07**	**0.77**	**31**	**28**	**–**	**–**	**–**
18.23 to < 99.99	Below B-	**35.96**	**0.88**	**6**	**9**	**–**	**–**	**–**
100 (default)	Defaulted	**–**	**–**	**–**	**–**	**–**	**–**	**–**
Total		**0.33**	**0.34**	**358**	**367**	**–**	**–**	**–**

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

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

CR9: AIRB – BACKTESTING OF PD PER PORTFOLIO continued

	SME corporate							
	As at 30 June 2018							
				Number of obligors		Defaulted obligors		
PD scale	External rating equivalent	**Weighted average PD %***	**Arithmetic average PD by obligors %**	**End of prior year**	**End of current year**	**During current year**	**New during current year**	**Average historical annual default rate %***
0.00 to < 0.12	AAA, AA, A	**0.05**	**0.05**	**36**	**19**	**–**	**–**	**1.02**
0.12 to < 0.45	BBB	**0.28**	**0.39**	**7 515**	**4 852**	**32**	**27**	**0.95**
0.45 to < 1.08	BB+, BB	**0.79**	**0.85**	**9 017**	**10 238**	**61**	**61**	**1.15**
1.08 to < 1.80	BB-	**1.39**	**1.36**	**9 683**	**3 634**	**126**	**126**	**1.73**
1.80 to < 3.23	B+	**2.36**	**2.36**	**5 459**	**2 840**	**49**	**47**	**3.70**
3.23 to < 9.12	B	**4.90**	**4.66**	**3 930**	**2 557**	**322**	**306**	**5.81**
9.12 to < 18.23	B-	**12.69**	**12.16**	**679**	**465**	**95**	**93**	**8.75**
18.23 to < 99.99	Below B-	**28.49**	**34.60**	**443**	**111**	**51**	**51**	**33.58**
100 (default)	Defaulted	**100.00**	**100.00**	**2 619**	**2 343**	**2 159**	**869**	**100.00**
Total		**3.55**	**7.05**	**39 381**	**27 059**	**2 895**	**1 580**	**3.99**

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

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

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

CR9: AIRB – BACKTESTING OF PD PER PORTFOLIO continued

	SME retail							
	As at 30 June 2018							
				Number of obligors		Defaulted obligors		
PD scale	External rating equivalent	**Weighted average PD %**	**Arithmetic average PD by obligors %***	**End of prior year**	**End of current year**	**During current year**	**New during current year**	**Average historical annual default rate %**
0.00 to < 0.12	AAA, AA, A	**0.07**	**0.07**	**7 826**	**358**	**141**	**141**	**0.80**
0.12 to < 0.45	BBB	**0.33**	**0.33**	**55 733**	**65 990**	**1 016**	**1 016**	**0.78**
0.45 to < 1.08	BB+, BB	**0.76**	**0.75**	**24 865**	**38 372**	**527**	**515**	**1.77**
1.08 to < 1.80	BB-	**1.38**	**1.43**	**27 207**	**178 140**	**484**	**474**	**1.49**
1.80 to < 3.23	B+	**2.45**	**2.30**	**108 299**	**542 524**	**19 741**	**19 683**	**3.34**
3.23 to < 9.12	B	**4.72**	**4.64**	**983 281**	**532 575**	**104 608**	**104 540**	**9.68**
9.12 to < 18.23	B-	**12.64**	**10.83**	**14 666**	**40 743**	**2 273**	**2 157**	**31.78**
18.23 to < 99.99	Below B-	**36.73**	**36.27**	**11 424**	**13 794**	**3 066**	**2 782**	**79.93**
100 (default)	Defaulted	**100.00**	**99.24**	**23 207**	**40 325**	**22 918**	**4 212**	**100.00**
Total		**7.16**	**7.08**	**1 256 508**	**1 452 821**	**154 774**	**135 520**	**7.27**

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

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

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

CR9: AIRB – BACKTESTING OF PD PER PORTFOLIO continued

	Retail mortgages							
	As at 30 June 2018							
				Number of obligors		Defaulted obligors		
PD scale	External rating equivalent	**Weighted average PD %**	**Arithmetic average PD by obligors %**	**End of prior year**	**End of current year**	**During current year**	**New during current year**	**Average historical annual default rate %**
0.00 to < 0.12	AAA, AA, A	**0.08**	**0.08**	**18 139**	**19 398**	**2**	**–**	**0.18**
0.12 to < 0.45	BBB	**0.33**	**0.30**	**38 630**	**38 843**	**3**	**–**	**0.17**
0.45 to < 1.08	BB+, BB	**0.71**	**0.71**	**97 716**	**100 964**	**31**	**–**	**0.49**
1.08 to < 1.80	BB-	**1.35**	**1.36**	**77 990**	**78 537**	**62**	**–**	**0.92**
1.80 to < 3.23	B+	**2.39**	**2.40**	**48 248**	**46 781**	**102**	**1**	**2.00**
3.23 to < 9.12	B	**5.18**	**4.96**	**42 837**	**41 910**	**179**	**4**	**3.92**
9.12 to < 18.23	B-	**12.61**	**12.20**	**10 690**	**9 862**	**152**	**2**	**10.12**
18.23 to < 99.99	Below B-	**37.74**	**39.80**	**8 932**	**7 857**	**599**	**13**	**40.78**
100 (default)	Defaulted	**100.00**	**100.00**	**16 302**	**16 537**	**7 404**	**79**	**100.00**
Total		**5.36**	**7.73**	**359 484**	**360 689**	**8 534**	**99**	**2.84**

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

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

CR9: AIRB – BACKTESTING OF PD PER PORTFOLIO continued

	Retail revolving							
	As at 30 June 2018							
				Number of obligors		Defaulted obligors		
PD scale	External rating equivalent	**Weighted average PD %**	**Arithmetic average PD by obligors %**	**End of prior year**	**End of current year**	**During current year**	**New during current year**	**Average historical annual default rate %**
0.00 to < 0.12	AAA, AA, A	**0.06**	**0.07**	**144 474**	**176 531**	**6**	**–**	**0.71**
0.12 to < 0.45	BBB	**0.27**	**0.27**	**324 566**	**338 490**	**37**	**1**	**0.71**
0.45 to < 1.08	BB+, BB	**0.73**	**0.73**	**617 915**	**652 217**	**466**	**3**	**1.25**
1.08 to < 1.80	BB-	**1.42**	**1.41**	**447 601**	**493 617**	**1 155**	**15**	**2.09**
1.80 to < 3.23	B+	**2.43**	**2.46**	**561 769**	**625 273**	**3 717**	**40**	**3.24**
3.23 to < 9.12	B	**5.23**	**5.44**	**780 759**	**886 764**	**20 712**	**660**	**6.78**
9.12 to < 18.23	B-	**12.08**	**12.74**	**341 198**	**365 532**	**21 196**	**2 001**	**13.93**
18.23 to < 99.99	Below B-	**38.67**	**39.22**	**370 808**	**428 382**	**36 950**	**6 274**	**37.31**
100 (default)	Defaulted	**100.00**	**100.00**	**1 008 183**	**1 122 453**	**150 810**	**31 105**	**100.00**
Total		**5.59**	**7.79**	**4 597 273**	**5 089 259**	**235 049**	**40 099**	**8.00**

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

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

CR9: AIRB – BACKTESTING OF PD PER PORTFOLIO continued

	Other retail							
	As at 30 June 2018							
				Number of obligors		Defaulted obligors		
PD scale	**External rating equivalent**	**Weighted average PD %***	**Arithmetic average PD by obligors %**	**End of prior year**	**End of current year***	**During current year**	**New during current year**	**Average historical annual default rate %**
0.00 to < 0.12	AAA, AA, A	**0.08**	**0.07**	**141**	**122**	**–**	**–**	**6.16**
0.12 to < 0.45	BBB	**0.36**	**0.35**	**18 223**	**4 684**	**12**	**–**	**4.26**
0.45 to < 1.08	BB+, BB	**0.74**	**0.74**	**76 469**	**59 080**	**139**	**6**	**2.02**
1.08 to < 1.80	BB-	**1.49**	**1.47**	**177 144**	**183 017**	**355**	**13**	**3.05**
1.80 to < 3.23	B+	**2.36**	**2.37**	**266 633**	**283 233**	**652**	**54**	**3.39**
3.23 to < 9.12	B	**5.22**	**5.49**	**480 287**	**525 726**	**1 727**	**107**	**5.22**
9.12 to < 18.23	B-	**11.91**	**12.32**	**151 629**	**166 045**	**1 532**	**103**	**7.43**
18.23 to < 99.99	Below B-	**39.56**	**40.16**	**168 818**	**166 808**	**7 441**	**700**	**13.92**
100 (default)	Defaulted	**100.00**	**100.00**	**116 642**	**117 291**	**79 813**	**21 018**	**100.00**
Total		13.01	7.87	**1 455 986**	**1 506 006**	**91 671**	**22 001**	6.48

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

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

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

CREDIT RISK UNDER STANDARDISED APPROACH

For regulatory capital purposes, the group uses the AIRB approach for FRB SA exposures, and the standardised approach for the group's other legal entities, the bank's offshore branches and Aldermore. 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 76).

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

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

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

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

	As at 30 June 2018					
	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	**47 607**	**114**	**42 333**	**4**	**19 045**	**44.98**
2. Non-central government public sector entities	**3 547**	**929**	**4 387**	**250**	**1 799**	**38.80**
3. Multilateral development banks	**–**	**–**	**–**	**–**	**–**	**–**
4. Banks	**28 664**	**857**	**26 553**	**752**	**6 314**	**23.12**
5. Securities firms	**–**	**–**	**–**	**–**	**–**	**–**
6. Corporates	**108 373**	**23 167**	**93 903**	**8 780**	**93 688**	**91.24**
7. Regulatory retail portfolios	**59 163**	**10 312**	**50 983**	**1 548**	**48 569**	**92.46**
8. Secured by residential property	**126 221**	**5 471**	**126 218**	**1 707**	**46 186**	**36.10**
9. Secured by commercial real estate	**–**	**–**	**–**	**–**	**–**	**–**
10. Equity	**–**	**–**	**–**	**–**	**–**	**–**
11. Past due advances	**–**	**–**	**–**	**–**	**–**	**–**
12. Higher-risk categories	**–**	**–**	**–**	**–**	**–**	**–**
13. Other assets	**–**	**–**	**–**	**–**	**–**	**–**
14. **Total**	**373 575**	**40 850**	**344 377**	**13 041**	**215 601**	**60.32**

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

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

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

	As at 30 June 2018									
	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	**22 403**	**–**	**57**	**–**	**588**	**15 430**	**3 858**	**–**	**–**	**42 336**
2. Non-central government public sector entities	**–**	**–**	**51**	**–**	**4 025**	**–**	**561**	**–**	**–**	**4 637**
3. Multilateral development banks	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**
4. Banks	**6 604**	**–**	**6 845**	**–**	**13 130**	**–**	**726**	**–**	**–**	**27 305**
5. Securities firms	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**
6. Corporates	**–**	**–**	**1 926**	**–**	**14 049**	**1 317**	**81 371**	**323**	**3 697**	**102 683**
7. Regulatory retail portfolios	**–**	**–**	**–**	**–**	**–**	**52 529**	**2**	**–**	**–**	**52 531**
8. Secured by residential property	**206**	**–**	**–**	**126 540**	**–**	**1 150**	**29**	**–**	**–**	**127 925**
9. Secured by commercial real estate	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**
10. Equity	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**
11. Past due advances	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**
12. Higher-risk categories	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**
13. Other assets	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**
14. **Total**	**29 213**	**–**	**8 879**	**126 540**	**31 792**	**70 426**	**86 547**	**323**	**3 697**	**357 417**

CR5: STANDARDISED APPROACH – EXPOSURES BY ASSET CLASSES AND RISK WEIGHTS continued

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

SPECIALISED LENDING EXPOSURES UNDER SLOTTING

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

CR10: AIRB SPECIALISED LENDING

R million		As at 30 June 2018							
		Other than high-volatility commercial estate*							
					Exposure amount				
Regulatory categories	Remaining maturity	On-balance sheet amount	Off-balance sheet amount	Risk weight	Project finance	Income-producing real estate	Total	RWA	Expected losses
Strong	Less than 2.5 years	–	–	50%	–	–	–	–	–
	Equal to or more than 2.5 years	9 103	1 408	70%	9 834	–	9 834	7 540	44
Good	Less than 2.5 years	–	–	70%	–	–	–	–	–
	Equal to or more than 2.5 years	5 267	1 269	90%	6 002	–	6 002	5 726	48
Satisfactory		1 522	109	115%	1 515	116	1 631	1 854	36
Weak		1 396	140	250%	1 477	–	1 477	3 913	118
Total		17 288	2 926		18 828	116	18 944	19 033	246

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

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

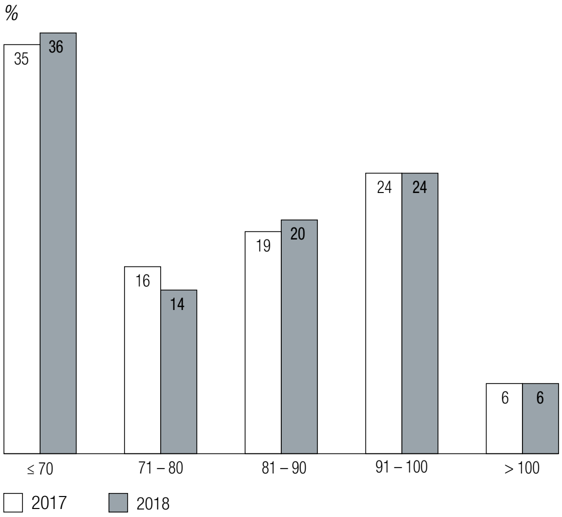
* *There were no high-volatility commercial real estate exposures during the year. For specialised lending exposures other than high-volatility commercial real estate, there were no exposures to object finance or commodities asset classes during the year.*

SELECTED RISK ANALYSES

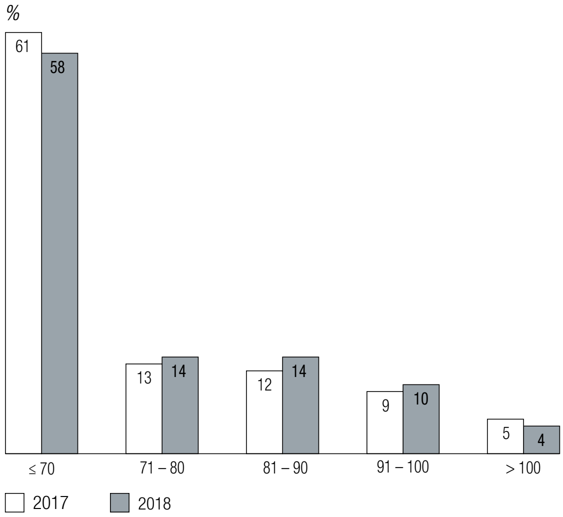
The graphs below provide loan balance-to-value ratios and age distributions of residential mortgages.

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.

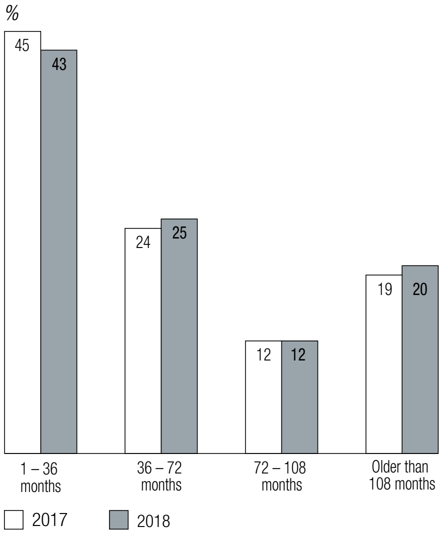
FNB RESIDENTIAL MORTGAGES
BALANCE-TO-ORIGINAL VALUE



FNB RESIDENTIAL MORTGAGES
BALANCE-TO-MARKET VALUE

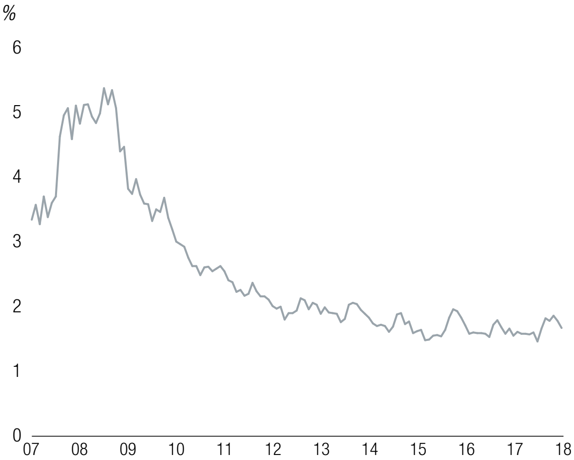


FNB RESIDENTIAL MORTGAGES
AGE DISTRIBUTION



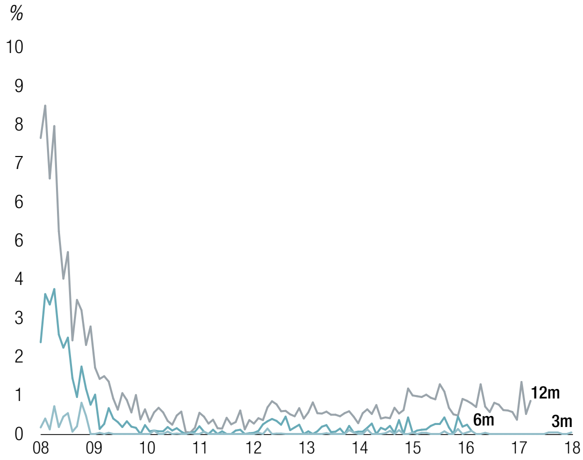
The following graph shows arrears in the FNB HomeLoans portfolio. It includes accounts where more than one full payment is in arrears, expressed as a percentage of total advances. The increase in arrears in the year under review reflects the reclassification of restructured debt review accounts to arrear status.

FNB HOMELOANS ARREARS



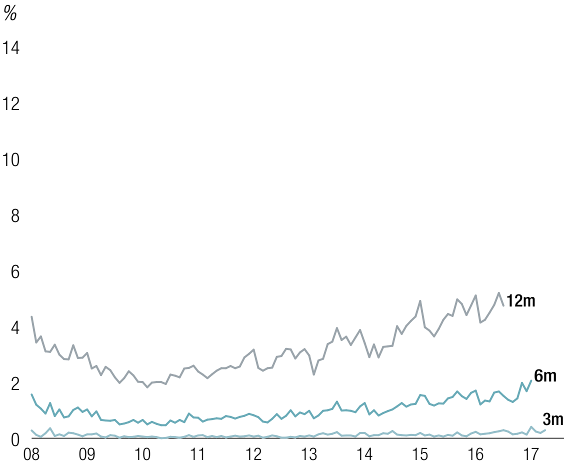
Vintages in FNB HomeLoans remained stable as collections were strong. Lower new business volumes limited book growth for most of the year.

FNB HOMELOANS VINTAGE ANALYSIS



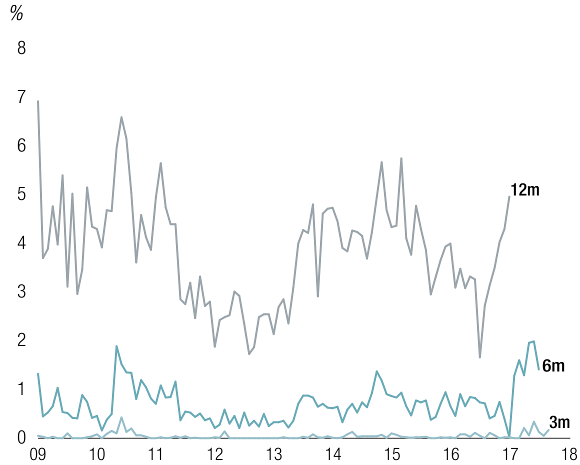
The retail SA VAF vintages experienced strain in the latter part of the 2018 financial year due to the continued increase in customers opting for court orders for repossession and the ongoing impact of third-party data, which resulted in the underprediction of certain risk factors. Further risk appetite adjustments have been implemented.

WESBANK RETAIL VAF VINTAGE ANALYSIS



FNB card growth differed across segments over the year. Card growth in premium benefited from customer growth, while the book contracted in the consumer segment as appetite remained conservative. Vintages have trended higher, especially in consumer. Default rates are still within expectation.

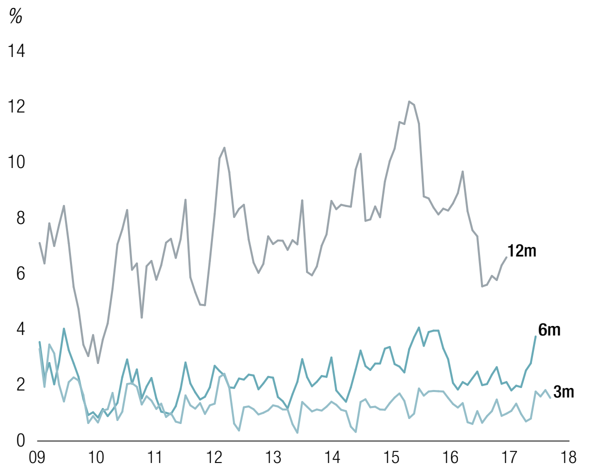
FNB CARD VINTAGE ANALYSIS



FNB personal loans growth was concentrated in the premium segment driven by increased penetration into the existing base. The change in risk mix and effective collections resulted in vintages remaining within risk appetite. The uptick in vintage trend is expected given the growth in shorter term (up to 6 months) loans.

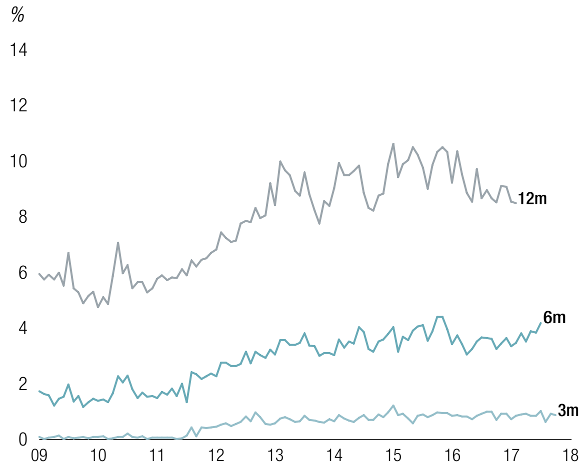
Although the debt-review NPL portfolio grew more relative to the performing book, it still remains a relatively small proportion of the total book. Collections in the debt-review book are, however, better than non-debt review NPLs, further improving the 12-month vintage over the past two-year period.

FNB PERSONAL LOANS VINTAGE ANALYSIS

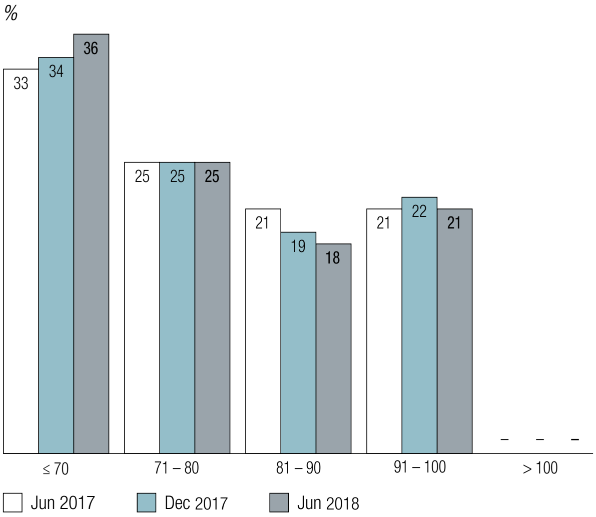


WesBank personal loans vintages have been stable since December 2013 due to active credit origination management within the portfolio, including a number of risk cuts, where appropriate.

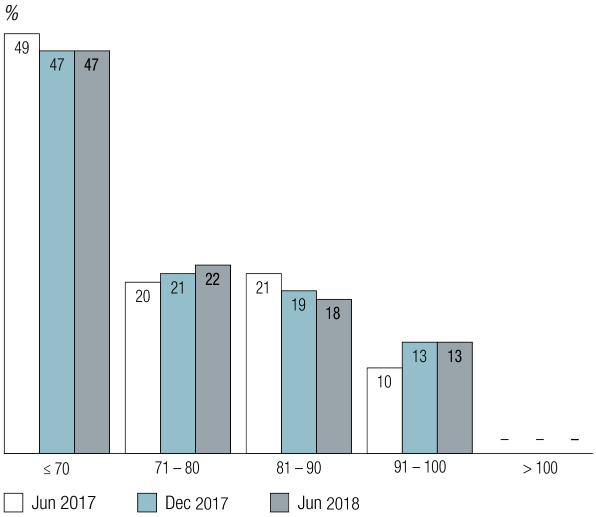
WESBANK PERSONAL LOANS VINTAGE ANALYSIS



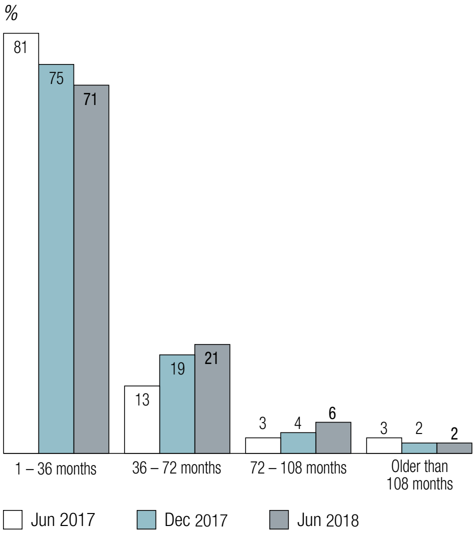
ALDERMORE RESIDENTIAL MORTGAGES BALANCE-TO-ORIGINAL VALUE



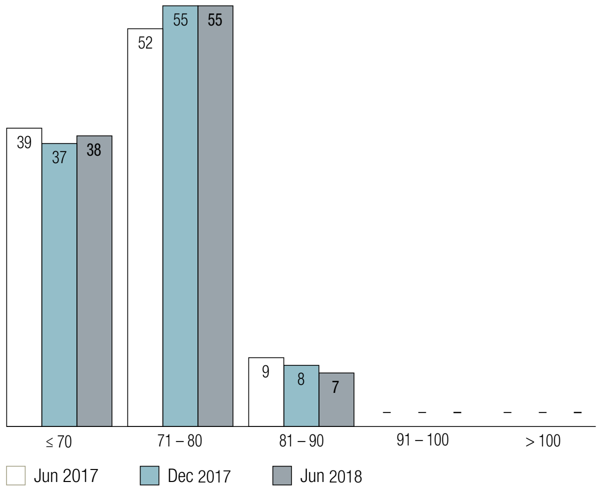
ALDERMORE RESIDENTIAL MORTGAGES CURRENT BALANCE-TO-MARKET VALUE



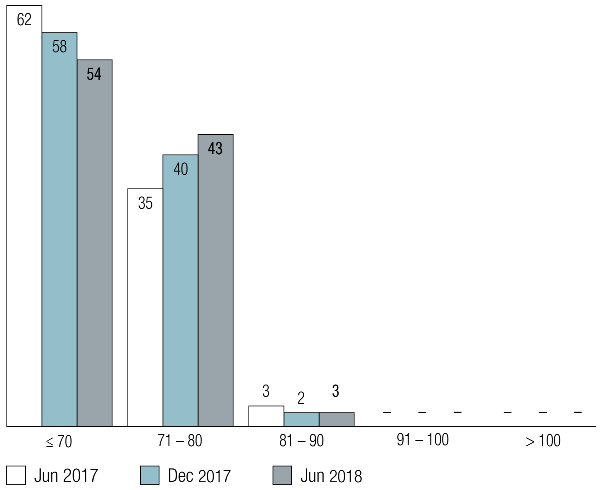
ALDERMORE RESIDENTIAL MORTGAGES AGE DISTRIBUTION



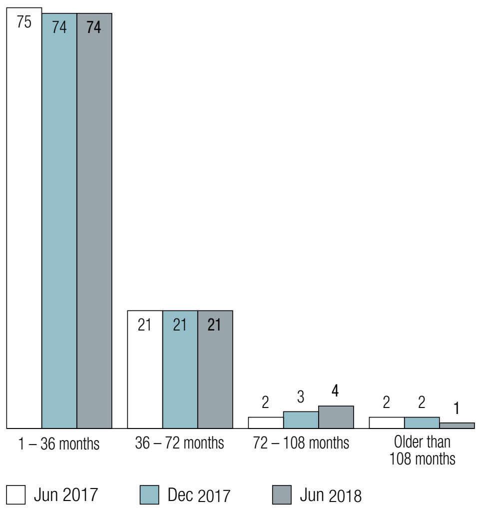
ALDERMORE BUY-TO-LET BALANCE-TO-ORIGINAL VALUE
%



ALDERMORE BUY-TO-LET CURRENT BALANCE-TO-MARKET VALUE
%



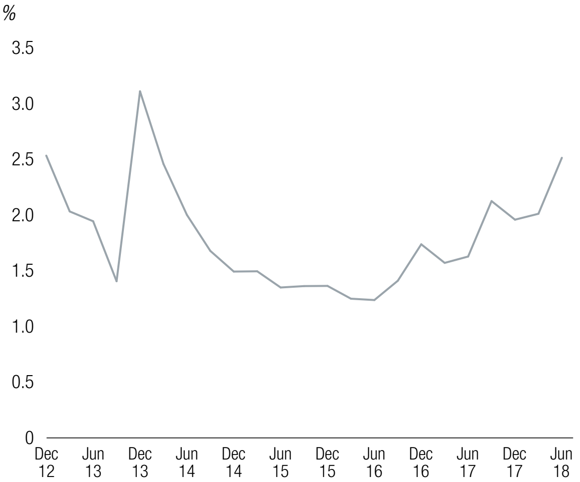
ALDERMORE BUY-TO-LET AGE DISTRIBUTION
%



For standard residential mortgages, Aldermore typically operates in a higher LTV range compared to the larger high street banks, but uses experienced manual underwriting to identify low-to-medium risk lending opportunities within that range. Aldermore covers a broad spectrum of customers from first-time buyers to self-employed customers.

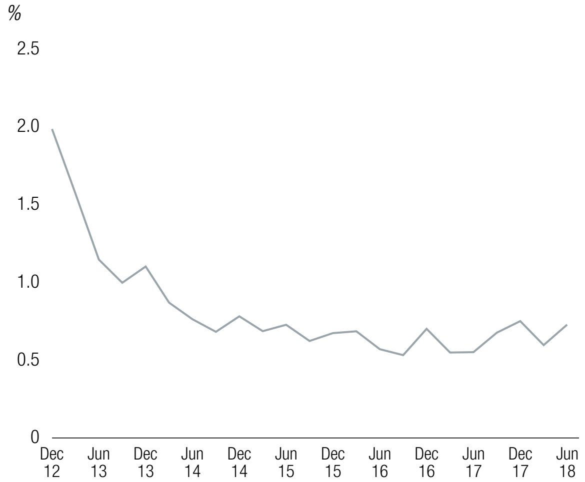
The following graph shows arrears levels in this portfolio. Arrears levels spiked in December 2013 as a relatively small acquired mortgage portfolio migrated to Aldermore adding some short-term volatility. Arrears levels have subsequently reduced as the portfolio grew rapidly. The gradual increase during 2017/18 largely reflects the maturing of the book. Arrears levels are, however, in line with industry benchmarking figures.

ALDERMORE RESIDENTIAL MORTGAGES ARREARS



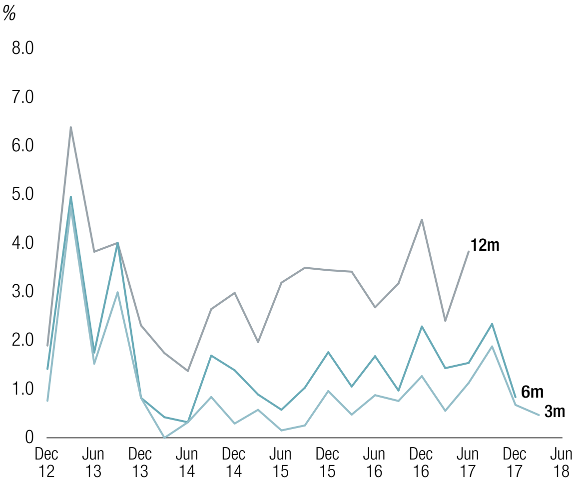
With the deployment of the new buy-to-let underwriting standards in January 2017 (for affordability) and September 2017 (for portfolio landlords), an increased level of control has been applied to the affordability assessment for this portfolio, therefore, improving the prospective credit quality.

ALDERMORE BUY-TO-LET ARREARS

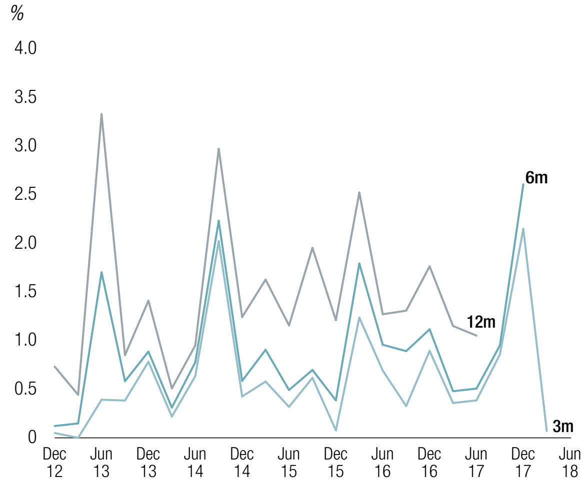


The following graph reflects that relatively low volumes of arrears for this portfolio result in some volatility in the vintage lines. Arrears have been at similar levels since 2014. Aldermore's credit quality is strong and relatively stable.

ALDERMORE RESIDENTIAL MORTGAGES VINTAGE ANALYSIS



ALDERMORE BUY-TO-LET VINTAGE ANALYSIS



Counterparty credit risk

INTRODUCTION AND OBJECTIVES

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

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

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

YEAR UNDER REVIEW AND FOCUS AREAS

YEAR UNDER REVIEW	RISK MANAGEMENT FOCUS AREAS
> Focused on integrated assessment of credit, legal, liquidity and market risks of complex counterparty derivative portfolios. > Performed impact assessment of upcoming liquidity, margin and capital regulations on derivative portfolios. > 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 is 31 March 2019. > 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.

Regulatory capital limits.

ASSESSMENT AND APPROVAL

Relevant technical committees

Derivative counterparty risk management committee

Market and investment risk 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

The group's counterparty credit risk mitigation approach is described on page 22.

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 is an adjustment to the fair value (or price) of derivative instruments to account for counterparty credit risk. Thus, CVA is commonly viewed as the price of counterparty credit risk. 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 the BCBS with the intention to implement new standards by January 2022. The rationale for revising the current framework is to:

> capture all CVA risks and better recognise CVA hedges;
> align with industry practices for accounting purposes; and
> align 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 following 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 FRB SA. The group calculates counterparty credit risk exposures under the standardised method for FRB 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 a central clearing counterparties (CCP). The changes in counterparty exposure numbers year-on-year 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, counterparty credit risk 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 FRB SA

	As at 30 June 2018					
R million	**Replacement cost**	**Potential future exposure**	**EEPE**	**Alpha used for computing regulatory EAD**	**EAD post-CRM**	**RWA**
1. Standardised approach (for derivatives)*	**6 343**	**6 058**	**–**	**1.4**	**17 361**	**5 879**
4. Comprehensive approach for credit risk mitigation for security financing transactions**	**–**	**–**	**–**	**–**	**4 011**	**1 850**
6. **Total**	**6 343**	**6 058**	**–**	**–**	**21 372**	**7 729**

* *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	EEPE	Alpha used for computing regulatory EAD	EAD post-CRM	RWA
1. Standardised approach (for derivatives)*	5 336	7 850	–	1.4	18 461	6 881
4. Comprehensive approach for credit risk mitigation for security financing transactions**	–	–	–	–	1 813	1 120
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, therefore, 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 year.

CCR2: CVA CAPITAL CHARGE

	As at 30 June 2018		As at 30 June 2017	
R million	**EAD post-CRM**	**RWA**	EAD post-CRM	RWA
3. All portfolios subject to the standardised CVA capital charge	**17 361**	**6 734**	18 461	6 573
4. **Total subject to the CVA capital charge**	**17 361**	**6 734**	18 461	6 573

CCR3: STANDARDISED APPROACH – EXPOSURES BY REGULATORY PORTFOLIO AND RISK WEIGHTS*

	As at 30 June 2018					
	Risk weight#					
R million	**0%**	**20%**	**50%**	**100%**	**150%**	**Total credit exposure**
Asset classes**						
Sovereigns	**–**	**–**	**–**	**350**	**–**	**350**
Non-central government public sector entities	**–**	**–**	**–**	**–**	**–**	**–**
Multilateral development banks	**–**	**–**	**–**	**–**	**–**	**–**
Banks	**1 555**	**2**	**36**	**1**	**1**	**1 595**
Securities firms	**473**	**–**	**3**	**–**	**–**	**476**
Corporates	**–**	**–**	**5**	**157**	**–**	**162**
Total	**2 028**	**2**	**44**	**508**	**1**	**2 583**

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

** *There were no exposures in the regulatory retail portfolios and other assets classes at 30 June 2018.*

There were no exposures in the 10%, 35%, and 75% risk weight buckets at 30 June 2018.

	As at 30 June 2017					
	Risk weight#					
R million	0%	20%	50%	100%	150%	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	–	–	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 assets 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 year was largely driven by an increase in the banking and corporate exposures in the bank's 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 FRB 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 FRB SA						
	As at 30 June 2018						
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	**3 563**	**0.07**	**43**	**22.00**	**1.24**	**408**	**11.45**
0.15 to <0.25	**4 400**	**0.16**	**103**	**27.00**	**0.97**	**964**	**21.91**
0.25 to <0.50	**4 695**	**0.36**	**150**	**35.00**	**1.83**	**1 946**	**41.43**
0.50 to <0.75	**682**	**0.74**	**81**	**26.00**	**0.89**	**305**	**44.79**
0.75 to <2.50	**3 457**	**1.65**	**221**	**20.00**	**1.37**	**1 819**	**52.54**
2.50 to <10.00	**496**	**4.34**	**68**	**21.00**	**1.03**	**322**	**64.92**
10.00 to <100.00	**68**	**15.42**	**22**	**36.00**	**1.10**	**115**	**169.12**
100.00 (default)	**–**	**–**	**–**	**–**	**–**	**–**	**–**
Total	**17 361**		**688**			**5 879**	**33.86**

	Total FRB SA						
	As at 30 June 2017						
PD scale	EAD post-CRM R million	Average PD %	Number of obligors	Average LGD %	Average maturity Years	RWA R million	RWA density %
0.00 to <0.15	2 460	0.07	50	23.61	1.72	371	15.08
0.15 to <0.25	4 614	0.16	133	18.71	1.36	763	16.53
0.25 to <0.50	6 418	0.33	116	28.37	2.57	2 493	38.84
0.50 to <0.75	1 248	0.74	94	26.63	2.79	648	51.97
0.75 to <2.50	3 265	1.51	249	26.12	1.21	2 195	67.22
2.50 to <10.00	429	4.62	68	27.35	1.41	379	88.27
10.00 to <100.00	27	13.60	22	23.37	1.70	32	121.31
100.00 (default)	–	–	–	–	–	–	–
Total	18 461		732			6 881	37.27

RWA reduced by R1 002 million year-on-year. The change emanates from the 0.25% to <0.50% PD band due to reduced trade volumes and the strengthening of the rand during the quarter ended 30 June 2018.

CCR4: AIRB – COUNTERPARTY CREDIT RISK EXPOSURES BY PORTFOLIO AND PD RANGE continued

	Banks						
	As at 30 June 2018						
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	**3 391**	**0.07**	**35**	**21.00**	**1.21**	**377**	**11.12**
0.15 to <0.25	**1 423**	**0.16**	**3**	**40.00**	**0.31**	**472**	**33.17**
0.25 to <0.50	**630**	**0.45**	**18**	**30.00**	**1.70**	**317**	**50.32**
0.50 to <0.75	**1**	**0.74**	**1**	**26.00**	**0.89**	**–**	**44.79**
0.75 to <2.50	**14**	**1.33**	**4**	**35.00**	**1.11**	**11**	**78.57**
2.50 to <10.00	**3**	**4.93**	**8**	**50.00**	**0.58**	**5**	**166.67**
10.00 to <100.00	**–**	**32.21**	**4**	**45.00**	**0.30**	**1**	**29.52**
100.00 (default)	**–**	**–**	**–**	**–**	**–**	**–**	**–**
Subtotal	**5 462**		**73**			**1 183**	**21.66**

	Banks						
	As at 30 June 2017						
PD scale	EAD post-CRM R million	Average PD %	Number of obligors	Average LGD %	Average maturity Years	RWA R million	RWA density %
0.00 to <0.15	2 113	0.07	39	24.90	1.74	341	16.13
0.15 to <0.25	329	0.16	6	38.16	1.47	124	37.58
0.25 to <0.50	885	0.33	21	22.34	1.42	287	32.47
0.50 to <0.75	12	0.74	1	45.00	0.74	8	67.77
0.75 to <2.50	16	1.34	6	35.13	1.35	13	80.63
2.50 to <10.00	3	4.79	8	48.35	0.54	5	147.68
10.00 to <100.00	4	32.33	4	43.41	0.39	10	241.38
100.00 (default)	–	–	–	–	–	–	–
Subtotal	3 362		85			788	23.44

For the bank's portfolio, the overall increase in exposure and RWA was driven by currency movements on positions facing international banks as reflected by the 0.00% to <0.15% and 0.15% to <0.25% PD bands.

CCR4: AIRB – COUNTERPARTY CREDIT RISK EXPOSURES BY PORTFOLIO AND PD RANGE continued

	Securities						
	As at 30 June 2018						
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	**116**	**0.09**	**2**	**23.00**	**2.04**	**21**	**18.10**
0.15 to <0.25	**2 514**	**0.17**	**56**	**20.00**	**1.22**	**402**	**15.99**
0.25 to <0.50	**2 972**	**0.34**	**36**	**36.00**	**1.68**	**1 119**	**37.65**
0.50 to <0.75	**368**	**0.74**	**26**	**16.00**	**0.41**	**100**	**27.17**
0.75 to <2.50	**2 575**	**1.45**	**104**	**15.00**	**1.04**	**980**	**38.06**
2.50 to <10.00	**167**	**4.93**	**15**	**8.00**	**2.68**	**55**	**32.93**
10.00 to <100.00	**54**	**10.07**	**11**	**34.00**	**1.39**	**79**	**146.30**
100.00 (default)	**–**	**–**	**–**	**–**	**–**	**–**	**–**
Subtotal	**8 766**		**250**			**2 756**	**31.44**

	Securities						
	As at 30 June 2017						
PD scale	EAD post-CRM R million	Average PD %	Number of obligors	Average LGD %	Average maturity Years	RWA R million	RWA density %
0.00 to <0.15	291	0.07	3	12.69	1.77	24	8.13
0.15 to <0.25	3 315	0.16	62	13.48	1.16	385	11.61
0.25 to <0.50	2 649	0.33	23	29.67	2.15	886	33.46
0.50 to <0.75	375	0.74	32	7.85	0.64	55	14.74
0.75 to <2.50	3 039	1.47	145	23.77	1.25	1 854	60.99
2.50 to <10.00	179	4.22	21	18.08	2.82	114	63.75
10.00 to <100.00	22	10.07	11	19.60	1.94	22	98.73
100.00 (default)	–	–	–	–	–	–	–
Subtotal	9 870		297			3 340	33.84

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. The reduction in exposure and RWA in the 0.75% to <2.50% PD band is driven by the reduced number of obligors in that PD band.

CCR4: AIRB – COUNTERPARTY CREDIT RISK EXPOSURES BY PORTFOLIO AND PD RANGE continued

	Corporate						
	As at 30 June 2018						
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	**46**	**0.07**	**5**	**41.00**	**0.80**	**7**	**15.22**
0.15 to <0.25	**417**	**0.17**	**38**	**29.00**	**1.56**	**84**	**20.14**
0.25 to <0.50	**628**	**0.35**	**76**	**41.00**	**2.01**	**303**	**48.25**
0.50 to <0.75	**215**	**0.74**	**46**	**44.00**	**0.79**	**149**	**69.30**
0.75 to <2.50	**453**	**2.03**	**106**	**40.00**	**1.32**	**431**	**95.14**
2.50 to <10.00	**321**	**4.00**	**36**	**27.00**	**0.17**	**255**	**79.44**
10.00 to <100.00	**14**	**35.08**	**6**	**44.00**	**0.04**	**35**	**250.00**
100.00 (default)	**–**	**–**	**–**	**–**	**–**	**–**	**–**
Subtotal	**2 094**		**313**			**1 264**	**60.36**

	Corporate						
	As at 30 June 2017						
PD scale	EAD post-CRM R million	Average PD %	Number of obligors	Average LGD %	Average maturity Years	RWA R million	RWA density %
0.00 to <0.15	55	0.08	7	31.84	0.75	6	11.84
0.15 to <0.25	762	0.17	60	32.71	1.30	181	23.73
0.25 to <0.50	638	0.34	55	37.83	1.05	251	39.36
0.50 to <0.75	313	0.74	56	43.37	3.30	211	67.37
0.75 to <2.50	208	2.10	91	59.88	0.61	327	157.64
2.50 to <10.00	237	4.86	32	33.91	0.34	250	105.08
10.00 to <100.00	–	10.07	7	45.00	0.01	–	186.86
100.00 (default)	–	–	–	–	–	–	–
Subtotal	2 213		308			1 226	55.41

The decrease in exposure is due to changes in market prices and trade volumes during the quarter ended 30 June 2018. 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 BY PORTFOLIO AND PD RANGE continued

	Public sector and local government						
	As at 30 June 2018						
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	1	20.00	3.99	–	33.90
0.25 to <0.50	76	0.47	5	32.00	3.27	43	56.58
0.50 to <0.75	–	–-	–	–	–	–	–
0.75 to <2.50	413	2.45	5	30.00	3.50	395	95.64
2.50 to <10.00	–	–	–	–	–	–	–
10.00 to <100.00	–	–	–	–	–	–	–
100.00 (default)	–	–	–	–	–	–	–
Subtotal	490		11			438	89.39

	Public sector and local government						
	As at 30 June 2017						
PD scale	EAD post-CRM R million	Average PD %	Number of obligors	Average LGD %	Average maturity Years	RWA R million	RWA density %
0.00 to <0.15	–	–	–	–	–	–	–
0.15 to <0.25	4	0.16	1	20.00	8.63	2	38.06
0.25 to <0.50	1 396	0.33	5	30.10	4.95	819	58.71
0.50 to <0.75	511	0.74	2	30.06	3.78	356	69.61
0.75 to <2.50	–	2.45	2	45.00	–	–	108.84
2.50 to <10.00	5	4.93	2	35.00	–	5	108.15
10.00 to <100.00	–	–	–	–	–	–	–
100.00 (default)	–	–	–	–	–	–	–
Subtotal	1 916		12			1 182	61.69

The overall decrease in EAD reflects the effects of credit hedges and a stronger rand experienced during the period from December 2017 to May 2018 against hard currencies. The migration in PD band 0.75% to <2.50% 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 BY PORTFOLIO AND PD RANGE continued

	Sovereign						
	As at 30 June 2018						
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**	**44.00**	**0.71**	**–**	**38.11**
0.25 to <0.50	**128**	**0.33**	**2**	**45.00**	**1.56**	**102**	**79.69**
0.50 to <0.75	**1**	**0.74**	**2**	**45.00**	**0.44**	**–**	**67.77**
0.75 to <2.50	**–**	**–**	**–**	**–**	**–**	**–**	**–**
2.50 to <10.00	**–**	**–**	**–**	**–**	**–**	**–**	**–**
10.00 to <100.00	**–**	**–**	**–**	**–**	**–**	**–**	**–**
100.00 (default)	**–**	**–**	**–**	**–**	**–**	**–**	**–**
Subtotal	**130**		**7**			**102**	**78.46**

	Sovereign						
	As at 30 June 2017						
PD scale	EAD post-CRM R million	Average PD %	Number of obligors	Average LGD %	Average maturity Years	RWA R million	RWA density %
0.00 to <0.15	1	0.03	1	30.00	0.02	–	5.36
0.15 to <0.25	152	0.17	2	20.07	4.99	60	39.57
0.25 to <0.50	146	0.33	2	45.00	1.63	113	77.18
0.50 to <0.75	–	–	–	–	–	–	–
0.75 to <2.50	–	–	–	–	–	–	–
2.50 to <10.00	–	–	–	–	–	–	–
10.00 to <100.00	–	–	–	–	–	–	–
100.00 (default)	–	–	–	–	–	–	–
Subtotal	299		5			173	57.92

CCR4: AIRB – COUNTERPARTY CREDIT RISK EXPOSURES BY PORTFOLIO AND PD RANGE continued

	Other						
	As at 30 June 2018						
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	**10**	**0.08**	**1**	**30.00**	**5.06**	**3**	**30.00**
0.15 to <0.25	**44**	**0.17**	**2**	**16.00**	**2.24**	**6**	**13.64**
0.25 to <0.50	**261**	**0.34**	**13**	**16.00**	**3.15**	**62**	**23.75**
0.50 to <0.75	**97**	**0.74**	**7**	**28.00**	**2.93**	**56**	**57.73**
0.75 to <2.50	**2**	**1.14**	**5**	**45.00**	**6.69**	**2**	**100.00**
2.50 to <10.00	**5**	**6.72**	**6**	**39.00**	**1.20**	**7**	**140.00**
10.00 to <100.00	**–**	**–**	**–**	**–**	**–**	**–**	**–**
100.00 (default)	**–**	**–**	**–**	**–**	**–**	**–**	**–**
Subtotal	**419**		**34**			**136**	**–**

	Other						
	As at 30 June 2017						
PD scale	EAD post-CRM R million	Average PD %	Number of obligors	Average LGD %	Average maturity Years	RWA R million	RWA density %
0.00 to <0.15	–	–	–	–	–	–	–
0.15 to <0.25	52	0.17	2	20.00	3.15	11	21.79
0.25 to <0.50	706	0.33	10	15.60	2.45	136	19.31
0.50 to <0.75	36	0.74	3	21.72	3.60	18	49.74
0.75 to <2.50	3	1.19	5	21.34	1.80	2	44.91
2.50 to <10.00	4	7.50	5	28.94	2.91	5	121.25
10.00 to <100.00	–	–	–	–	–	–	–
100.00 (default)	–	–	–	–	–	–	–
Subtotal	801		25			172	21.46

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 30 June 2018					
	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	**6 588**	**4 922**	**–**	**18 119**	**–**	**–**
Cash – other currencies	**–**	**2 468**	**–**	**–**	**–**	**–**
Domestic sovereign debt	**–**	**–**	**–**	**1 354**	**310 665**	**315 376**
Other sovereign debt	**–**	**–**	**–**	**–**	**31**	**31**
Government agency debt	**–**	**–**	**–**	**3 101**	**9 878**	**9 891**
Corporate bonds	**–**	**–**	**–**	**–**	**1 796**	**1 471**
Total	**6 588**	**7 390**	**–**	**22 574**	**322 370**	**326 769**

* *There were no collateral in the equity securities, and other collateral categories during the year.*

	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	14 592
Corporate bonds	–	–	–	35	2 566	2 515
Total	9 109	8 129	–	5 608	286 379	298 277

* *There were no collateral in the equity securities and other collateral categories during the year.*

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

CCR6: CREDIT DERIVATIVES

	As at June 2018		As at 30 June 2017	
R million	**Protection bought**	**Protection sold**	Protection bought	Protection sold
Notionals*				
– Single-name credit default swaps	**17 208**	**3 757**	14 592	4 147
Total notionals	**17 208**	**3 757**	14 592	4 147
Fair values	**(779)**	**846**	45	5
– Positive fair value (asset)	**300**	**938**	435	920
– Negative fair value (liability)	**(1 079)**	**(92)**	(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 year.*

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

CCR8: EXPOSURES TO CENTRAL COUNTERPARTIES

	As at 30 June 2018		As at 30 June 2017	
R million	**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:	**11 072**	**222**	3 155	63
3. – OTC derivatives	**589**	**12**	718	14
4. – Exchange-traded derivatives	**10 483**	**210**	2 437	49
5. – Securities financing transactions	**–**	**–**	–	–
6. – Nettings sets where cross-product netting has been approved	**–**	**–**	–	–
7. Segregated initial margin*	**6 588**	**–**	9 109	–
8. Non-segregated initial margin	**–**	**–**	–	–
9. Pre-funded default fund contributions**	**321**	**1 393**	319	1 154
10. Unfunded default fund contributions	**–**	**–**	–	–
1. **Total exposures to qualifying central counterparties#**	**17 981**	**1 615**	11 583	1 217

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

** *June 2017 restated due to refinement in methodology.*

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

Securitisations

INTRODUCTION AND OBJECTIVES

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

OBJECTIVES OF SECURITISATION ACTIVITIES

Securitisation enables the group to access funding markets at ratings that are typically higher than its own corporate credit rating. This generally provides access to broader funding sources at more favourable rates. The removal of the assets and supporting funding from the balance sheet enables the group to reduce the cost of on-balance sheet financing and to 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 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 approval for any proposed transactions.

RESECURITISATION

A resecuritisation exposure is a securitisation exposure 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 Issuer	✓	✓	✓	✓			✓
MotoPark	✓	✓	✓	✓			✓
MotoFirst	✓	✓	✓	✓			
MotoHouse	✓	✓	✓	✓			✓
Nitro 5	✓	✓	✓	✓			✓
Nitro 6	✓	✓	✓	✓			✓
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				✓			
Velocity Finance				✓			✓

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

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

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

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

ASSESSMENT AND MANAGEMENT

OVERSIGHT AND RISK MITIGATION

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

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

For securitisations originated by the group, exposures are managed from a credit perspective by the originating business 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, 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 FRB for financial reporting purposes. Any retained notes are accounted for as investment securities in the banking book. Liabilities resulting from securitisation vehicles are accounted for in line with group accounting policies for liabilities, provisions and contingent liabilities.

YEAR UNDER REVIEW

TURBO FINANCE 5

In July 2017, FirstRand exercised the Turbo Finance 4 clean-up call. This allowed FirstRand Bank London branch to repurchase the loan receivables and for the SPV, in turn, to redeem all outstanding notes.

With the remaining Turbo Finance 5 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 2018.

NITRO 6

Nitro 6 is similar in structure to Nitro 5 and was publicly rated by Global Credit Ratings (GCR). The auction took place on 28 March 2018 with settlement occurring on 5 April 2018. The total asset back note issuance was R2 billion. FRB initially purchased R78 million of the A notes, R120 million of the B notes and FRIHL purchased the G notes worth R40 million. The class A, B and G notes were subsequently sold.

FAST ISSUER SPV UPSIZE

The FAST SPV was created to provide FRB with access to dollar funding on a secured basis at favourable funding spreads. In the second half of 2017, the revolving period was extended by a further 12 months and the dollar funding element was upsited from $350 million to $500 million (together with a commensurate increase in the mezzanine and junior notes).

MOTONOVO SYNDICATED WAREHOUSE (MOTOFIRST)

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

MOTOPARK

The MotoPark securitisation was concluded in January 2018 and consists of MotoNovo-originated assets. The transaction has a similar structure to the Turbo programme, however, all notes are held by the group. The notes are then used as collateral for other funding programmes.

EXTERNAL CREDIT ASSESSMENT INSTITUTIONS (ECAIs)

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

TRADITIONAL SECURITISATIONS TRANSACTIONS*

Traditional securitisations	Asset type	Rating agency	Year initiated	Expected close
Nitro 5	Retail: Auto loans	S&P	2015	2023
Nitro 6	Retail: Auto loans	GCR	2018	2025
FAST Issuer	Retail: Auto loans		2016	2025
Turbo Finance 4	Retail: Auto loans	Moody's and Fitch	2015	2023
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
MotoPark	Retail: Auto loans		2018	2025
MotoFirst	Retail: Auto loans		2017	2026
MotoHouse	Retail: Auto loans		2015	2023

	Assets	Assets**		Notes outstanding		Retained exposure	
R million	securitised	2018	2017	2018	2017	2018	2017
Nitro 5	2 399	**243**	640	**293**	710	**226**	226
Nitro 6	2 000	**1 824**	–	**1 944**	–	**20**	–
FAST Issuer	8 475	**8 476**	6 293	**9 284**	6 385	**2 336**	1 778
Turbo Finance 4	–	**–**	562	**–**	660	**–**	292
Turbo Finance 5	–	**–**	1 831	**–**	2 012	**–**	632
Turbo Finance 6	8 839	**2 746**	5 271	**2 885**	5 532	**714**	1 520
Turbo Finance 7	9 670	**5 282**	9 297	**5 524**	9 727	**404**	602
MotoPark	9 558	**9 558**	–	**9 885**	–	**9 885**	–
MotoFirst	10 929	**10 929**	–	**11 221**	–	**881**	–
MotoHouse	5 667	**5 181**	4 860	**5 468**	5 112	**377**	353
Total	57 537	**44 239**	28 754	**46 503**	30 138	**14 843**	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 EXPOSURE IN THE BANKING BOOK PER PORTFOLIO

	As at 30 June 2018				
	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	**14 843**	**–**	**23 775**	**–**	**38 618**
6. **Corporate**					
7. – Loans to corporates	**–**	**–**	**–**	**4 205**	**4 205**
Total	**14 843**	**–**	**23 775**	**4 205**	**42 823**

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

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

Internal ratings-based (IRB) approach	**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 IAA for calculating risk weighted assets on securitisation exposures.
	Supervisory formula approach (SFA) Where 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 year.

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

	As at 30 June 2018								
	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	**2 257**	**9 225**	**391**	**334**	**2 637**	**–**	**1 772**	**10 434**	**2 637**
5. – Corporate	**–**	**4 205**	**–**	**–**	**–**	**–**	**–**	**4 205**	**–**
Total	**2 257**	**13 430**	**391**	**334**	**2 637**	**–**	**1 772**	**14 639**	**2 637**

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

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

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

	As at 30 June 2018							
	RWA by regulatory approach				**Capital charge after cap**			
	IRB		**SA**		**IRB**		**SA**	
	RBA	**SFA**	**SSFA**	**1250%**	**RBA**	**SFA**	**SSFA**	**1250%**
	–	**131**	**6 268**	**32 961**	**–**	**15**	**702**	**3 695**
	–	**–**	**2 110**	**–**	**–**	**–**	**236**	**–**
	–	**131**	**8 378**	**32 961**	**–**	**15**	**938**	**3 695**

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

SEC4: TRADITIONAL SECURITISATION EXPOSURES IN THE BANKING BOOK AND ASSOCIATED CAPITAL REQUIREMENTS – BANK ACTING AS INVESTOR

	As at 30 June 2018*						
	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	**23 775**	**101**	**23 674**	**64**	**1 757**	**7**	**197**
5. – Corporate	**–**	**–**	**–**	**–**	**–**	**–**	**–**
Total	**23 775**	**101**	**23 674**	**64**	**1 757**	**7**	**197**

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

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

There were no exposures under the standardised approach or to unrated notes risk weighted at 1250% during the year.

	As at 30 June 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	157
5. – Corporate	–	–	–	–	–	–	–
Total	19 325	101	19 224	11	1 426	1	157

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

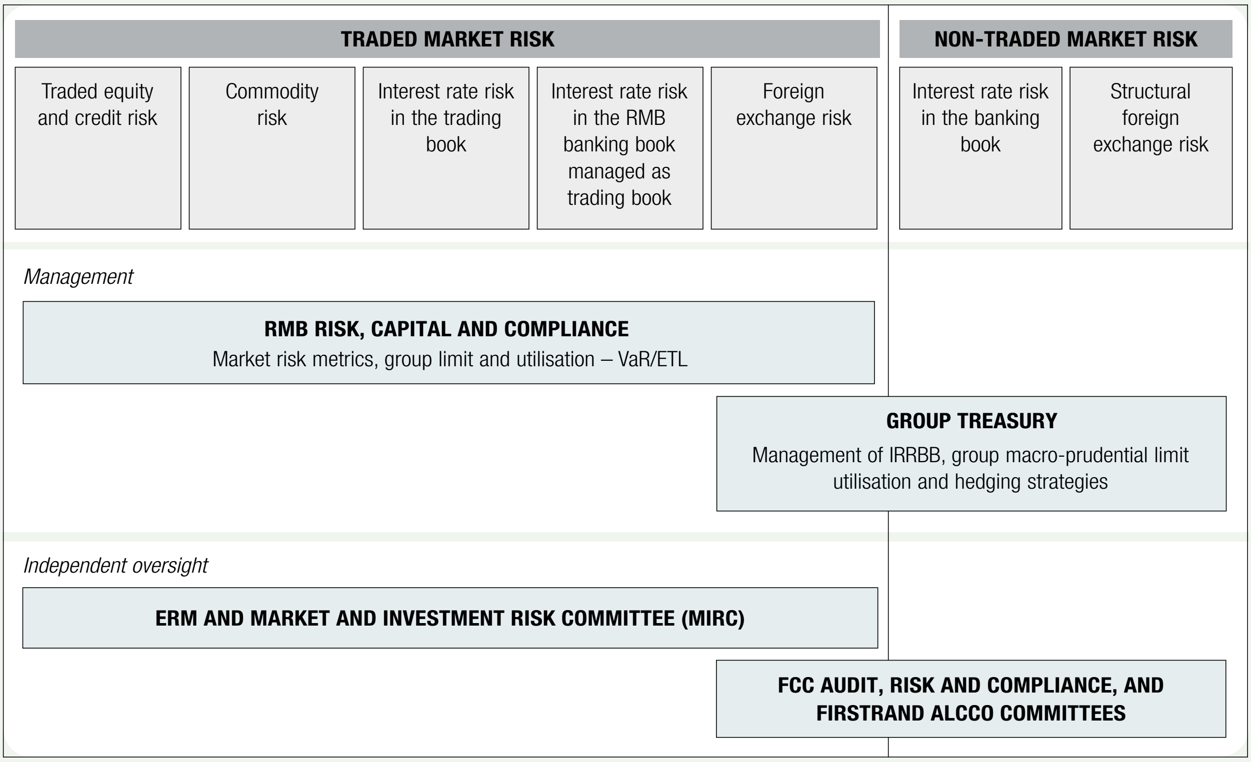
** *There were no exposures in the >20% to 50%, >50% to 100%, >100% to <1250% and 1250% RW bands.*

There were no exposures under the standardised approach or to unrated notes risk weighted at 1250% during the year.

Market risk

The group distinguishes between **traded market risk** 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



Traded market risk

INTRODUCTION AND OBJECTIVES

TRADED MARKET RISK ACTIVITIES

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

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 business units 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 UNDER THE MARKET RISK FRAMEWORK

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 R45 million on a 10-day ETL basis at 30 June 2018 (2017: R56.8 million). Interest rate risk in the remaining domestic banking book is discussed in the *interest rate risk in the banking book* section.

YEAR UNDER REVIEW AND FOCUS AREAS

YEAR UNDER REVIEW	RISK MANAGEMENT FOCUS AREAS
> Overall diversified levels of market risk increased over the year. There were no significant concentrations in the portfolio. > The increase in market risk across the group emanated mainly from an increase in business activity and the current macroeconomic conditions.	> Given the impending regulatory changes from BCBS's documents, *Fundamental review of the trading book* and BCBS239, 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

- review and approve independent validation of market risk, valuation and curve instruction models and report to MRVC on these model changes.

RMB CORPORATE AND INSTITUTIONAL FRM EXECUTIVE COMMITTEE (RMB FRM)

- 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 CORPORATE AND INSTITUTIONAL 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 group regularly reviews the content of market risk reports to ensure relevance and 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 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 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;
- internal model back testing results; and
- model risk.

INTERNAL MODELS APPROACH (IMA): DOMESTIC TRADING PORTFOLIOS

The internal VaR model for general market risk was approved by the PA 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 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. Market risk limits are governed by 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 1-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 the bank's foreign branches are measured using the regulatory standardised approach for regulatory capital and an internal stress loss methodology for internal measurement of risk. Capital is calculated for general and specific market risk using the Basel III standardised duration methodology.

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

MR2: RWA FLOW STATEMENT OF MARKET RISK EXPOSURES UNDER IMA*

R million	VaR	sVaR	Total RWA
1. **RWA at 31 March 2018**	**5 822**	**8 077**	**13 899**
2. Movement in risk levels	**607**	**560**	**1 167**
3. Model updates/changes	–	–	–
4. Methodology and policy	–	–	–
5. Acquisitions and disposals	–	–	–
6. Foreign exchange movements	–	–	–
7. Other	–	–	–
8. **RWA at 30 June 2018**	**6 429**	**8 637**	**15 066**

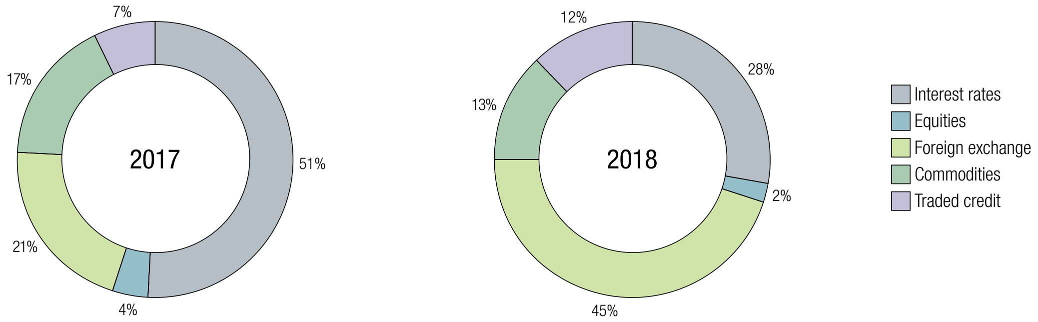
* *The group does not use the incremental risk charge and comprehensive risk measure approaches.*

The movement in market RWA for the year ended 30 June 2018 relates to normal business activities.

VaR EXPOSURE PER ASSET CLASS

The following chart shows the distribution of exposures per asset class across the group's trading activities at 30 June 2018 based on the VaR methodology. Interest rate risk represented the most significant exposure throughout the year. As at 30 June 2018, the foreign exchange asset class represented the most significant exposure due to increased activity in Nigeria and a weakened rand, and a decrease in the interest rate exposure due to a reduction in bond exposure.

TRADED MARKET RISK VAR EXPOSURE PER ASSET CLASS FOR THE GROUP EXCLUDING SUBSIDIARIES IN THE REST OF AFRICA



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

	FRB SA*	
R million	**As at 30 June 2018**	As at 30 June 2017
VaR (10-day 99%)		
1. Maximum value	**241**	489
2. Average value	**84**	155
3. Minimum value	**40**	31
4. Period end	**112**	54
sVaR (10-day 99%)		
5. Maximum value	**283**	302
6. Average value	**133**	113
7. Minimum value	**80**	57
8. Period end	**127**	121
VaR (1-day 99%)		
Maximum value	**215**	126
Average value	**57**	41
Minimum value	**23**	19
Period end	**34**	30

* *FirstRand Bank SA excludes foreign branches.*

MR3: IMA VALUES FOR NON-TRADED MARKET RISK

	FRB SA*	
R million	**As at 30 June 2018**	As at 30 June 2017
VaR (10-day 99%)		
1. Maximum value	**217**	199
2. Average value	**55**	88
3. Minimum value	**23**	12
4. Period end	**80**	40
sVaR (10-day 99%)		
5. Maximum value	**209**	280
6. Average value	**91**	135
7. Minimum value	**41**	40
8. Period end	**101**	73
VaR (1-day 99%)		
Maximum value	**127**	99
Average value	**25**	39
Minimum value	**10**	6
Period end	**23**	15

* *FirstRand Bank SA excludes foreign branches.*

MR3: IMA VALUES FOR TOTAL MARKET RISK

	FirstRand*		FRB SA*	
R million	**As at 30 June 2018**	As at 30 June 2017	**As at 30 June 2018**	As at 30 June 2017
VaR (10-day 99%)				
1. Maximum value	**389**	387	**358**	377
2. Average value	**148**	160	**110**	149
3. Minimum value	**64**	49	**57**	41
4. Period end	**201**	88	**185**	79
sVaR (10-day 99%)				
5. Maximum value	**344**	348	**275**	319
6. Average value	**182**	172	**170**	169
7. Minimum value	**97**	87	**97**	87
8. Period end	**218**	201	**205**	188
VaR (1-day 99%)				
Maximum value			**273**	104
Average value			**63**	49
Minimum value			**26**	19
Period end			**45**	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.*

VaR and sVaR as at 30 June 2018 remained relatively flat year-on-year, with small movements arising from normal business activities.

STRESS TESTING

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

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

EARNINGS VOLATILITY

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

In addition to assessing the maximum acceptable level of earnings volatility, stress testing is used to understand sources of earnings volatility and highlight unused capacity within the group's risk appetite. Market risk earnings volatility is calculated and assessed on a quarterly basis.

REGULATORY BACK TESTING

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

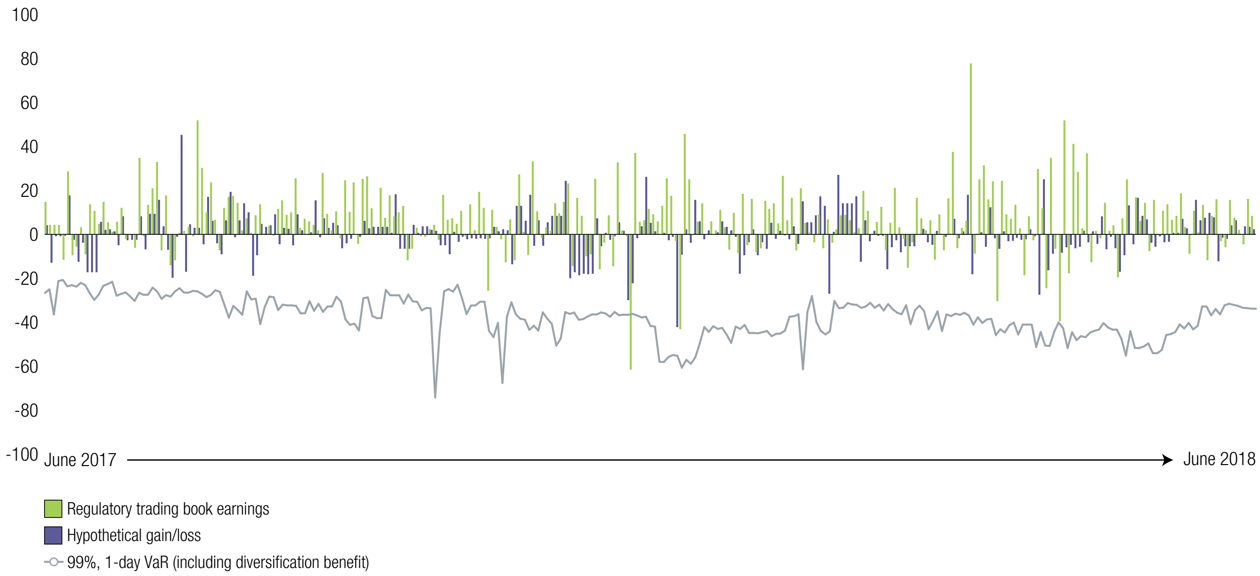
The regulatory standard for back testing is to measure daily actual and hypothetical changes in portfolio value against VaR at the 99th percentile (1-day holding period equivalent). The number of breaches over a period of 250 trading days is calculated, and, should the number exceed that which is considered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

BACK TESTING: DAILY REGULATORY TRADING BOOK EARNINGS VERSUS 1-DAY, 99% VAR

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

MR4: COMPARISON OF VAR ESTIMATES WITH GAINS AND LOSSES FOR FRB SA

R million



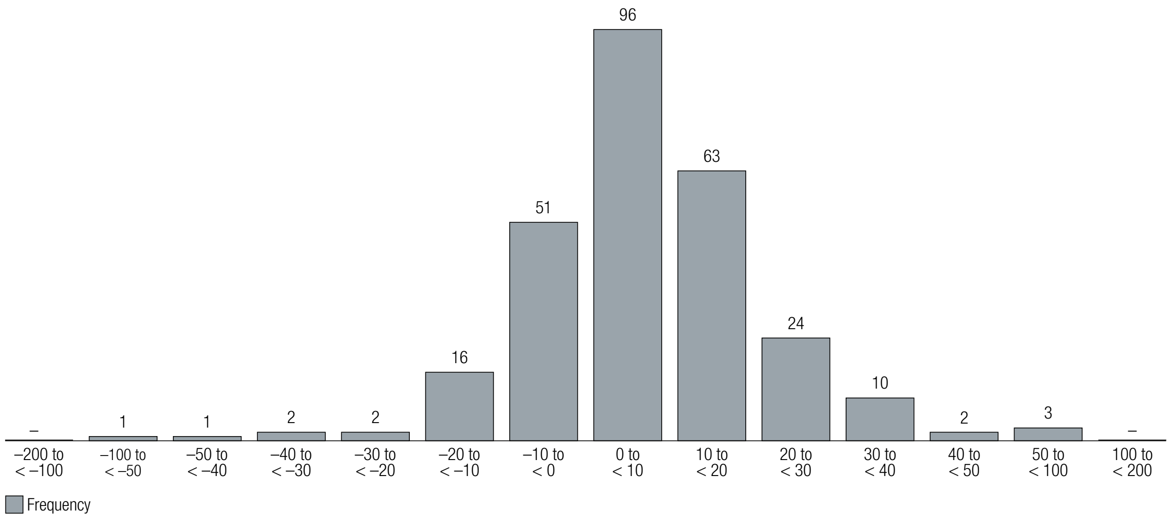
Trading book earnings exceeded 1-day VaR on one occasion during the year. This indicates that the group's internal model quantifies market risk appropriately.

DISTRIBUTION OF DAILY TRADING EARNINGS FROM TRADING UNITS

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

FRB SA DISTRIBUTION OF DAILY EARNINGS – FREQUENCY

Days in a period



STANDARDISED APPROACH: GENERAL AND SPECIFIC RISK

The bank's India and London branches and the group's subsidiaries in the rest of Africa also have market risk exposure. The India and London branches are measured and managed on the same basis as the South African 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 by 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 FRB SA balance sheet is exposed to interest rate and equity specific risk. Equity specific risk relates to listed equity exposures in the RMB Resources portfolio. The 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). Aldermore is exposed to foreign exchange (general risk).

MR1: MARKET RISK UNDER STANDARDISED APPROACH – RISK WEIGHTED ASSETS

	RWA	
R million	**As at 30 June 2018**	As at 30 June 2017
Outright products		
1. Interest rate risk	**6 759**	8 422
– Specific risk*	**5 137**	7 658
– General risk	**1 622**	764
2. Equity risk	**168**	649
– Specific risk	**168**	643
– General risk	**–**	6
3. Foreign exchange risk	**2 780**	2 192
– Traded market risk	**248**	131
– Non-traded market risk	**2 532**	2 061
4. Commodity risk	**–**	–
Total	**9 707**	11 263

* *The decrease in specific risk is due to trading book positions that were exited.*

Market risk was contained within acceptable stress loss limits and effectively managed across the subsidiaries during the year. Options are capitalised using IMA (rows 5 – 7 of the MR1 template are therefore excluded), (refer to *MR3: IMA values for traded market risk* table on page 154), and securitisations (row 8 of the MR1 template therefore 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 an increase in RMB's Investment Banking Division pound-based exposures.

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, the bank's foreign branches and Aldermore	> 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 (IRRBB)

INTRODUCTION AND OBJECTIVES

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.

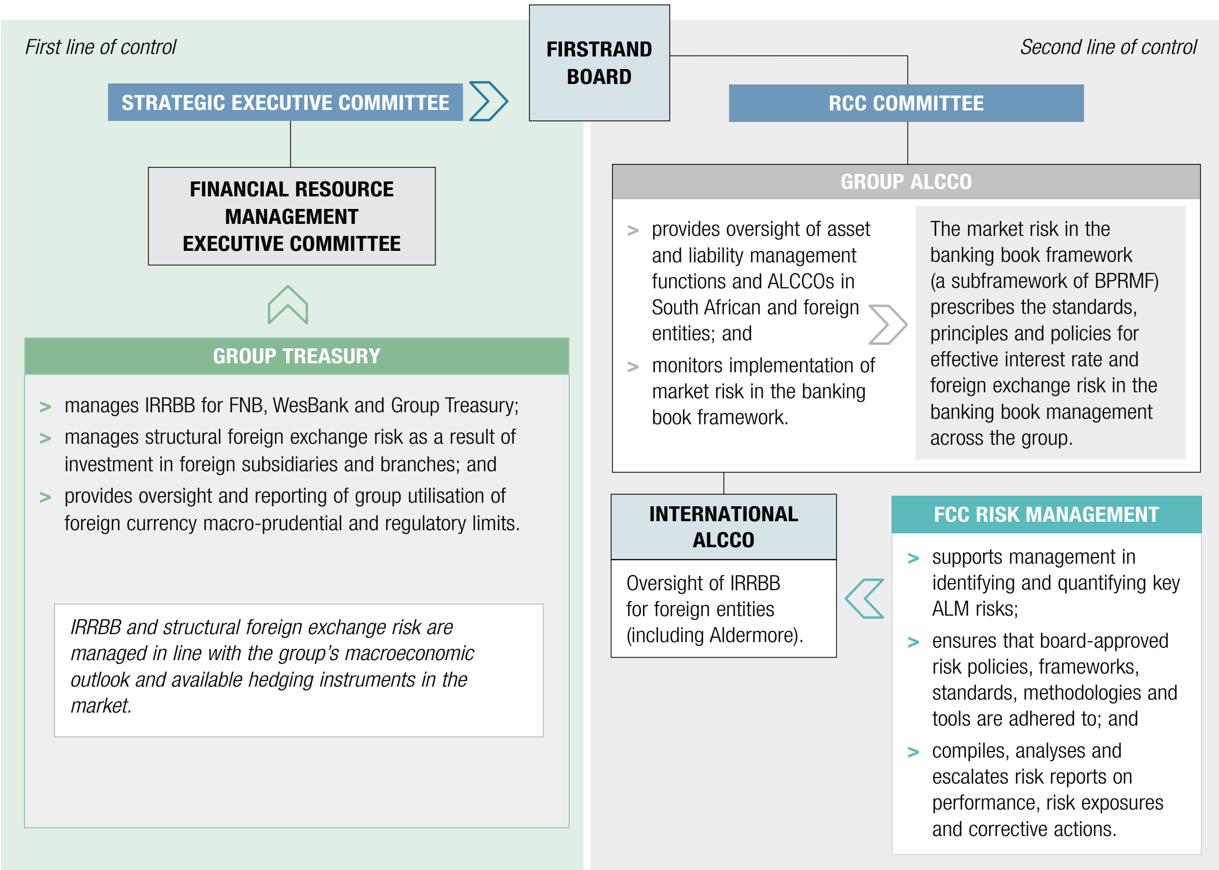
Hedges are in place to protect the group's net interest margin. These hedges are actively monitored along with macroeconomic factors impacting domestic rates, as well as rates in the other countries where the group operates.

YEAR UNDER REVIEW AND FOCUS AREAS

YEAR UNDER REVIEW	RISK MANAGEMENT FOCUS AREAS
> The SARB cut interest rates by 25 bps in July 2017 and again in March 2018, which impacted earnings negatively.	> The BCBS, through the task force for IRRBB, has published a more robust regulation for IRRBB. The group is addressing these new requirements, which will be formally adopted from 1 January 2020. > Given current uncertainty about the level and direction of future interest rates, the group continues to manage endowment actively.

ORGANISATIONAL STRUCTURE AND GOVERNANCE

IRRBB GOVERNANCE STRUCTURE



ASSESSMENT AND MANAGEMENT

FRB SA

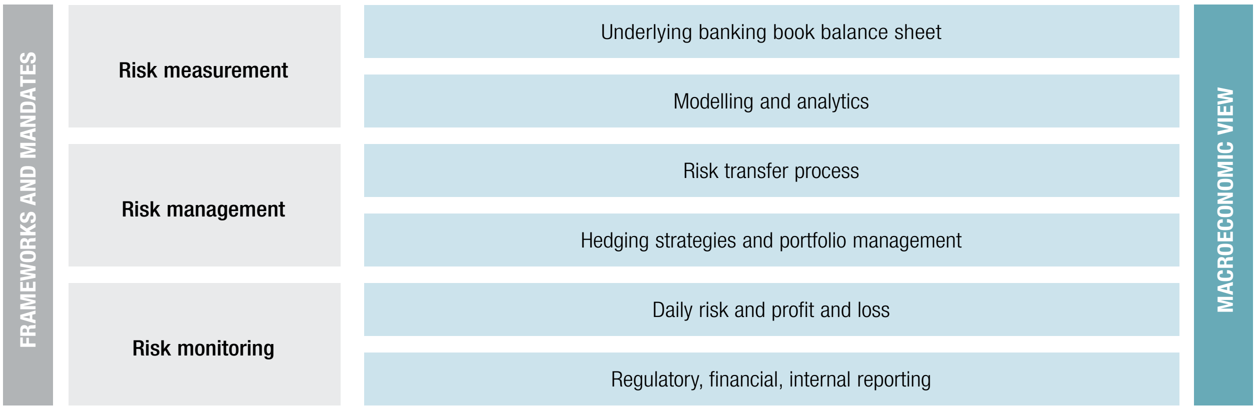
The measurement techniques used to monitor IRRBB include NII sensitivity/earnings risk and NAV/economic value of equity (EVE) sensitivity. A repricing gap is also generated to better understand the repricing characteristics of the balance sheet. In calculating the repricing gap, all banking book assets, 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 operating businesses 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, Aldermore and the bank's foreign 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 value 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 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 R223 billion for the year ended 30 June 2018. Total sensitivity is measured to rand rate moves in South Africa and to local currency moves in the subsidiaries in the rest of Africa and Aldermore.

PROJECTED NII SENSITIVITY TO INTEREST RATE MOVEMENTS

	As at 30 June 2018		
	Change in projected 12-month NII		
R million	**FRB SA**	**Subsidiaries in the rest of Africa and the bank's foreign branches**	**Total FirstRand**
Downward 200 bps	**(3 045)**	**(339)**	**(3 384)**
Upward 200 bps	**2 551**	**540**	**3 091**

	As at 30 June 2017		
	Change in projected 12-month NII		
R million	FRB SA	Subsidiaries in the rest of Africa and the bank's foreign branches	Total 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 R3 384 million. A similar increase in interest rates would result in an increase in projected 12-month NII of R3 091 million.

ECONOMIC VALUE OF EQUITY (EVE)

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 limits, appetite levels and current economic conditions.

The EVE shocks applied are based on regulatory guidelines and comprise 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, capture relevant open risk positions in the banking book. This measure does not take into account the unrealised economic benefit embedded as a result of the banking book products which are not recognised at fair value.

The following table:

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

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

	FirstRand Bank		FirstRand	
%	**As at 30 June 2018**	As at 30 June 2017	**As at 30 June 2018**	As at 30 June 2017
Downward 200 bps	**3.07**	2.53	**2.35**	1.91
Upward 200 bps	**(2.69)**	(2.26)	**(2.05)**	(1.71)

The increase in NAV sensitivity in this year is attributable to an increase in both structural as well as tactical hedges. The group has increased its endowment book hedge position relative to the prior year in line with its macroeconomic outlook.

Structural foreign exchange risk

INTRODUCTION AND OBJECTIVES

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

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 its foreign operations' results into rand. The impact on equity as a result of structural foreign exchange risk is recognised in the foreign currency translation reserve balance, which is included in qualifying capital for regulatory purposes.

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

YEAR UNDER REVIEW AND FOCUS AREAS

YEAR UNDER REVIEW	RISK MANAGEMENT FOCUS AREAS
> Continued to strengthen principles 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 *traded market risk* 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 positions 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 and the pre-tax impact on equity of a 15% change in the exchange rate between the South African rand and the relevant functional foreign currencies. There were no significant structural hedging strategies in the current year. The increase in the sterling exposure from the prior year is attributable to the acquisition of Aldermore during the year.

NET STRUCTURAL FOREIGN EXPOSURES

	As at 30 June 2018		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
Functional currency				
Botswana pula	**4 410**	**661**	3 819	573
United States dollar	**4 168**	**625**	3 696	554
Sterling	**14 667**	**2 200**	3 015	452
Nigerian naira	**1 349**	**202**	1 069	160
Australian dollar	**385**	**58**	756	113
Zambian kwacha	**805**	**121**	1 004	151
Mozambican metical	**370**	**56**	520	78
Indian rupee	**676**	**101**	634	95
Ghanaian cedi	**365**	**55**	403	60
Tanzanian shilling	**413**	**62**	539	81
Common Monetary Area (CMA) countries*	**6 533**	**980**	5 876	881
Total	**34 141**	**5 121**	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.

Other sources of equity investment risk include strategic investments held by WesBank, FNB, Aldermore 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 was 1 September 2018. The group is refining its processes to comply with the standard. The overall quality of the investment portfolio remains acceptable and is within risk appetite.

YEAR UNDER REVIEW AND FOCUS AREAS

YEAR UNDER REVIEW	RISK MANAGEMENT FOCUS AREAS
> The 2018 financial year resulted in a number of private equity realisations as well as several acquisitions to replenish the portfolio. > The unrealised value of RMB Private Equity's portfolio remained relatively unchanged at R3.65 billion (2017: R3.67 billion).	> 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

FIRSTRAND BOARD

LARGE EXPOSURES COMMITTEE

Approves senior debt in investment structures as appropriate.

RMB PRUDENTIAL INVESTMENT COMMITTEE

Oversight and approval of portfolio investment transactions in equity, quasi-equity or quasi-debt instruments.

RELEVANT CREDIT COMMITTEES

RCC COMMITTEE

Responsible for equity investment risk appetite.

MARKET AND INVESTMENT RISK COMMITTEE (MIRC)

- provides oversight of investment risk measures and management across the group;
- monitors implementation of the investment risk framework (a subframework of BPRMF); and
- receives reports of investment activities from business risk and management structures.

BUSINESS RISK AND MANAGEMENT STRUCTURE

RMB FRM

- sets and monitors risk appetite and risk limits for RMB investment activities.

RMB RCC committee

- independent oversight of RMB's investment activities; and
- supported by RMB CRO and deployed risk managers.

Investment risk oversight committee

- assesses quality, size and performance of RMB's investment portfolio.

FNB executive committee, WesBank strategic executive committee and FCC executive committee

- monitors and manages respective investments through financial reporting process.

Ashburton Investments audit, risk and compliance committee | **Ashburton Investments FRM** | **Ashburton Investments business forum**

- monitors fund investment activity; and
- reviews reports on investment positions.

- monitors fund investments approved by Ashburton Investments FRM committee;
- capital limits approved by ALCCO;
- investment limits approved by MIRC; and
- Ashburton Investments capital committee reports on positions and monitors fund and investment performance.

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

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

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

EQUITY INVESTMENT RISK VALUATIONS

During the year, there were a number of private equity realisations as well as several acquisitions to replenish the portfolio. The unrealised value of RMB Private Equity's portfolio remained relatively unchanged at R3.65 billion (2017: R3.67 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 VALUATIONS AND ASSOCIATED REGULATORY CAPITAL REQUIREMENTS

R million	As at 30 June 2018	As at 30 June 2017
Listed investment risk exposure included in the equity investment risk ETL	**1**	21
Estimated sensitivity of remaining investment balances		
Sensitivity to 10% movement in market value on investment fair value	**245**	238
Cumulative gains realised from sale of positions in the banking book during the year	**2 046**	3 117

CR10: EQUITY POSITIONS IN THE BANKING BOOK UNDER MARKET-BASED APPROACH (SIMPLE RISK-WEIGHT METHOD)

	As at 30 June 2018				
R million	**On-balance sheet amount**	**Off-balance sheet amount**	**Risk weight**	**Exposure amount**	**RWA**
Categories					
Exchange-traded equity exposures*	**112**	**–**	**300%**	**112**	**355**
Private equity exposures*	**5 662**	**198**	**400%**	**5 860**	**24 896**
Subtotal	**5 774**	**198**		**5 972**	**25 201**
Financial and insurance entities	**3 739**	**–**	**250%**	**3 739**	**9 347**
Total	**9 513**	**198**		**9 711**	**34 548**

* *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

	As at 30 June 2018		
R million	**Publicly quoted investments**	**Privately held investments**	**Total**
Carrying value of investments	**112**	**9 599**	**9 711**
Per risk bucket			
250% – Basel III investments in financial entities	**–**	**3 739**	**3 739**
300% – listed investments	**112**	**–**	**112**
400% – unlisted investments	**–**	**5 860**	**5 860**
Latent revaluation gains not recognised in the balance sheet*	**–**	**5 679**	**5 679**
Fair value	**112**	**15 278**	**15 390**
Total unrealised gains recognised directly in the balance sheet through equity instead of the income statement*	**–**	**4**	**4**
Capital requirement**	**40**	**3 832**	**3 872**

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

** *Capital requirement calculated at 11.208% of RWA (excluding the bank-specific individual capital requirement) and includes capital on investments in financial entities.*

	As at 30 June 2017		
R million	Publicly quoted investments	Privately held investments	Total
Carrying value of investments	429	9 327	9 756
Per risk bucket			
250% – Basel III investments in financial entities	–	3 369	3 369
300% – listed investments	429	–	429
400% – unlisted investments	–	5 958	5 958
Latent revaluation gains not recognised in the balance sheet*	–	5 722	5 722
Fair value	429	15 049	15 478
Total unrealised gains recognised directly in the balance sheet through equity instead of the income statement*	–	170	170
Capital requirement**	147	3 621	3 768

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

** *Capital requirement calculated at 10.75% 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 third-party insurance operations housed in FirstRand Insurance Holdings Limited. Currently insurance risk arises from the group's long-term insurance operations, underwritten through its subsidiary, FirstRand Life Assurance Limited (FirstRand Life). The group is in the process of setting up a registered short-term insurer through its subsidiary, FirstRand Short-term Insurance Limited.

FirstRand Life currently underwrites funeral policies, accidental death plans, risk policies, credit life policies (against FNB credit products) and health cash plans. FirstRand Life also writes linked-investment policies. There is, however, no insurance risk associated with these policies as these are not guaranteed. These policies are all originated through FNB.

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 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 FNB's distribution channels. Some of these channels introduce the possibility of anti-selection which also impacts the level of insurance risk.

YEAR UNDER REVIEW AND FOCUS AREAS

YEAR UNDER REVIEW	RISK MANAGEMENT FOCUS AREAS
> Set up of FirstRand Short-term Insurance Limited and application to be a registered short-term insurer. > Growth in the book of risk policies. > Launch of new credit life policies to be compliant with the credit life insurance regulations under the National Credit Amendment Act (NCAA). > Preparation for solvency assessment and management (SAM) implementation.	> Embedment of risk appetite. > Setting up of risk management processes and tools for short-term insurer. > Enhance risk reporting.

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 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:

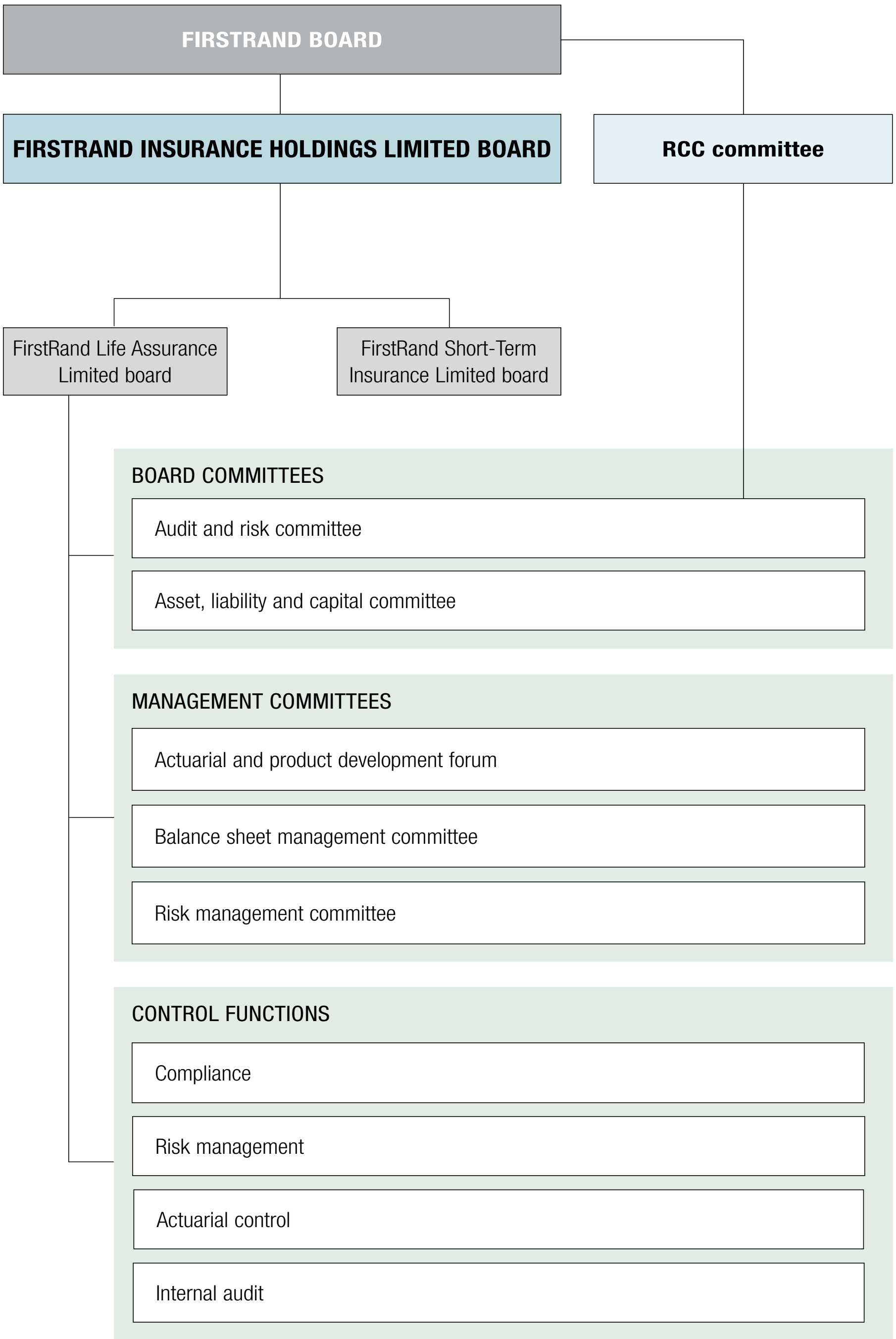
- providing oversight of the product suite;
- approving new products;
- financial resource management; and
- governance and challenging inputs, models and results of pricing and valuations.

To ensure consistency with the group, there are common members of the FirstRand Life and FirstRand Insurance Holdings Limited 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.

An important component of the management of insurance risk is the control function required to be set up, namely, compliance, risk management, actuarial and internal audit.

The following graph illustrates the insurance risk governance structures in FirstRand Insurance Holdings Limited:

INSURANCE RISK GOVERNANCE STRUCTURE



ASSESSMENT AND MANAGEMENT

FNB Life manages its insurance risk to be within its stated risk appetite. This is translated to risk limits for various risk metrics that can be monitored and managed by management.

The assessment and management of risk focuses on two main areas, namely:

- product design and pricing; and
- the management of the in-force book.

Ensuring that insurance risk is priced correctly and understood is an important component of managing insurance risk. This is achieved through the following.

- Rigorous and proactive risk management processes to ensure sound product design and accurate pricing including:
  - 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.
- Risk policies sold to FNB's 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. On non-underwritten products, insurance risk can be controlled through lead selection for outbound sales.
- The design of appropriate reinsurance structures is an important component of the pricing and product design to keep risk exposure within appetite.

The assessment and management of insurance risk in the in-force book uses the following methodologies including advisory and mandatory actuarial methodologies:

- FNB Life manages its insurance risk through monitoring and reporting the frequency and severity of claims by considering incidence rates, claims ratios and business mix.
- The actuarial valuation process involves the long-term projection of in-force policies and the setting up of insurance liabilities. This gives insight into the longer-term evolution of the risks on the portfolio. Adequate reserves are set for future and current claims and expenses. Where actual benefits are different from those originally estimated, actuarial models and assumptions are updated to reflect this. This is fed back into the pricing process.
- There are reinsurance agreements in place to mitigate various insurance risks and manage catastrophe risk.
- Asset/liability management is performed to ensure that assets backing insurance liabilities are appropriate and liquid.
- Stress and scenario analyses are performed to provide insights on the risk profile and future capital position.

The management of insurance risk is governed by several policies and there are processes, tools and systems in the business to assess and manage insurance risk.

The own risk and solvency assessment (ORSA) is defined as the entirety of the processes and procedures employed to identify, assess, monitor, manage and report on short- and long-term risks that FirstRand Insurance Holdings Limited faces or might face, and to determine the own funds necessary to ensure that the overall solvency needs of FirstRand Insurance Holdings Limited, and entities within the group, are met at all times and are sufficient to achieve its business strategy. An ORSA report is produced annually.

CAPITAL

Capital for FNB Life is calculated on the current regulatory basis, SAM basis and the group's economic basis. Target levels for capital coverage are specified in the risk appetite statement and have been met over the year. Capital is risk sensitive and is also used to understand the exposure to insurance risk.

Operational risk

INTRODUCTION AND OBJECTIVES

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

The group continuously evaluates and enhances existing frameworks, policies, methodologies, processes, standards, systems and infrastructure to ensure that the operational risk management practices are practical, adequate, effective, adaptable, and in line with 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 to support the group in the execution of its strategy.

- 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.
- Embed third-party risk management discipline.
- Prepare the risk management community in the group for increased management of risks associated with digitisation.
- Enhance operational risk management awareness 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 projects/initiatives;
- operational risk governance and reporting; and
- operational risk management advisory and support services to business.

YEAR UNDER REVIEW AND FOCUS AREAS

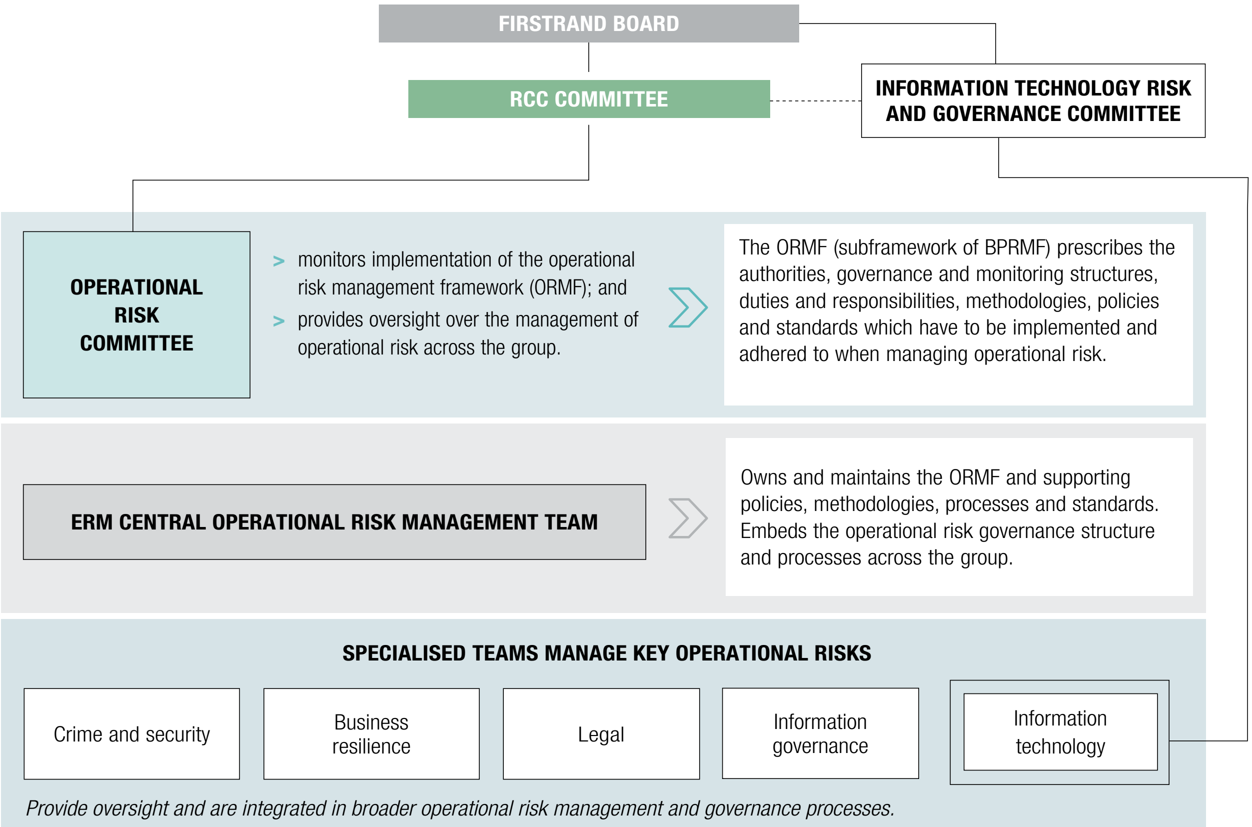
There are ongoing control improvement initiatives aimed at addressing key operational risk themes, mitigating emerging risks and improving operational risk maturity. The progress on these initiatives and impact on the operational risk profile is tracked and reported on regularly at business and group 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. Risk management programmes are continuously reviewed and enhanced to focus on identified key risks and emerging risks based on changes in the internal and external environments.

The principal operational risks currently facing the group are:

- **cyber risk** (including information security), given the growing sophistication of cyberattacks locally and globally;
- **technology risk**, due to the pace of technology change and increasing digitisation;
- **commercial and violent crime** (including internal fraud);
- **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.

YEAR UNDER REVIEW	RISK MANAGEMENT FOCUS AREAS
> Enhanced risk management procedures related to critical third parties, third-party outsourcing (including cloud services) and key intragroup insourcing. > Enhanced the risk scenario analysis process to focus on the group's key risks through themed scenario deep dives to derive greater risk management value. > Enhanced the quality of operational risk information derived through implementation of the operational risk tools. > Embedded the discipline of formal risk acceptance processes through the risk governance process. > Developed group-wide actions and initiatives to comply with BCBS239. > Reviewed and updated contingency plans to manage business resilience risks associated with water supply shortages and potential mass protest action. > Improved 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. > 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.	> Embed cloud risk management programme to manage the use and governance of cloud services efficiently, within the group's operational risk appetite and in terms of regulatory requirements. > Integrate operational and IT risk processes and approaches for greater efficiency and alignment. > Enhance scenario-based cyber incident response planning. > Improve efficiencies in the risk assessment of third parties across the third-party life cycle. > Enhance value and use of operational risk management system and information and analysis to business. > Address gaps relating to BCBS239. > 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, Ashburton Investments and Aldermore follow **BIA**.

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 operating business) 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 business 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 PA 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, pace of change;
- changes in organisational structure resulting in the movement of businesses and/or products from one business area to another; and
- changes in the external environment, which drive certain types of operational risk (e.g. rising civil protest actions, water/electricity supply shortages, increasing unemployment, 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 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

- 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.

KEY RISK INDICATORS

- 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

- 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

- risk scenarios are widely used to identify and quantify low frequency, extreme loss events;
- senior management actively participates in the risk scenario 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 thereof within its risk appetite levels through appropriate risk mitigation. Operational losses are measured and reported 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 following diagram.

KEY SPECIALIST RISK AND MANAGEMENT PROCESSES

	BUSINESS RESILIENCE	LEGAL	IT
Management	> Operations should be resilient against 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	CRIME 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 crime and physical security. > Contains criminal losses with enhanced controls and introduction of improved real-time detection models. > Mitigates the growing cybercrime threat with measures to improve resilience against cyberattacks through integrated approach across multiple disciplines.	> 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 RCC committee). > Information governance framework, risk data aggregation and risk reporting framework and acceptable use of information resources policy.	> Crime and security function reporting to FNB CRO with a group mandate. > Fraud risk management governance framework and physical security 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

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

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.

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

INTRODUCTION AND OBJECTIVES

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

Business risk capital stems from:

- potential earnings volatility that is unrelated to other known, material and already capitalised for risk types;
- potential lower than expected earnings, higher than expected operating costs or due to the inability to generate sufficient volumes, margin or fees to maintain a positive net operating margin in a volatile business environment; 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.

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.

ASSESSMENT AND MANAGEMENT

The group has a business risk process which aims to create a group-wide shared definition and understanding and to ensure business risk is appropriately identified, monitored, measured and embedded in the risk management activities.

The components of business risk include the following:

COMPONENT	DESCRIPTION
Volume, margin and fee changes	Related to the group's ability to generate sufficient levels of revenue to offset its operating costs.
New business and expansion activities	Risk of downside deviation from planned expansion activities, where franchise value is lower than expected due to lower revenues or higher costs than expected.
Changes in external environment	Related to external changes ranging between political, economic, customers, competition, market, technology and relevant regulations.
Internal changes	Related to internal changes in strategy, organisational structure, business model, strategic processes or management.

BUSINESS RISK ASSESSMENT CYCLE

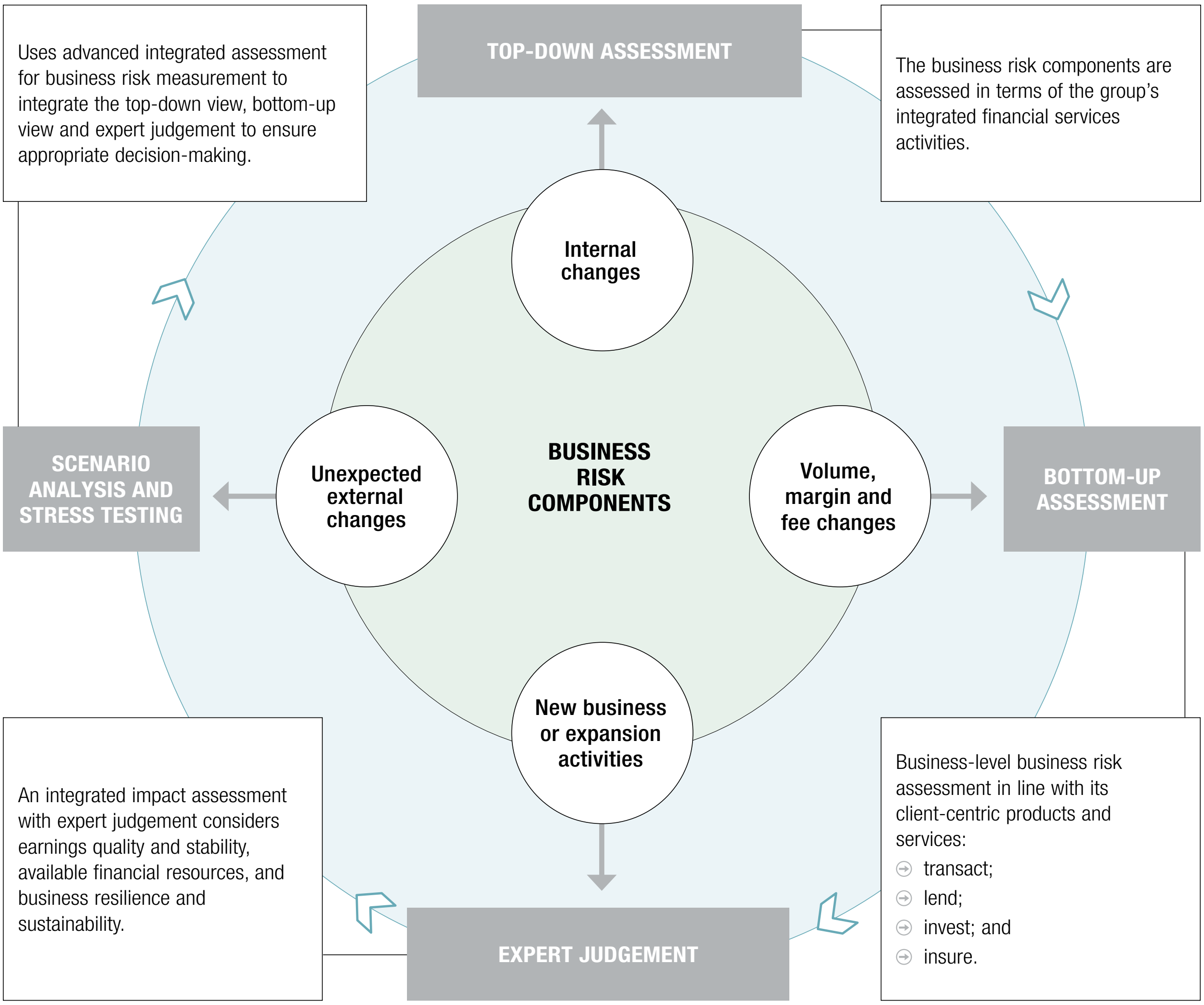
The business risk assessment and management cycle is based on a philosophy that allows integration, alignment and avoiding/minimising possible double-counting of the components of business risk in the following processes:

- risk appetite;
- scenario analysis and stress testing; and
- economic capital.

This ensures that there are adequate and transparent processes with integrated tools for monitoring, assessment, measurement and mitigation of risk as well as capitalisation for exposure to unexpected losses. The processes and tools for monitoring business risk provides insight across different points of loss distribution to enable financial resource optimisation.

The components of business risk are considered in each step of the business risk cycle.

BUSINESS RISK IDENTIFICATION ASSESSMENT CYCLE



MEASUREMENT OF BUSINESS RISK CAPITAL

Business risk capital is quantified for economic capital purposes and is calculated for volume and margin changes, expansion activities and unexpected regulatory changes and follows the guidelines of FirstRand's business risk framework. The business risk assessment cycle and approach are incorporated in internal and strategic planning processes supported by the group's management committees and governance structures.

Economic capital estimates for all components of business risk are reported internally to management and externally to the PA on a biannual basis with details of approach, models and methodologies used included in the annual ICAAP submission.

The group has an established process to identify, manage and measure business risk exposure, which ultimately enables the quantification of business risk economic capital.

BUSINESS RISK MEASUREMENT AND MANAGEMENT PROCESS

1 DEFINITION AND IDENTIFICATION

The first step involves tracking of key risk drivers and factors that could give rise to business risk. In assessing 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, and 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, risk factors and analysis of root causes that could lead to additional unexpected capital injections, as well as frequent monitoring and reporting of execution variance against the plan.

Continued monitoring of:	Changes to the external environment; volume, margin and fee changes; and new business and expansion activities.

2 MEASUREMENT AND MANAGEMENT

Internal models are used to capture the increasing probability of unexpected losses from the remainder of material risks not captured, mitigated or capitalised for by other Pillar 1 and non-pillar risks types.

The risk exposure is modelled using fit-for-purpose models ranging from stochastic approaches, sensitivity assessment, scenario analysis and stress testing at different levels of the organisation. The outputs of risk measurement are used as input into the risk appetite framework and management decision-making.

Continued monitoring of:	Risk triggers, risk exposure, earnings quality and resilience, cost structures and business model changes.

3 CAPITALISATION AND MANAGEMENT ACTIONS

FirstRand uses a combination of top-down and bottom-up models to quantify tail risk exposures which are capitalised for. These include risk exposure quantification models, objective qualitative overlay scenarios and in addition, factors proposed by experts for consideration are incorporated into the running of sensitivity assessments, scenario analyses and stress testing model impact assessments. The output of this process is presented to relevant committees for management action.

The group capitalises for downside deviation of residual unexpected losses beyond risk appetite levels at a percentile to achieve a desired credit rating over a one-year time horizon.

Continued monitoring of:	Unexpected losses, earnings volatility, inflexible operating cost structures and unsustainable performance drivers.

4 CAPITAL ALLOCATION

The last step of the business risk management process involves capital allocation to business units where the risk exposure originates, where it can be controlled and managed, and action can be taken to align with group strategic objectives.

Continued monitoring of:	Increasing capital costs, capital costs that remain inflexible, and expected revenues continuing to be lower than expected costs on a forward-looking basis.

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 assessment (ESRA) programmes, programmes reviewing the impact of ecosystem risks on the lending portfolios of the group, implementation of the recommendations of the G20 Task Force on Climate-Related Financial Disclosures, as well as programmes for the management of direct operational environmental 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 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 in positive impact finance. 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 dedicated environmental and social conduct forum with representation from the operating businesses has a mandate to focus on reviews of initiatives related to positive impact finance (PIF), ESRA, task force on climate-related financial disclosures (TCFD), climate resilience and environmental footprint. The operating businesses provide feedback through this forum on current PIF initiatives and the forum allows for sharing of information and experience throughout the group.

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 its website, www.firstrand.co.za.

A FirstRand exclusions list and sensitive industry matrix has 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 or loan covenants, or where the group may suffer reputational damage due to involvement with the specific industries.

Model risk

The use of models causes model risk, which is the potential for adverse consequences from decisions based on incorrect or misused model outputs and reports. Model risk can lead to financial losses, poor business and strategic decision-making, or damage to the group's reputation.

The group recognises two types of model risk:

Intrinsic model risk – the risk inherent in the modelling process, which cannot be directly controlled, but can be appropriately mitigated. Examples of intrinsic model risk drivers include model complexity, availability of data and model materiality.

Incremental model risk – the risk caused by inadequate internal practices and processes, which can be actively mitigated through quality model documentation, robust governance processes and a secure model implementation environment.

A model is defined as a quantitative method, system, or approach that applies statistical, economic, financial, or mathematical theories, techniques and assumptions to process input data into quantitative estimates. A model generally consists of three components:

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

Model risk exists as models may have fundamental errors and produce inaccurate outputs when assessed against the design objective and intended business use. Model risk may also arise as a result of model results being used incorrectly or inappropriately.

YEAR UNDER REVIEW AND FOCUS AREAS

YEAR UNDER REVIEW	RISK MANAGEMENT FOCUS AREAS
> Developed a group model risk management and reporting framework. > Continued rollout of model risk management software for credit risk stress testing and credit risk economic capital models. > Commenced rollout of model risk management software for market risk models.	> Implement group model risk management and reporting framework across risk types using models. > Rollout 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 outlines 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; > challenge of methods and assumptions by experts; 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

Regulatory risk refers to the risk of statutory or regulatory sanction, material financial loss or reputational damage as a result of failure to comply with any applicable laws, regulations or supervisory requirements.

The group expects ethical behaviour that contributes to the overall objective of prudent regulatory compliance and risk management by striving to observe both the spirit and the letter of the law. Management's ownership and accountability contributes to this through providing responsible financial products and services, and treating customers fairly. The ethics and compliance culture embraces standards of integrity and ethical conduct which affect 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 and conduct 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 the group's operations is critical 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 to act 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 laws and other requirements include:

- Financial Sector Regulation Act, 2017;
- Banks Act, 1990 and related Regulations;
- Companies Act, 2008;
- 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;
- Insurance Act, 2017;
- Financial Advisory and Intermediary Services (FAIS) Act, 2002;
- National Credit Amendment Act (NCAA), 2005;
- Consumer Protection Act, 2008;
- Financial Markets Act (FMA), 2012;
- Foreign Account Tax Compliance Act, 2010;
- Protection of Personal Information Act (PoPIA), 2013;
- Prevention and Combatting of Corrupt Activities Act, 2004;
- King Code of Governance Principles for South Africa, 2016 (King IV); and
- JSE rules and directives.

Ethical conduct promotes effective regulatory and conduct risk management, compliance with applicable laws, regulations and related requirements as a business outcome, and supports integration into business processes. RCRM assists senior management to effectively and expeditiously resolve identified ethics, conduct and compliance issues. RCRM interacts and cooperates closely with other group and business functions, as well as with the group's various regulatory authorities.

YEAR UNDER REVIEW AND FOCUS AREAS

YEAR UNDER REVIEW	RISK MANAGEMENT FOCUS AREAS
> The Twin Peaks system of financial regulation was implemented on 1 April 2018. This resulted in the creation of the PA and the FSCA to govern prudential regulation and market conduct respectively, and the SARB is now formally responsible for financial stability. Although most provisions of the Financial Sector Regulation Act, 2017 are now effective, provisions pertaining to the Ombud Council and ombuds, significant owners, financial conglomerates and licencing requirements will become effective on different dates up to 1 April 2019. > Regulations pertaining to AML/CFT have been amended whilst exemptions made in terms of the FIC Act were also withdrawn. This provides the legal basis for a shift from a rules-based to a risk-based approach, which modernises the way institutions undertake customer due diligences and encourages innovation in the way in which institutions manage their financial crime risk. > During November 2017, the South African Department of Justice and Correctional Services published the *Prevention and Combating of Corrupt Activities (PRECCA) Amendment Bill*, which proposes amending the Prevention and Combating of Corrupt Activities Act, 2004. Amongst others, the amendments will place an obligation on persons in a position of authority to implement an internal compliance programme to ensure offences are detected and reported. Once enacted, the said amendments will also have the effect that “facilitation payments” will be an offence.	> Continued cooperation with regulatory authorities and other stakeholders with significant focus on the implementation of the FIC Amendment Act and GoAML reporting requirements ahead of the Financial Action Task Force mutual evaluation exercise in April 2019. > Continue to make significant investments in people, systems and processes to manage risks emanating from the large number of new and/or amended local and international regulatory requirements, including the FIC Act, NCAA, FAIS Act and Protection of Personal Information Act. > Ongoing investment in systems, processes and resources to services ensure compliance with AML/CFT legislation. > Focus on managing regulatory risks posed by clients and other external stakeholders. > Management of organisational culture risk detection, prevention and remediation, which supports regulatory and conduct risk management. > Continue to work closely with regulators and industry on the authenticated collections project, the main objective of which is to prevent debit order abuse. > Manage risks associated with illicit cross-border flows.

BANKING LEGISLATION

As a member of the BCBS, the SARB and the PA are committed to ensuring that the South African regulatory and legislative framework relating to the prudential regulation and supervision of banks and banking groups remain 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, most notably, 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, banking groups and financial conglomerates, 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

Many of the Financial Sector Regulation Act provisions became effective on 1 April 2018 and effectively implemented the new Twin Peaks system of financial regulation in South Africa. In terms of the new framework, equal focus is placed on prudential and market conduct regulation with separate but equally important focus on financial stability. In this regard, the SARB assumed responsibility in terms of a comprehensive mandate for financial stability, whilst the PA and the FSCA, as the two key pillars of the Twin Peaks system of financial regulation, also took effect on 1 April 2018. To ensure a well-managed and non-disruptive transition, certain provisions of the Financial Sector Regulation Act are being phased in up to 1 April 2019. These relate to provisions pertaining to the Ombud Council and ombuds, significant owners, financial conglomerates, licencing requirements in terms of this Act, as well as fees and levies.

Most existing sub-sectoral/financial sector laws such as the Banks Act, 1990 for banking (as amended to align to the Financial Sector Regulation Act), will remain in place. It is also important to note that a key objective of the new framework is to ensure that there is effective cooperation and collaboration among the SARB, the PA, the FSCA, the National Credit Regulator (NCR), the Financial Intelligence Centre (FIC) and the Competition Commission, 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 these matters. It is anticipated that, once stage one of the new framework is fully phased in by 1 April 2019, focus will shift to the creation of a more harmonised system of licencing, supervision, enforcement, dealing with customer complaints (including ombuds), appeals, and consumer advice and education across the financial sector.

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
Effective cooperation, collaboration and support among the SARB, the PA, the FSCA, the NCR, the FIC and the Competition Commission

TWIN PEAKS IMPLEMENTATION

Phase 1

- effectively implemented on 1 April 2018; and
- provision of Ombud Council and ombuds, significant owners, financial conglomerates, licencing requirements in terms of the Financial Sector Regulation Act, fees and levies to be phased in by 1 April 2019.

Phase 2

- creation of a harmonised system of licensing, supervision, enforcement, customer complaints (including ombuds), appeals, and consumer advice and education across the financial sector;
- ongoing amendments of current regulatory requirements and the introduction of new regulatory instruments; and
- introduction of new legislation and licencing procedures, where required.

Other regulatory developments and focus areas during the year are described in the following diagram.

REGULATORY DEVELOPMENTS AND REGULATORY RISK MANAGEMENT FOCUS AREAS

PROTECTION OF PERSONAL INFORMATION (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. 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.
- Various privacy laws apply in the different jurisdictions in which the group operates, most notably, the General Data Protection Regulations (GDPR) in the UK.
- A GDPR impact assessment was undertaken.

FINANCIAL CRIME RISK MANAGEMENT

- The group's objective is to ensure compliance with the provisions of AML/CFT legislation, the FIC Amendment Act and other requirements pertaining thereto.
- The anti-bribery and corruption programme has been incorporated under the financial crime pillar. It covers risk assessments, training and guidance.
- A number of initiatives are underway in anticipation of changes to PRECCA.
- The ongoing management of the group's automated screening, monitoring and reporting tools, including the implementation of the GoAML interface with the FIC.

MARKET CONDUCT

- The group's market conduct programme among other covers, treat customers fairly principles, as well as broader retail and wholesale market conduct requirements such as those pertaining to FAIS and the FMA.
- Participated in industry and regulatory engagements regarding the Conduct of Financial Institutions Bill and license framework.
- Project planning and oversight to implement new FAIS fit and proper requirements and debarment rules.
- Internal review of fee arrangements as a proactive response to the *Retail Distribution Review* paper.

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.

FINANCIAL SECTOR REGULATION ACT

- The new framework of the Financial Sector Regulation Act is a complete and comprehensive system for regulating the financial sector and is being implemented in two stages, namely:
  - stage one relates to the Financial Sector Regulation Act provisions which are being phased in from 1 April 2018 until 1 April 2019; and
  - the second stage will focus in the main on streamlining the current and separate activity-based financial sector legislation into consolidated legislation, which will reduce the scope for regulatory arbitrage.

NATIONAL CREDIT AMENDMENT ACT

- Driving NCAA compliance programme including workshops and training.
- Coordinating regulatory liaison and engagement.
- Ongoing engagement with the regulator relating to topical credit risk areas.
- Participation in Banking Association of South Africa workstreams and discussions in respect of the Draft National Credit Amendment Bill.

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
- oversees of business and market conduct risk management related to culture and fair treatment of customers.

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 and conduct risk management framework.

BUSINESS COMPLIANCE OFFICERS

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

RCRM FUNCTION

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

- coordinates management of group regulatory and conduct 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 regulations and regulated regulatory standards.

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 our regulators. 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 and ethics-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 Limited 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, offshore branches and representative offices. 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 senior management executives are aware of key developments relating to public policy, legislation and regulation pertinent to the group's business activities. It also supports the group's directors and executives to proactively identify and discuss emerging policy and regulatory issues which may require attention and risk mitigation from a group perspective. The office achieves its objectives by, amongst other things, establishing and maintaining relationships with government stakeholders and regulators and industry bodies in South Africa and other countries in which the group has a footprint.

This office reports directly to the group COO and maintains close working relationships with RCRM, ERM and business units where specific technical expertise resides.

CONDUCT RISK

Conduct risk arises when employees and directors behave in a manner that would not be considered fair to other employees, financial market participants, clients or other societal stakeholders.

Governments increasingly recognise the importance of ethical conduct in banking and, as a result, develop regulation to enforce standards and hold business leaders accountable for their actions.

INTRODUCTION AND OBJECTIVES

The group endorses a risk philosophy which takes into account 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 into commercial strategies. For this reason, strategy and leadership and the intersect with culture and conduct are continuously evaluated.

Year under review and focus areas

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

YEAR UNDER REVIEW	RISK MANAGEMENT FOCUS AREAS
> Reviewed the outcomes of several culture risk assessments, coupled with group engagement assessments. > Launched anti-bribery and corruption risk assessments. > Reviewed whistle-blowing trends and adequacy of analysis for the group. > Reviewed culture and conduct risk in specialised areas of WesBank and FNB. > Oversaw clients of interest deliberations and reviews. > Developed an anti-bribery and corruption risk framework and policy.	> Review market conduct maturity and associated platform developments. > Focus on emerging culture risks and appropriate responses to the regulatory framework. > Oversee implementation of business conduct programme with a focus on whistle-blowing and client due diligence. > Oversee activity in the financial markets via the group's personal account trading programme. > Active management of conflicts of interest and repositioning of the associated programme. > Management of third-party risk.

ORGANISATIONAL STRUCTURE AND GOVERNANCE

FIRSTRAND BOARD

SOCIAL, ETHICS AND TRANSFORMATION COMMITTEE

- provides oversight of governance and functioning of group-wide ethics, market conduct, business conduct and transformation programmes; and
- approves the code of ethics and related governance documents, which is the cornerstone of the group's ethics management framework.

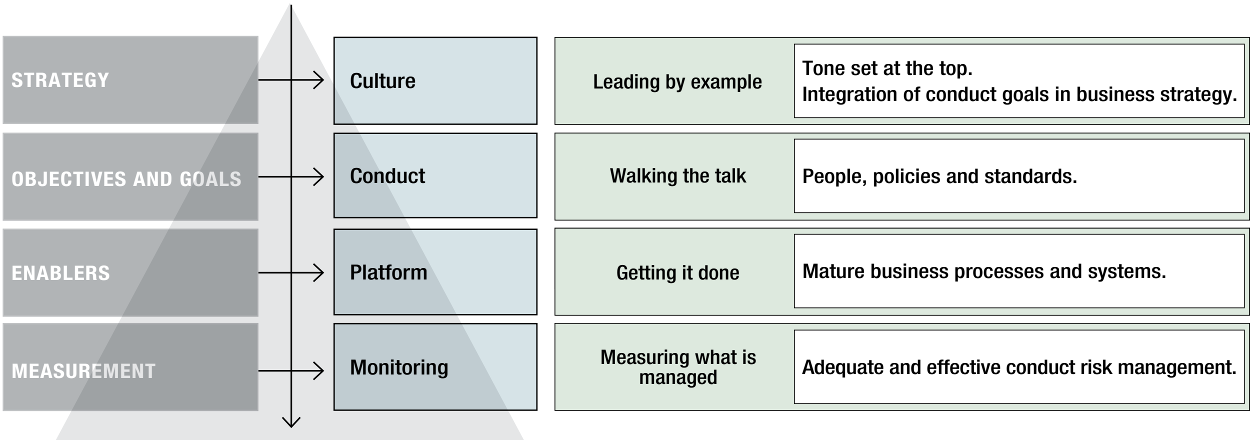
BUSINESS ETHICS AND CONDUCT RISK COMMITTEES

- Committees with a culture and conduct theme.
- Drive business ownership of conduct programmes.

ASSESSMENT AND MANAGEMENT

Conduct risk 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 conduct risk programmes with appropriate levels of employee training and communication to ensure responsible conduct. The focus areas of some of the programmes are outlined in the following table.

BUSINESS CONDUCT PROGRAMMES	MARKET CONDUCT PROGRAMMES
> conflicts of interest management (including declarations of interest); > safe whistle-blowing; > personal account trading; and > client desirability reviews.	> retail market conduct; > ethical trading in financial markets; > credit and consumer protection practices; > responsible competitive practices; and > responsible wholesale banking practices.

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 and the Pillar 3 standard, 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.

Index of Pillar 3 disclosure templates and Regulation 43

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)	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. Tier 1 less Additional Tier 1 capital.
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.
FRB 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
ALCCO	Asset, liability and capital committee
AMA	Advanced measurement approach
AML/CFT	Anti-money laundering and combating the financing of terrorism
AT1	Additional Tier 1
AVAs	Additional valuation adjustments
BCBS	Basel Committee on Banking Supervision
BIA	Basic indicator approach
BPRMF	Business performance and risk management framework
CCF	Credit conversion factors
CCP	Central clearing counterparties
CCyB	Countercyclical buffer
CEM	Current exposure method
CET1	Common Equity Tier 1
CLF	Committed liquidity facility
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
EEPE	Effective expected positive exposure
EP	Equator principles
ERM	Enterprise Risk Management
ESRA	Environmental and social risk analyses
ETL	Expected tail loss
EVE	Economic value of equity
FAIS Act	Financial Advisory and Intermediary Services Act
FIC Act	Financial Intelligence Centre Act
FSB	Financial Stability Board
FSCA	Financial Sector Conduct Authority
GIA	Group Internal Audit
HQLA	High quality liquid asset
IAA	Internal assessment approach
ICAAP	Internal capital adequacy assessment process
IFRS	International Financial Reporting Standards
IMA	Internal models approach
IRA	Internal ratings-based
ISDA	International Swaps and Derivatives Association
ISMA	International Securities Market Association
LCR	Liquidity coverage ratio
LGD	Loss given default
NAV	Net asset value
NCAA	National Credit Amendment Act
NCNR	Non-cumulative non-redeemable
NIACC	Net income after capital charge
NII	Net interest income
NSFR	Net stable funding ratio
ORSA	Own risk and solvency assessment

OTC	Over-the-counter
PA	Prudential Authority
PD	Probability of default
PIF	Positive impact finance
PoPIA	Protection of Personal Information Act
PVA	Prudential valuation adjustments
RBA	Ratings-based approach
RCC committee	Risk, capital management and compliance committee
RCRM	Regulatory and Conduct Risk Management
RSF	Required stable funding
RWA	Risk weighted assets
SA-CCR	Standardised approach for measuring counterparty credit risk
SAM	Solvency assessment and management
SARB	South African Reserve Bank
SFA	Supervisory formula approach
SMEs	Small and medium enterprises
SOEs	State-owned enterprises
SPV	Special purpose vehicle
SSFA	Simplified supervisory formula approach
Stratco	Strategic executive committee
sVaR	Stressed VaR
TCFD	Task force on climate-related financial disclosures
TSA	The standardised approach for operational risk
VaR	Value-at-Risk

www.firstrand.co.za

FirstRand