basel pillar 3

disclosure

for the year ended 30 June 2023

FirstRand Basel Pillar 3 disclosure

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Certain entities within the FirstRand group are authorised financial services and credit providers. This report is available on the group's website:
www.firstrand.co.za
Email questions to
investor.relations@firstrand.co.za

overview *of the group*

FirstRand's portfolio of integrated financial services businesses comprises FNB, WesBank, RMB and Aldermore. The group operates in South Africa, certain markets in sub-Saharan Africa and in the UK, and offers a universal set of transactional, lending, investment and insurance products and services. FirstRand Corporate Centre (the Centre) represents group-wide functions.

Aldermore

risk management
overview

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's) Pillar 3 disclosure requirements (Pillar 3 standard), BCBS 309 (January 2015), the consolidated and enhanced framework BCBS 400 (March 2017), and the BCBS technical amendment on the regulatory treatment of accounting provisions (August 2018);
- Regulation 43 of the Regulations relating to Banks (Regulations), issued in terms of the Banks Act 94 of 1990; *Directive 1 of 2019, Matters related to Pillar 3 disclosure requirement framework*; and all other Pillar 3 disclosure-related directives issued by the Prudential Authority (PA); and
- certain aspects of the Task Force on Climate-related Financial Disclosures (TCFD) recommendations relating to risk management, governance and key metrics and targets, which are covered in the *Climate risk* section of this report.

The table references used throughout the Pillar 3 disclosure are in accordance with the Pillar 3 standard, where required.

Some differences exist between the practices, approaches, processes and policies of FirstRand Bank Limited (FRB or the bank) and FirstRand's other wholly owned subsidiaries. These are highlighted by reference to the appropriate entity, where necessary. There is further distinction between FRB (which includes foreign branches) and FirstRand Bank Limited South Africa (FRBSA) (which excludes foreign branches). Refer to the simplified group structure on page 05.

This report has been internally verified through the group's governance processes, in line with its external communication and disclosure policy, which describes the responsibilities and duties of senior management and the board in the preparation and review of the Pillar 3 disclosure. It aims to ensure that:

- the 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
- quantitative and qualitative disclosures are appropriately reviewed.

In this regard, the board and senior management have ensured that appropriate review of the relevant disclosures have taken place. The review process applied was approved by the FirstRand risk, capital management and compliance committee (RCCC).

The information within this report has not been audited or reported on by the group's external auditors. However, the group has commissioned certain information included in this report to be subject to an independent review, which included the performance of procedures to assess the consistency and accuracy of information.

Year under review

In the year under review, the operating environment normalised following the pandemic. The year was characterised by a deterioration in the global economic environment driven by higher interest rates and inflation, as well as other fallouts emanating from the conflict between Russia and Ukraine. In the past year the group further improved the maturity of its risk management profile, enhanced governance structures and efficiencies, and evolved the risk appetite definitions for all major risks. Credit origination also normalised post the pandemic, while taking account of the macroeconomic environment. The group's credit performance has demonstrated resilience but will require ongoing focus in the year ahead, as the outlook remains challenging.

Sovereign risk across the group's broader Africa operating jurisdictions was elevated throughout the financial year. This was driven by a constrained debt-servicing capacity due to higher interest rates and lower fiscal revenues. Pricing of debt was also impacted by a reduction in global risk appetite and a tighter liquidity environment. The sovereign debt restructuring in Ghana was a notable adverse risk outcome. Actions taken during the year to mitigate sovereign risks in those countries with elevated risks included rebalancing liquid asset portfolios to a more conservative, shorter duration.

Operational and compliance risk required heightened monitoring and targeted risk mitigation to manage or contain risks associated with industry-wide changes to payment standards and the sustained energy crisis in South Africa. Vendor performance, resilience risk and change risk were topical themes for the group during the past year. Improved risk surveillance, reporting and governance standards were deployed in respect of these areas.

Pertinent emerging risk themes included the greylisting of South Africa and Nigeria by the Financial Action Task Force (FATF), as well as South Africa's energy crisis and its resilience impacts. Understanding the root causes, consequences and transmission of risks emanating from the collapse of several small and medium-sized banks in the US following the Silicon Valley bank failure, was also a focus area. These risks are highlighted in the current and emerging risk opportunities on page 03 of this report.

The group reviewed its risk assessments and taxonomy, which resulted in the update of the group's principal and supporting risks. A key change was the classification of climate risk as a principal risk. FirstRand recognises that climate risk is intrinsically linked to other principal risk types, and acknowledges the need to integrate climate considerations within other key risks faced by the group, given that it amplifies other risks.

The inclusion of climate risk as a principal risk resulted in a refreshed approach to climate-related disclosures. Climate-related disclosures, taking into consideration TCFD recommendations, has been split. This Pillar III report covers aspects of climate governance, risk management and key metrics and measures. Other group climate-related disclosures including strategy and business updates will be published in October 2023 at https://www.firstrand.co.za/investors/integrated-reporting-hub/climate/. Further refinements are expected as the group continues to assess the International Sustainability Standards Board's (ISSB's) IFRS Sustainability Disclosures Standards.

Nature and biodiversity are elements of environmental risk, and are growing in prominence. The group is monitoring reporting developments on this topic, for example the Taskforce on Nature-related Financial Disclosures (TNFD) recommendations which will be finalised in September 2023.

Following the recent focus from international and local regulators on model risk and governance as well as the growth in the use of artificial intelligence (AI) tools and technologies, this has become a focus area from both a risk management and business efficiency perspective. This also necessitated a refinement in risk appetite calibration as the universe of models increases in line with growth in data analytics, machine learning and advanced analytics techniques being employed across the group. A complete view of the group's principal and supporting risk universe is outlined on page 12 of this report.

The above matters will continue to receive focus in the new financial year, with attention expected on the following areas:

- Maintaining an appropriate approach to credit origination, given the macroeconomic environment, with triggers to guide opportunities and identify risk concentration build-up.
- Projects underpinning the implementation and transition to the final Basel III post-crisis reforms scheduled for July 2025.
- Further refining and evolving the group's climate pathways in closer alignment to the new World Bank Paris alignment framework.

Current and emerging risks

The risk identification process requires several sources and inputs to ensure adequate coverage of potential emerging risks. These sources include external publications from institutions such as the South African Reserve Bank (SARB) and World Economic Forum (WEF). The risks identified below align with those included by the SARB in its 2023 risk and vulnerability matrix.

The diagram below provides a view of the current emerging risk landscape (i.e. risks that have not yet fully emerged) as at 30 June 2023. It differentiates between the underlying source of the risk (compliance, environmental, macroeconomic, socio-political and technological), the expected impact on the group, and the timeframe over which the risk may manifest.

Additional context is provided below on risks that are likely to have a material impact on the group, or that are recurring over the contemplated time horizon.

Emerging risks

FATF greylisting spill-over

The FATF greylist comprises jurisdictions under increased monitoring that are actively working with the FATF to address strategic deficiencies in their regimes to counter money laundering, terrorist financing and proliferation financing. Greylisting often results in short-term disruption but also has the potential to introduce other spill-over implications.

The group proactively engages with various parties, including regulators and government to address the deficiencies identified, improve anti-money laundering controls and counter the financing of terrorism.

Conduct risk

There is an increase in focus on market conduct across the group driven by regulatory and supervisory scrutiny. Conduct risk is actively monitored. To date, various measures have been implemented to assess and address this risk.

Cyber risk

Cyber risk remains a high-priority focus area. The threat of in-nation state cyber-warfare risks persists as well as increased exposure through third-party service providers, innovation and new business models for ransomware and cybercrimes, elevated threats to cloud environments, and fewer barriers to entry for cybercrimes. Cyberattacks continue to manifest in South African private and public sector entities.

The group's threat intelligence capabilities and toolsets actively monitor cyber risk to identify any elevated threat activity to the local industry or to the group. To date, notwithstanding the heightened global threat landscape, there has been no indication of an increased cyber threat directed specifically at the group.

The group continues to bolster its cyber risk capabilities by investing in additional resources, strengthening second-line cyber risk functions, including active cyber risk management, oversight, assurance and framework, and embedding a standalone cyber risk appetite framework in the year under review.

Nature and biodiversity risk

Increased focus is expected on nature and biodiversity risk as it is inextricably linked to climate change and there have been significant developments in the industry, including the adoption of the Kunming-Montreal Global Biodiversity Framework (GBF) at COP 15, the ongoing development of the TNFD and the issuance of the ISSB IFRS Sustainability Disclosure Standards.

There are five main drivers of nature change, namely climate change, resource exploitation, land and sea use change, pollution and invasive alien species. Other causes of nature-related financial risks include man-made interventions, e.g. pollution, deforestation, and unsustainable agricultural practices, amongst others. As natural capital declines, the capacity of nature to provide ecosystem services may be reduced temporarily or permanently.

Financial risks to the group are the result of impacts and/or dependencies on nature, including but not limited to a potential financial loss resulting from negative impacts on nature, through regulation, market access or otherwise, and the costs stemming from the loss of certain key ecosystem services on which the group's clients depend. A full analysis of impacts and dependencies can also present opportunities, such as the potential financial benefits resulting from positive impacts on nature or the strengthening of nature on which an organisation depends.

Group strategy

FirstRand Limited is a portfolio of integrated financial services businesses operating in South Africa, certain markets in sub-Saharan Africa and the UK. Many of these businesses are leaders in their respective segments and markets, and offer a broad range of transactional, lending, investment and insurance products and services.

The group's long track record of delivering growth and superior returns is reflective of consistent execution on its core strategies. It also reflects the disciplined allocation of financial resources.

FirstRand's earnings remain tilted towards South Africa, which represents c. 80% of total earnings, mainly generated by its large lending, transactional and deposit franchises, which have resulted in deep and loyal customer bases. These domestic banking operations are mature and systemically important. Against the prevailing backdrop of weak macroeconomic growth and given the group's size, any aspiration to outperform requires strategic distinction combined with sound execution. The key growth imperatives in the domestic businesses are to grow customer numbers, do more business with customers, and do this more efficiently. The group is also investing in building capital-light revenues in adjacent activities such as insurance, and investment and asset management.

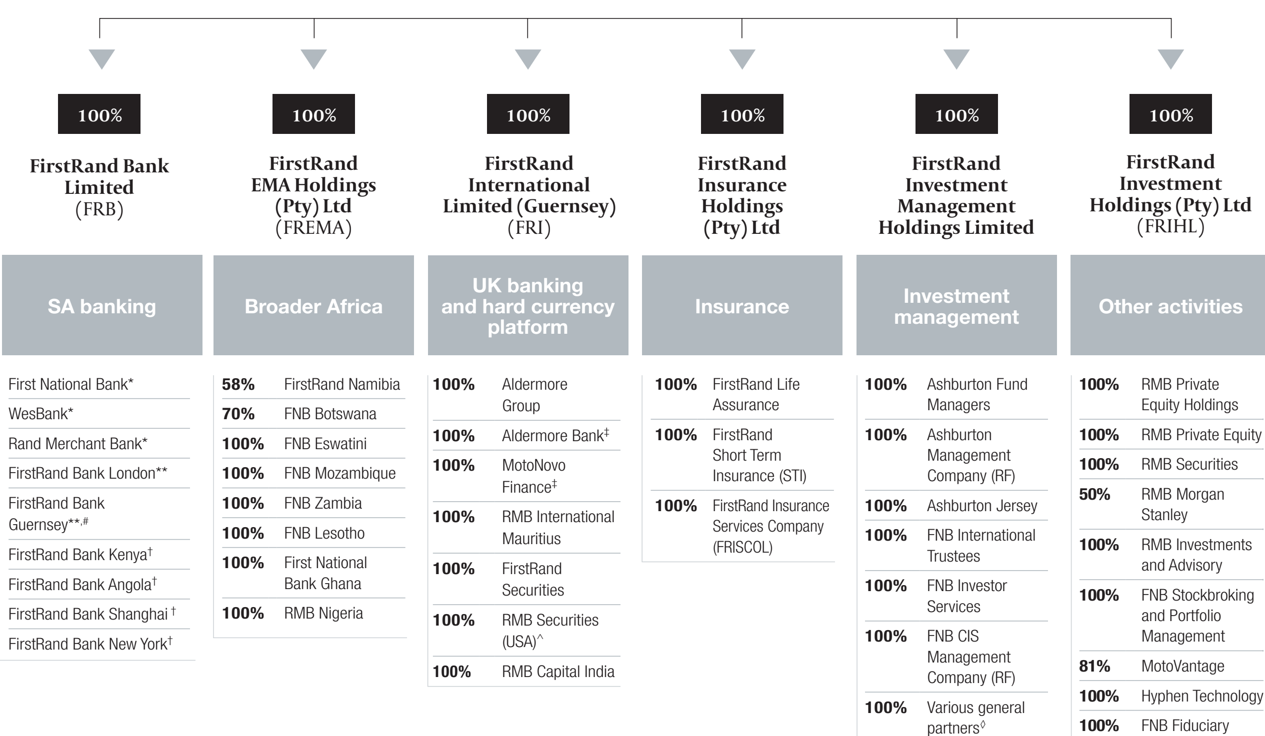
In the broader Africa portfolio, which represents 11% of earnings, FirstRand remains focused on growing its presence and offerings in certain key markets where it believes it can build competitive advantage and scale over time. The group's expansion strategy has been largely organic, complemented where possible by bolt-on acquisitions. There is a strong focus on building in-country customer and deposit franchises.

Contributing 9% to earnings, the group's UK operations represent long-term growth opportunities decoupled from South Africa and broader Africa, with the UK market offering attractive risk-adjusted returns through the cycle. The diversification is already supporting group net asset value (NAV) accretion.

As a specialist lender, Aldermore's business model targets the credit needs of individuals and entities which are underserved by mainstream providers. These customer pools in the UK market are large and growing. They also represent quality risk that is not catered for by the large incumbent players as it requires a bespoke approach to structuring and underwriting.

The group remains confident the UK business can grow at a higher rate than the domestic franchise given its presence in large profit pools, and given that UK system growth is expected to be stronger than current SA projections for GDP. The UK management team is executing on strategies to grow market share in core product sets where it has strong value propositions, modernise its platforms to achieve scale and efficiencies, and build a more diversified and sustainable funding franchise.

Simplified group structure



* *Division*
** *Branch*
# *Trading as FNB Channel Islands.*
† *Representative office*
DirectAxis is a business unit of FirstRand Bank Limited.

‡ *Wholly owned subsidiary of Aldermore Group.*
^ *Wholly owned subsidiary of FirstRand Securities.*
◊ *Ashburton Investments has a number of general partners for fund seeding purposes. All of these entities fall under FirstRand Investment Management Holdings Limited.*

Notes:

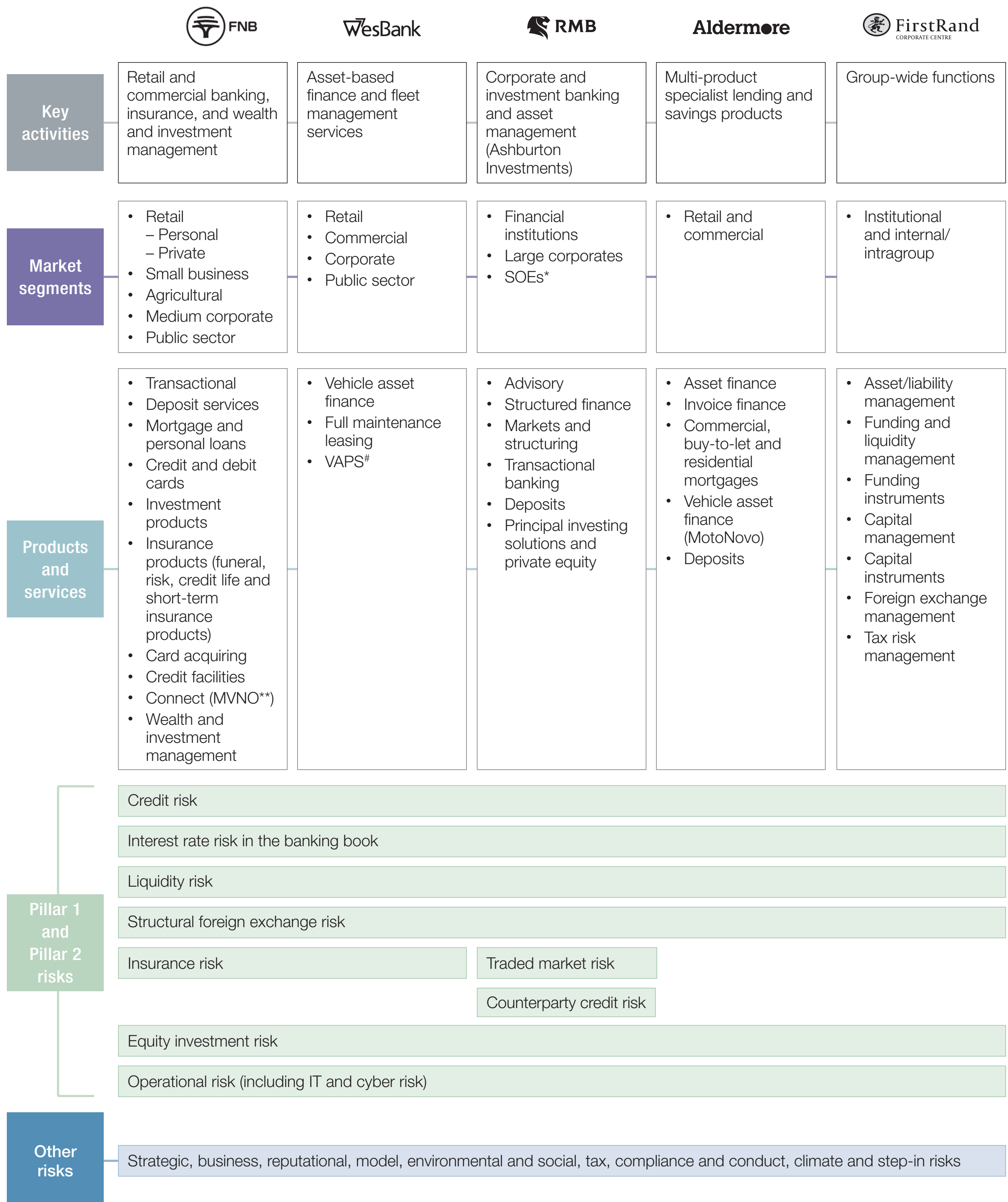
There were no material changes to the group structure over the year.

Structure shows effective consolidated shareholding.

For segmental analysis purposes entities included in FRIHL, FREMA, FRI, 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, WesBank, RMB or the Centre). The group's securitisations and other special purpose vehicles (SPVs) are in FRB, FRI and FRIHL.

Business activities and resultant risks

Business activities are delivered through the group's operating businesses and give rise to the risks shown below.



* *SOEs = state-owned enterprises.*
** *Mobile virtual network operator.*
\# *Value-added products and services.*

Group risk profile

The following table provides a high-level overview of the group's risk profile in relation to its quantitative return and risk appetite measures.

	Year ended 30 June 2023	**Key performance and risk measures**	**Year under review**
GROWTH AND RETURNS	**Normalised ROE**		The 12% increase in the group's normalised earnings was driven by good topline growth, reflecting continued momentum in new business origination in all large lending portfolios, ongoing growth from the deposit franchise and the performance of the group's transactional franchise (measured by customer growth and volumes). FirstRand delivered a normalised return on equity (ROE) of 21.2% (2022: 20.6%), which is at the top end of the target range of 18% to 22%, and produced R12.0 billion of economic profit (2022: R10.1 billion), or net income after cost of capital (NIACC), which is its key performance measure. For further detail on financial performance, refer to the FirstRand analysis of financial results for the year ended 30 June 2023 at https://www.firstrand.co.za/investors/integrated-reporting-hub/financial-reporting/.
	21.2% 2022: 20.6%	Long-term target range 18% – 22%	
	Normalised earnings growth 12% 2022: 23%	**Normalised earnings growth** Long-term target **Real GDP growth plus CPI plus (>0% – 3%)**	
SOLVENCY*	**CET1**		
	13.2% 2022: 13.9%	Target **11.0% – 12.0%**	The group reported strong capital and leverage ratios in excess of regulatory minima and internal targets. The group's total capital adequacy target for FY24 has been lifted by 50 bps to >14.75% to cater for the change in the UK countercyclical buffer (CCyB) requirement. The group's CET1 and Tier 1 targets remain unchanged. There is ongoing focus on optimising the overall level and mix of capital across the group and its regulated subsidiaries. The bank has issued a combination of AT1 and Tier 2 instruments to ensure sustainable support for ongoing growth initiatives and redemption of existing capital instruments. The capital stack has also been rebalanced with AT1 and Tier 2, following the payment of the special dividend in October 2022. The bank's US$500 million Tier 2 instrument was also redeemed in April 2023. It remains the group's intention to continue optimising its regulatory capital composition by issuing AT1 and Tier 2 capital instruments in the domestic and/or international markets.
	Tier 1		
	13.8% 2022: 14.5%	Target **>12.0%**	
	Capital adequacy		
	15.6% 2022: 16.7%	Target **>14.75%**	
	Leverage		
	7.8% 2022: 8.0%	Target **>5.5%**	
LIQUIDITY**	**LCR**		
	124% 2022: 121%	Minimum regulatory requirement: **100%**	The group exceeded the minimum liquidity coverage ratio (LCR), with an average LCR of 124% over the quarter ended 30 June 2023. At 30 June 2023, the group's average available high-quality liquid asset (HQLA) holdings amounted to R416 billion.
	NSFR		
	121% 2022: 122%#	Minimum regulatory requirement: **100%**	The group exceeded the 100% minimum requirement with a net stable funding ratio (NSFR) of 121% at 30 June 2023.

* *Ratios include unappropriated profits.*

** *Ratios include all registered banks and foreign branches in the group.*

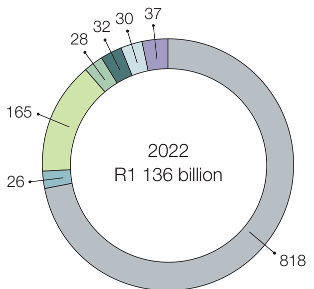
\# *The prior year group NSFR has been restated to reflect data quality improvements.*

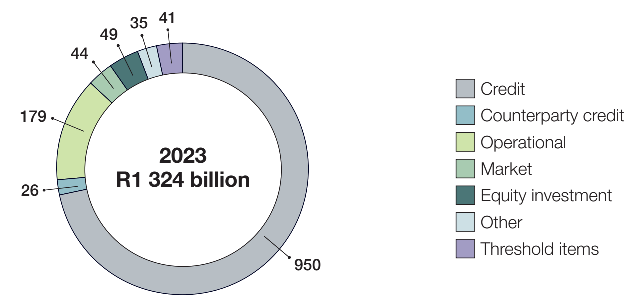
	Year ended 30 June 2023	Key performance and risk measures	Year under review
EXPOSURES PER RISK TYPE	**Credit risk**	**NPLs as a % of core lending advances** 3.80% 2022: 3.88% **Credit loss ratio*** 78 bps (including UK operations) 2022: 56 bps 84 bps (excluding UK operations) 2022: 61 bps **Long-run average** 80 – 110 bps	The group's credit performance was in line with expectations, with the credit loss ratio below the through-the-cycle (TTC) range despite the prevailing macroeconomic environment. The overall credit loss ratio increased to 78 bps (2022: 56 bps), driven largely by SA retail and the UK operations. This underlying performance reflects the group's origination strategies, particularly post the pandemic, and was achieved despite the current pressures from high inflation and interest rates. However, given these pressures, balance sheet provision levels remained conservative against the in-force book as new origination adapts to macros dynamically. Overall performing coverage on core lending advances decreased slightly to 1.72% (2022: 1.78%), reflecting book growth, mix change and the removal of the additional stress scenario provisions raised in the prior year in anticipation of the current year macro impacts. Non-performing loans (NPLs) increased to R57.4 billion (2022: R50.9 billion) but declined to 3.80% as a percentage of core lending advances (2022: 3.88%), due to book growth.
	Market risk	**10-day ETL** R465 million 2022: R670 million	The group's decrease in overall expected tail loss (ETL) exposure stemmed from a decrease in the interest rate and foreign exchange asset classes. The year was characterised by highly volatile financial markets in the face of global and domestic political uncertainty, global monetary policy tightening and consistent general hawkish rhetoric in an effort to curb persistent inflation post the pandemic.
	Equity investment risk	**Equity investment carrying value as % of Tier 1**** 9.6% 2022: 8.9%	The year was characterised by acquisitions as the RMB private equity team focused on the deployment of capital. The private equity portfolio remains resilient, despite the challenging macros. Whilst there was an increase in market value and unrealised value, this was partially offset by lower investee company earnings and a large private equity realisation in the first half of the financial year. The unrealised value of the portfolio as at 30 June 2023 was R5.7 billion (2022: R5.9 billion). The year-on-year uptick in the carrying value as a percentage of Tier 1 capital was due to an increase in exposure value relative to capital.
	Interest rate risk in the banking book	**Net interest income sensitivity**[#] **Down 400 bps** -R3.25 billion **Down 200 bps** 2022: -R1.03 billion **Up 400 bps** R2.76 billion **Up 200 bps** 2022: R663 million	The group's average endowment book (excluding UK operations) was R354 billion. The banking book regulatory assumptions have been applied on a behavioural basis and assume: • demand deposits will behave according to modelled expectations; • there is no management action in response to interest rate movements; and • an instantaneous, sustained parallel 400 bps increase/decrease in interest rates will take place.

* *As a percentage of core lending advances.*
** *Excluding unappropriated profits.*
[#] *There has been a change in the size of the instantaneous parallel shock used for sensitivity calculations (2023: 400 bps; 2022: 200 bps).*

The group's risk-weighted assets (RWA) distribution shows that credit risk and operational risk remain the most significant contributors to the group's overall risk profile.

Group RWA analysis
R billion





Bank risk profile

The table below provides a high-level overview of the bank's risk profile in relation to its quantitative return and risk appetite measures.

The bank's normalised earnings was driven by good topline growth, reflecting continued momentum in new business origination in all large lending portfolios, ongoing growth from the deposit franchise and the performance of the group's transactional franchise (measured by customer growth and volumes). This was offset by 12% growth in costs and a 43% increase in the impairment charge. The bank delivered a normalised ROE of 23.5%.

	Year ended 30 June 2023	Key performance and risk measures
SOLVENCY*	**CET1**	
	12.6% 2022: 14.2%	Target **11.0% – 12.0%**
	Tier 1	
	13.5% 2022: 14.9%	Target **>12.0%**
	Capital adequacy	
	15.4% 2022: 17.7%	Target **>14.25%**
	Leverage	
	6.6% 2022: 7.2%	Target **>5.5%**
LIQUIDITY**	**LCR**	
	129% 2022: 124%	Minimum regulatory requirement: **100%**
	NSFR	
	120% 2022: 120%	Minimum regulatory requirement: **100%**

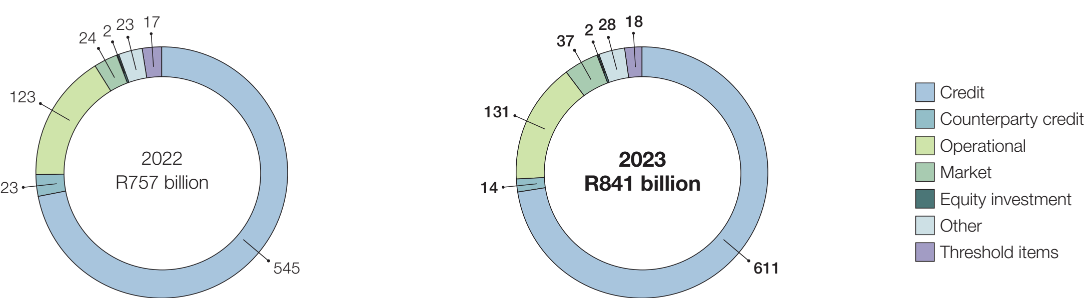
* *Ratios for FRB including foreign branches and unappropriated profits.*
** *Ratios for FRBSA.*

	Year ended 30 June 2023	Key performance and risk measures
EXPOSURES PER RISK TYPE	**Credit risk**	**NPLS as a % of core lending advances** **4.28%** 2022: 4.26%
		Credit loss ratio* **87 bps** 2022: 68 bps
	Market risk	**10-day ETL** **R457 million** 2022: R666 million
	Interest rate risk in the banking book	**Net interest income sensitivity**** **Down 400 bps** **-R2.20 billion** **Down 200 bps** 2022: -R277 million **Up 400 bps** **R1.93 billion** **Up 200 bps** 2022: R102 million

* *As a percentage of core lending advances.*
** *There has been a change in the size of the instantaneous parallel shock used for sensitivity calculations (2023: 400 bps; 2022: 200 bps).*

The bank's RWA distribution shows that credit risk and operational risk remain the most significant contributors to the bank's overall risk profile.

FRB RWA analysis
R billion



Risk management approach

FirstRand believes that the effective management of risk, performance and financial resources is key to its success and underpins the delivery of sustainable returns and earnings growth to shareholders. 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 sustainability. FirstRand's businesses have consistently executed on a set of strategies which are aligned to group financial resource management (FRM) principles and frameworks designed to ensure earnings resilience and growth, superior returns, balance sheet strength, an appropriate risk-return profile and an acceptable level of earnings volatility under adverse conditions. These deliverables are underpinned by core frameworks set at the Centre to ensure financial discipline, and incorporate performance metrics, risk appetite and FRM into long-term strategic planning and tactical decision-making. These frameworks are outlined in the table below.

Risk-return framework	Financial resource management executive committee charter	Performance measurement framework	Risk appetite framework	Risk management framework
• Outlines quantitative return and growth targets and link to risk appetite thresholds to balance the trade-off between returns, growth and risk in decision-making. • Links group strategy to the allocation of risk capacity, resource management and risk appetite through the quantification of top-of-the-house earnings volatility limits.	• Execute sustainable funding and liquidity strategies. • Protect credit ratings. • Ensure the group remains appropriately capitalised with an efficient capital structure with appropriate/ conservative gearing. • Ensure discipline in the allocation and pricing of financial resources. • Preserve balance sheet strength to be able to absorb shocks through the cycle. • Ensure that group delivers on commitments to stakeholders at a defined confidence level.	• Allocates capital appropriately. • Measures business delivery on a risk-adjusted basis. • Cascades group targets to business activities. • Sets appropriate pricing principles to drive return profile. • Drives economic value creation, which is defined as net income after cost of capital (NIACC), the group's key performance measure.	• Articulates the types of risk and the level of risk that the group is willing to accept to achieve its strategic goals. • Articulates risk appetite statements, risk limits and earnings volatility assessment approach per material risk type. • Ensures appropriate behaviour and conduct through qualitative risk appetite principles designed to support a strong risk culture across the group.	• Ensures material risks are identified, measured, monitored, mitigated and reported. • Assesses the impact of the cycle on the group's portfolio. • Ensures risk is understood and appropriately priced for. • Ensures origination within cycle-appropriate risk appetite and volatility parameters.

The group defines risk widely. It is any factor that, if not adequately identified, assessed, monitored and managed, may prevent FirstRand 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 a key differentiator and competitive advantage. These core risk competencies include identifying, assessing, measuring, monitoring and managing risk, and are integrated in all management functions and business areas across the group.

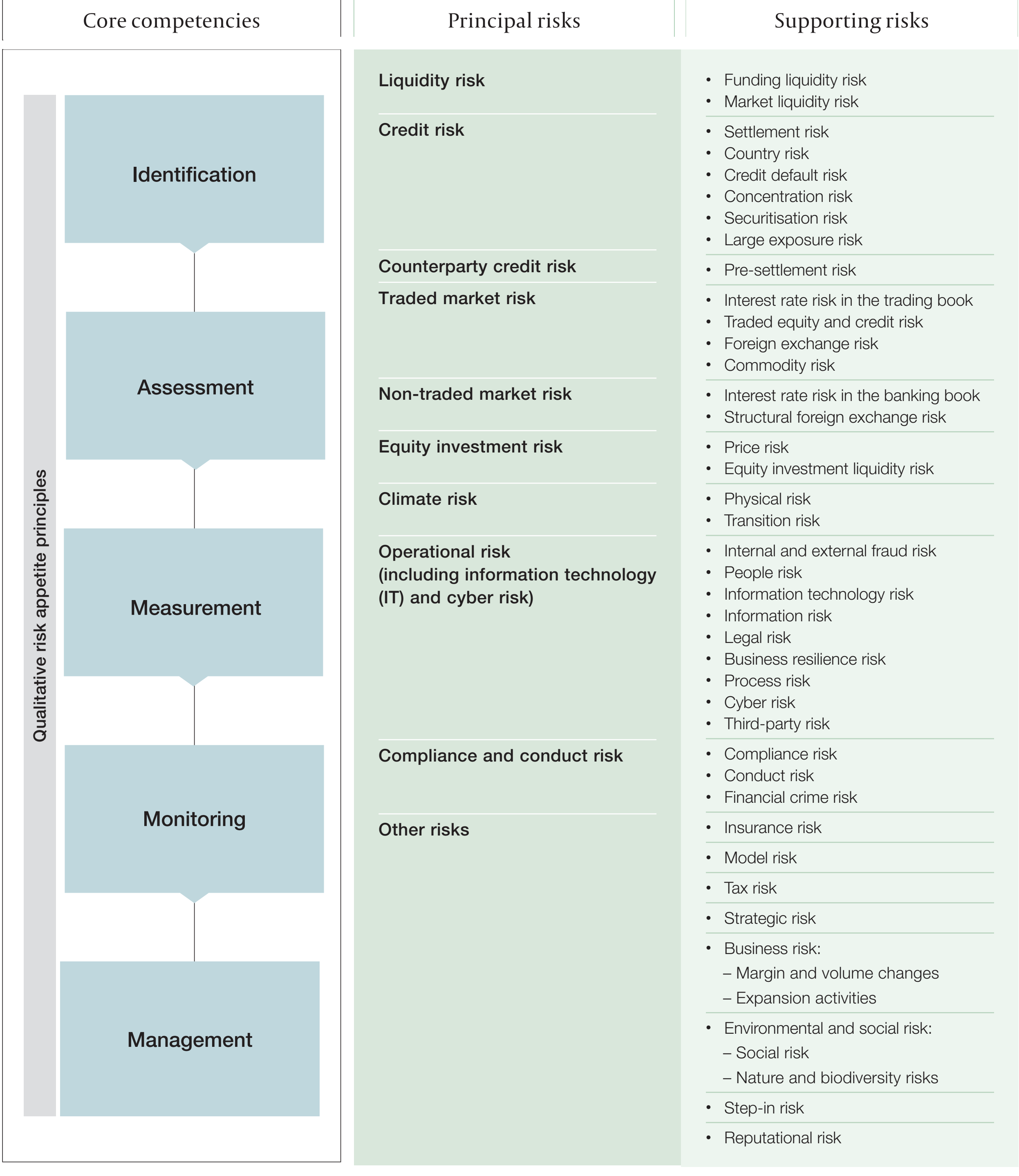
The risk management process provides the checks and balances necessary to ensure sustainability and performance, create opportunities, achieve desired objectives, and avoid adverse outcomes and reputational damage.

A business can profit from taking risks but will only generate an acceptable profit commensurate with the associated risk 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-return and risk appetite frameworks. The group's risk-return and risk appetite frameworks enable organisational decision-making and are aligned with FirstRand's strategic objectives. Refer to page 23 for more detail on the group's risk-return and risk appetite frameworks.

CORE RISK COMPETENCIES AND PRINCIPAL RISKS

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

Risk limits for all risk types are integral to risk management and are instrumental in constraining risk taking within appetite. Qualitative risk appetite principles are designed to support a strong risk culture in the group and provide a foundation to ensure appropriate behaviour and conduct. The risks, and the roles and responsibilities of the various stakeholders across business, support and control functions are described in the group's risk management framework.



Principal risks	Supporting risks
Liquidity risk	• Funding liquidity risk • Market liquidity risk
Credit risk	• Settlement risk • Country risk • Credit default risk • Concentration risk • Securitisation risk • Large exposure risk
Counterparty credit risk	• Pre-settlement 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	• Price risk • Equity investment liquidity risk
Climate risk	• Physical risk • Transition risk
Operational risk (including information technology (IT) and cyber risk)	• Internal and external fraud risk • People risk • Information technology risk • Information risk • Legal risk • Business resilience risk • Process risk • Cyber risk • Third-party risk
Compliance and conduct risk	• Compliance risk • Conduct risk • Financial crime risk
Other risks	• Insurance risk
	• Model risk
	• Tax risk
	• Strategic risk
	• Business risk: – Margin and volume changes – Expansion activities
	• Environmental and social risk: – Social risk – Nature and biodiversity risks
	• Step-in risk
	• Reputational risk

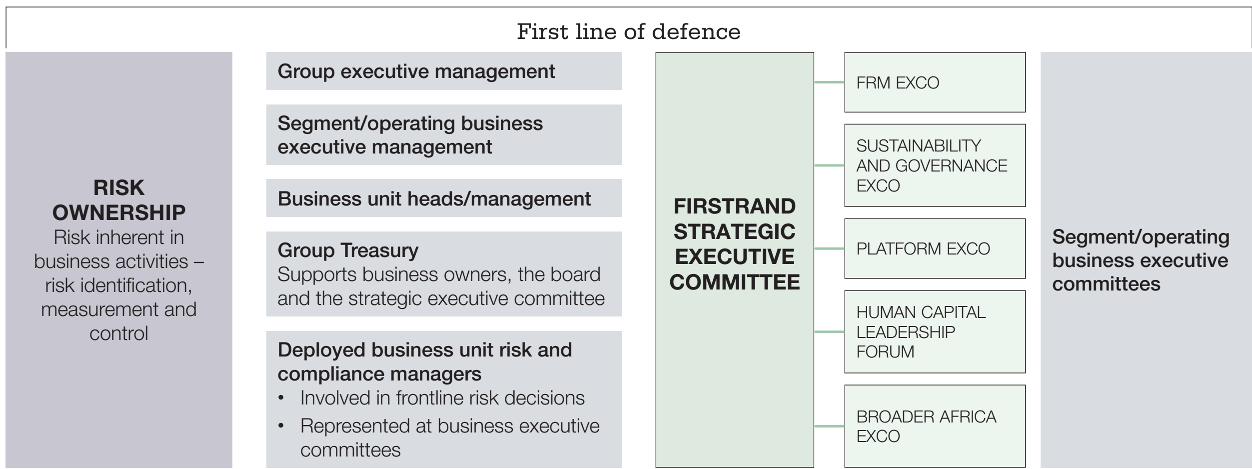
Risk governance

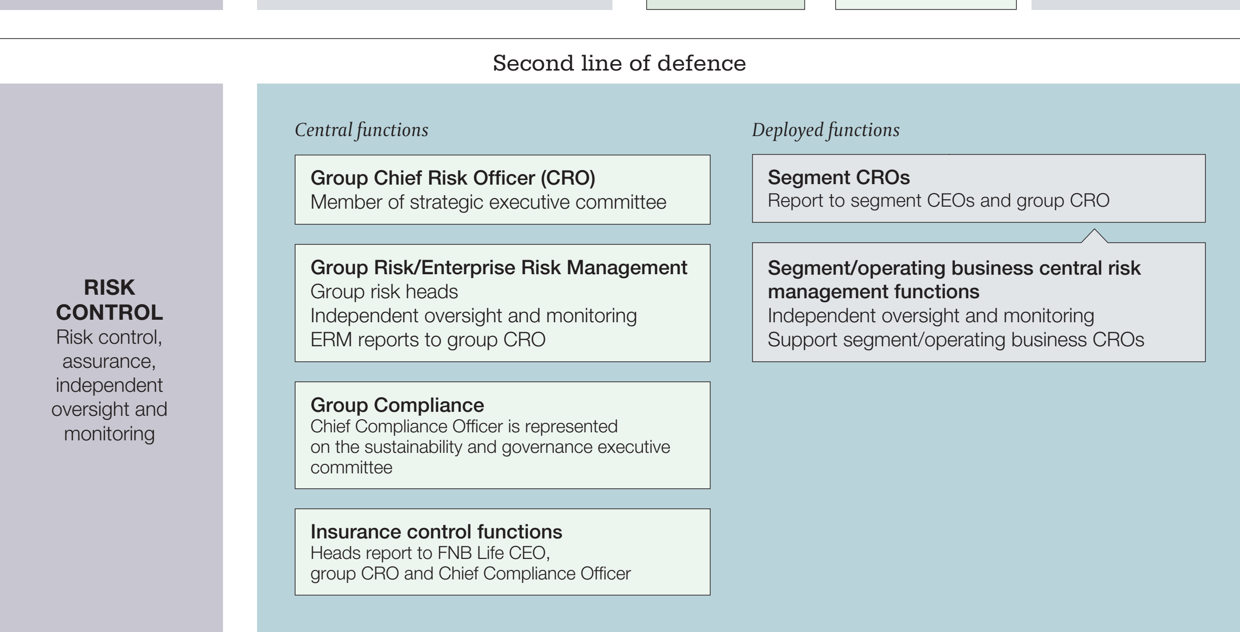
The group believes that effective risk management must be supported by effective governance structures, robust policy frameworks and an appropriate risk-sensitive culture. This ensures that risk considerations are embedded in business processes and that consistent standards exist across the group. In line with the group's corporate governance framework, the board retains ultimate responsibility for providing strategic direction, approving risk appetite and ensuring that risks are adequately identified, measured, monitored, managed and reported on.

Risk governance framework

The group's risk management framework describes FirstRand's risk management structure and approach to risk management. Effective risk management requires multiple points of control or safeguards that should be applied consistently at various levels throughout the organisation. The group's risk management framework recognises three lines of defence across the group's operations, as illustrated in the diagram below.

LINES OF RISK DEFENCE





Third line of defence

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 audit

Risk governance structure

The risk governance and management structure is set out in the group's risk management framework. As a policy of the board, the group risk management framework 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 risk, compliance and capital committee (RCCC). It has delegated responsibility for a number of specialist topics and key risk types to various risk subcommittees.

The RCCC and its delegated subcommittees represent the group's risk governance structure with appropriate decision-making mandates. Segment/operating business risk and governance committees support the RCCC by:

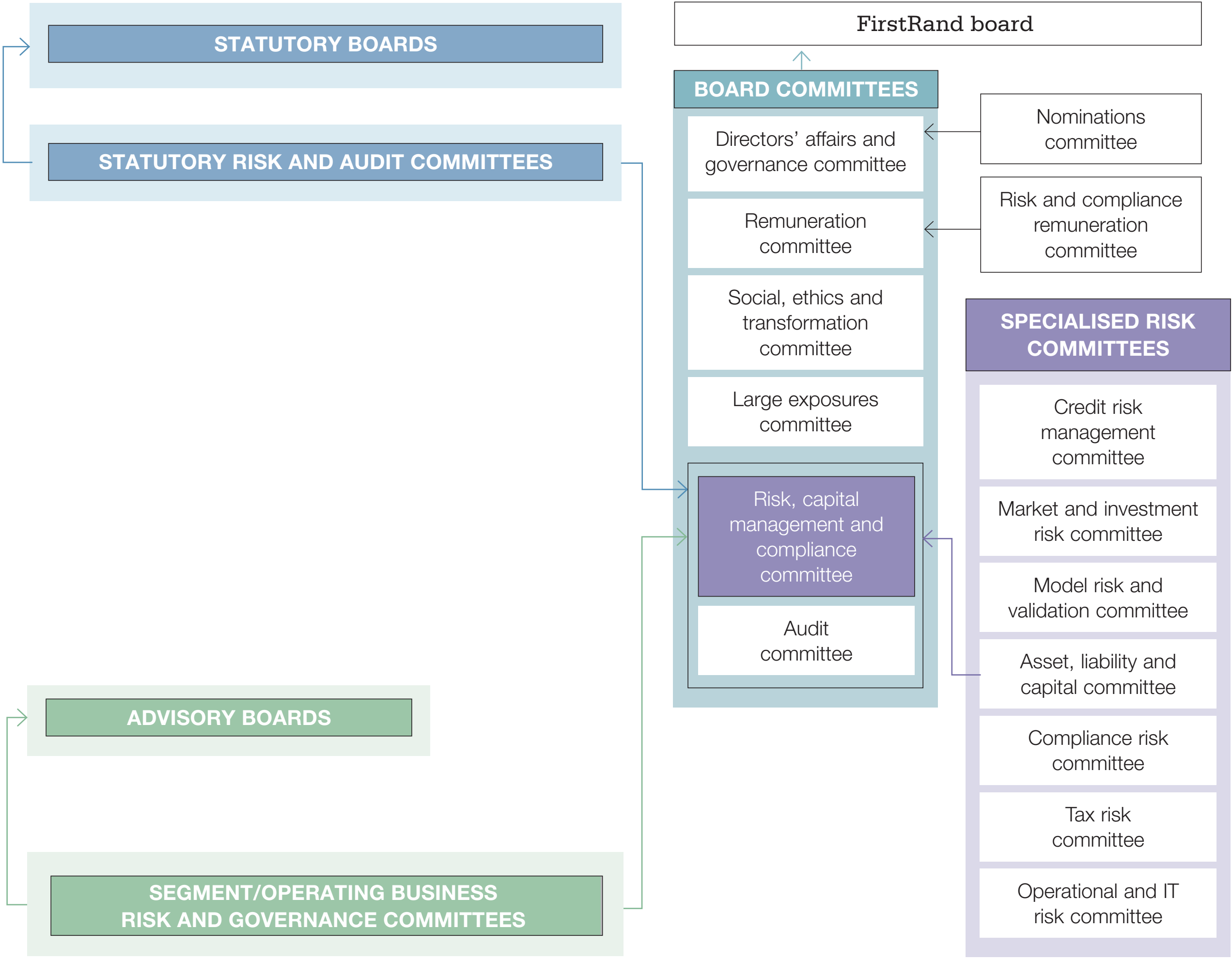
- providing executive risk oversight for segment CEOs and CROs from a risk and governance perspective; and
- providing a systematic screening mechanism to filter and escalate material risk concerns into the RCCC and its delegated subcommittees.

Non-executive directors are members of the group and segment/operating business risk and governance committees as independent contributors of specialist oversight and specialised knowledge where required, e.g. model validation, cyber risk and climate risk. Further support is provided by additional specialist risk committees, including the investment management, insurance, and broader Africa risk committees. Statutory risk and audit committees exist where there are separate legal entity or jurisdiction requirements, e.g. Aldermore and FirstRand Investment Management Holdings. These committees report to the relevant statutory boards.

There are also additional board committees with clearly defined responsibilities. The group board committees comprise members of segment/operating business advisory boards and audit and risk committees to ensure a common understanding of the challenges that businesses face and how these are addressed across the group. The group strategic executive committee ensures alignment of business strategies and the implementation of the risk-return and risk appetite frameworks, and the optimal deployment of the group's resources.

Further details on the roles and responsibilities of the RCCC and its subcommittees relating to each risk type are provided in the major risk sections of this report. The following diagram illustrates how the risk committees fit into the board risk committee structure and the risk coverage of each committee.

RISK GOVERNANCE STRUCTURE



BOARD COMMITTEE RESPONSIBILITIES

Committee	Responsibilities
Audit committee	• Assists the board with its duties relating to the safeguarding of assets, the implementation of adequate systems and controls, and the assessment of going-concern status. Ensures that relevant compliance and risk management processes are in place. • Oversees and reviews work performed by the external auditors and internal audit function. • Oversees financial risks and internal financial controls, including the integrity, accuracy and completeness of financial information and annual financial statements, which are provided to shareholders and other stakeholders.
Risk, capital management and compliance committee	• Approves group risk management policies, frameworks, strategies and processes, including its subcommittees' charters and memberships. • Delegates the approval of risk-type frameworks and policies to the RCCC subcommittees. • Monitors management and containment of risk exposures within the risk-return, risk appetite and group risk management frameworks. • Monitors the implementation of risk and compliance management approaches and processes, and the effectiveness of risk management of existing and emerging risks. • Approves, ratifies and monitors corrective risk management initiatives by management. • Monitors that the group takes appropriate action to manage its compliance, conduct and prudential risks, and complies with applicable laws, regulations, rules, codes and standards. • Delegates and monitors the approval of regulatory capital models, risk and capital targets, limits and thresholds. • Monitors capital adequacy and ensures that a sound capital management process exists. • Reports on assessment of the adequacy and effectiveness of risk appetite, risk management, BCBS 239, the group's internal capital adequacy assessment process (ICAAP), recovery plan, compliance processes, and information governance. • Oversees the group's climate change risk management programme and approves the climate-related disclosure jointly with the group social, ethics and transformation committee (Setcom).
Large exposures committee	• Reviews and declines or approves applications and/or renewals for investments, advances or other credit instruments in excess of 10% of the group's qualifying Tier 1 capital and reserves. • Reviews and declines or 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. • Reviews and declines or approves applications and renewals outside the mandate of the wholesale credit approval committee. • Delegates the mandate for declining or approving non-large exposure group and individual facilities to the wholesale credit approval committee, the commercial credit approval committee and the retail credit policy and risk appetite approval committee, as appropriate. • Ensures that for large exposures: – credit activities are conducted within the risk strategy, policies and tolerances approved by the board; – the group operates within sound and well-defined credit-granting criteria; – all extensions of credit are made on an arm's length basis; – senior management is fully capable of managing the credit activities conducted by FirstRand; – credit activities are subject to adequate internal controls and appropriate internal audit coverage; and – the group has adequate capital for the risks that it assumes. • Monitors large exposures on an ongoing basis and performs periodic reviews of the credit portfolio and regulatory returns detailing information of the 20 largest exposures.

RESPONSIBILITIES OF RCCC SUBCOMMITTEES

RCCC subcommittee	Responsibilities
Credit risk management committee	• Approves the group's credit risk management framework and related credit risk policies. • Monitors quality of the in-force business and business origination in terms of FirstRand's view of the credit economic outlook. • Ensures the uniform interpretation of the credit regulatory requirements and the acceptable standard of credit reporting. • Initiates and monitors corrective actions, where required. • Reviews and sets the group's credit risk appetite statement and monitors compliance thereof, approves prudential limits and monitors performance relative to prudential limits and segment risk limits. • Reviews, debates and approves results of credit loss forecasting, scenario analysis, stress testing and economic capital utilisation. • Monitors and measures the group's credit climate risk exposure. • Monitors the group's ongoing compliance with the principles and requirements stipulated in the group's risk data aggregation and reporting requirements (RDARR) framework for credit risk in line with the requirements of BCBS 239.
Market and investment risk committee (MIRC) • Traded market risk • Equity investment risk • Counterparty credit risk	• Approves market, investment and counterparty credit risk management frameworks, policies, standards and processes. • Monitors the market, investment and counterparty credit risk profile, the effectiveness of related risk management processes, and the implementation of corrective action, where required. • Approves and monitors market, investment and counterparty credit risk appetite. • Approves the final outputs for submission into the ICAAP process for investment, market and counterparty credit risk types. • Approves market, investment and counterparty credit risk-related limits.
Model risk and validation committee (MRVC)	• Approves model risk management frameworks, policies and standards as well as model risk tolerance. • Considers and approves all material aspects of model governance and validation processes, including but not limited to those processes related to credit risk rating and estimation, internal models for market risk and advanced measurement operational risk models. • Monitors the group's model risk profile, including ensuring that models are within risk tolerance. • Monitors material model risk issues and associated corrective actions.
Asset, liability and capital committee (ALCCO) • Liquidity risk and funding • Capital management • Interest rate risk in the banking book • Structural foreign exchange risk	• Approves and monitors effectiveness of management policies, assumptions, limits and processes for liquidity risk and funding, capital and non-traded market risk. • Approves and monitors the group's asset-liability management (ALM) risk appetite. • Monitors the group's funding management. • Monitors capital management including level, composition, supply and demand of capital, and capital adequacy ratios. • Approves frameworks and policies relating to internal funds transfer pricing for the group. • Provides oversight of balance sheet management.

RCCC subcommittee	Responsibilities
Compliance risk committee	• Monitors the effectiveness of the management of the group's compliance risk in all the jurisdictions in which it operates and recommends corrective action, where required. • Approves and monitors implementation of compliance risk management frameworks, policies, standards, coverage plans, and governance arrangements. • Receives compliance risk profile reports relating to financial crime, market conduct, prudential compliance, privacy and general compliance sub-risk types, and any other material matters relating to compliance within operating businesses of the group, as and when these arise. • Reviews compliance monitoring reports and internal audit reports on compliance matters, including the maintenance of an independent compliance risk management function. • Reviews progress feedback relating to compliance risk projects. • Approves and monitors compliance risk appetite.
Tax risk committee	• Approves and monitors tax strategy and tax risk appetite. • Approves tax risk management frameworks and policies. • Monitors tax risk assessments, risk profiles, compliance tax risk, concentration tax risk, and information governance relating to tax risk data. • Escalates relevant risk items to the RCCC.
Operational and IT risk committee	• Monitors the effectiveness of the implementation and oversight of operational and IT risk (including cyber risk) management. • Initiates such actions and issues instructions as may be appropriate to improve the overall status of operational and IT (including cyber) risk. • Implements a delegation framework to enable management forums to ensure that all the supporting risks are properly managed and monitored within risk management and monitoring structures. • Approves and monitors the group's operational and IT risk appetites. • Monitors the group, segment and operating business risk profiles against risk appetites and escalates relevant risks to RCCC timeously. • Approves operational and IT risk management frameworks, policies and committee charters (e.g. integrated crime, protective security, legal risk, business resilience risk and vendor risk).

Combined assurance

The audit committee oversees formal group-wide governance structures for enhancing the practice of combined assurance at both group and segment/operating business levels. The primary objective is for assurance providers to work with management to deliver appropriate, cost-effective assurance on top-of-mind risks. Assurance providers in this model include GIA, senior management, Enterprise Risk Management (ERM), Group Compliance and the external auditors. Appropriate consistency across methodologies which govern independent oversight, review, validation and audits performed by the respective assurance providers ensures a high standard in the operational and process components of the group's risk and assurance functions.

The group has a mature combined assurance forum, supported by segment/operating business combined assurance forums, with the primary objective of assisting the audit committee in discharging its responsibilities relating to the integration, coordination and alignment of the various risk management and assurance processes and activities across the group. Combined assurance is firmly embedded across the group and drives consistent reporting to relevant governance committees.

Enhancements to the combined assurance processes are ongoing to ensure greater efficiency through reducing duplication, optimising the use of available resources, and promoting collaboration across all assurance providers. Through the implementation of coordinated assurance plans, a comprehensive risk-based assurance coverage of key risk themes and control areas is achieved. In addition, the combined assurance forum enhances the awareness of emerging risks across the group.

Risk information reporting

Process of risk reporting

The group's robust and transparent risk-reporting process enables key stakeholders (including the board and senior executives) 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. Specialist risk committees and segment/operating business risk and compliance committees report to the RCCC and its subcommittees. Relevant executive committees receive reports on the risk profile, material risk exposures, risk-adjusted business performance and key risk issues. The RCCC submits reports to the board and highlights control issues to the audit committee.

Regular risk reporting enables the board, senior management, the RCCC and relevant subcommittees to evaluate and understand the level and trend of material risk exposures and their impact on the group's capital position, and to make timely adjustments to the group's future capital and strategic plans.

The RCCC submits reports to the board on:

- the macroeconomic house view, emerging external risks likely to affect the group and top-of-mind internal risks;
- the group's risk profile, significant issues, key risk exposures, risk rating trends, risk appetite principles and board risk limits;
- the effectiveness of corporate governance, risk management, capital management and capital adequacy;
- the level of compliance or non-compliance with laws, regulations and supervisory requirements;
- material internal control or regulatory malfunction;
- contravention of codes of conduct, personal trading or unethical behaviour; and
- limits, authorities and delegations granted to the RCCC.

GIA provides a written assessment of 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 financial statements.

Scope and content of risk reporting

Risk reports to the board, board risk committees, segment/operating business risk 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 reviews of progress against and deviations from the risk management plan;
- changes in the external or internal environment and their potential impact on the group's risk profile;
- the impact of climate change on the risk profile of the group;
- an assessment of whether risk responses are effective and efficient in design and operation;
- tracking of the implementation of risk responses;
- analysis and lessons learnt from significant audit findings, changes, trends, successes, failures and events; and
- the identification of emerging risks.

As part of the reporting, interrogation and control processes, 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 periodic assurance) that all policies, processes and systems are adequately designed and effectively implemented for pertinent risk information to be accurately captured, evaluated and escalated appropriately and timeously. This forms part of risk maturity assessments of which outcomes are shared with relevant RCCC subcommittees. This enables the board and its designated committees to retain effective control over the group's risk position.

Risk data aggregation and risk reporting

BCBS 239 was published in January 2013, setting out principles to strengthen banks' risk data aggregation capabilities and internal risk reporting practices. In turn, effective implementation of the principles is expected to enhance banks' risk management and decision-making processes. Domestic systemically important banks (D-SIBs) were required to comply with the principles by 1 January 2017.

BCBS 239 introduces key information management principles into regulation and these have been incorporated into the group's information governance and risk management frameworks as required.

FirstRand regards data as a strategic asset and, as such, the implementation of RDARR requirements is considered foundational to the group's data journey. The data strategy is designed through the lens of risk and data capabilities and in support of the group's integrated data architecture. Risk data governance has been incorporated into the overall risk management framework, supported by a culture of accountability for data set by executive management.

GIA, FirstRand's independent BCBS 239 compliance assessor, submitted a comprehensive audit report to the PA, clearly indicating the in-scope risk types across the 11 principles, augmented by the Banking Association of South Africa's (BASA's) attestation procedures and audit guidelines to determine the group's compliance with the RDARR principles. Although GIA plays an integral part in FirstRand's response to BCBS 239, the independence of GIA was not impaired since GIA was not involved in related decision-making processes and did not provide input to the construction or implementation of day-to-day processes.

GIA validated the status of all material risk types and the group is fully compliant with the requirements of BCBS 239 for the standardised approach for measuring counterparty credit risk (SA-CCR), achieving full compliance by 31 December 2022 along with all other principal risk types.

A programme is in place in Aldermore to implement RDARR requirements within the agreed compliance timelines, and regular updates are provided to the PA.

FirstRand's implementation of BCBS 239 resulted in enhanced risk management and decision-making processes, and risk data maturity. Focus has shifted from remediation of compliance gaps to maintaining compliance.

Risk culture

The group recognises that effective risk management requires an appropriate risk culture. The group distinguishes between corporate culture (FirstRand's philosophy/promises guiding behaviour) and risk culture (attitudes towards risk management). Significant determinants are ethical leadership, flow of information, reporting integrity and treating customers fairly.

The group's risk culture supports effective risk management and controls. It ensures appropriate levels of responsibility and ownership for risk management throughout the group. There are clear and robust mechanisms for ensuring each of the three lines of defence (risk ownership, risk control and independent assurance) discharge their functions fully.

In support of a sound risk culture, the group manages ethics and risk culture programmes with appropriate levels of advocacy, employee training and communication to ensure responsible conduct and positive risk management outcomes. Programmes include the assessment of risk culture, oversight of client desirability and related reviews, the management of whistleblowing and conflicts of interest, and other risk culture monitoring mechanisms. The outcomes of various other culture and behaviour assessments are also reviewed consistently. In the year under review the group's risk culture has been further strengthened by:

- further substantive enhancements to client desirability protocols and policies;
- enhanced reporting to better surface insights and strategic themes;
- better collaboration to improve the management of ethical matters; and
- the establishment and scoping of a dedicated human rights programme.

The group's 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, with appropriate supporting committee structures;
- best-practice risk identification, measurement, monitoring, management and reporting; and
- an organisational culture which supports appropriate ethics practices and risk management goals, and which ensures accountability for performance.

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

RISK CULTURE ASSESSMENT FRAMEWORK

Themes

Ethical and competent leadership	Accurate and timely flow of information with appropriate disclosure	Ethical customers and the ethical treatment of customers

Parameters	Activities
Tone from the top	• Ensuring an ethical and competent leadership pipeline – recruitment, promotion and dismissal • Developing management structures and forums that encourage openness
Setting risk goals	• Ensuring risk management goals, policies and standards are set and communicated effectively • Ensuring that ethics and accountability to risk management parameters are considered to be as important as efficiency, innovation and profit
Providing resources and sound platforms	• Ensuring risk management goals are attainable by adequately staffing risk management functions • Applying fit-and-proper tests for key risk roles • Embedding risk controls in business platforms
Aligning measurement and rewards	• Ensuring accurate and relevant performance metrics • Ensuring 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	FRBSA	PA implementation date for FirstRand	Remaining group subsidiaries and FRB branches
Credit risk	Advanced internal ratings-based (AIRB) approach and the standardised approach for certain portfolios	January 2008	Standardised approach
Securitisations	Securitisations internal ratings-based approach (SEC-IRBA) and securitisations standardised approach (SEC-SA)	October 2022	SEC-SA
Counterparty credit risk	• Default risk: derivatives – SA-CCR and AIRB approach • Default risk: secured financing transactions (SFTs) – comprehensive approach and AIRB approach • Credit valuation adjustment (CVA) – SA-CCR and standardised approach for CVA	January 2021	• Default risk: derivatives – SA-CCR and standardised approach • Default risk: SFTs – comprehensive approach and standardised approach • CVA – SA-CCR and standardised approach for CVA
Traded market risk	• Internal model approach • Standardised approach for specific risk	July 2007	Standardised approach
Equity investment risk	Market-based approach: • Simple risk-weighted method Equity investments in funds: • Look-through approach (LTA) • Mandate-based approach (MBA) • Fall-back approach (FBA)	June 2011 January 2021	Market-based approach: • Simple risk-weighted method Equity investments in funds: • LTA • MBA • FBA
Operational risk	Advanced measurement approach (AMA)	January 2009	AMA, basic indicator approach (BIA) and the standardised approach for operational risk (TSA)
Other assets*	Standardised approach	January 2008	Standardised approach

* *Including RWA related to investments in financial, banking and insurance entities, as well as deferred tax assets relating to temporary differences, as per the threshold rules under 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

The revised framework for securitisation, issued by the BCBS, was implemented by the bank in October 2022, when the framework was adopted into local regulations in South Africa.

Under the revised framework, a hierarchy of approaches is available to calculate the capital requirement for securitisation exposures. The prescribed hierarchy consists of three approaches: SEC-IRBA, the external ratings-based approach (SEC-ERBA) and SEC-SA. The highest-ranking approach should be used and if it cannot be used, the next approach can be applied. If none of the approaches can be applied a risk weighting of 1 250% should be applied to the exposure.

SEC-IRBA is used to calculate capital requirements if the bank has supervisory approval and sufficient information to estimate the capital charge for the underlying exposures. SEC-ERBA is used to calculate capital requirements if the exposure has an external credit rating (or has an inferred rating), and the jurisdiction permits the use of ratings for regulatory reporting purposes. SEC-SA uses more conservative calibration to calculate the capital requirements. The group has adopted the SEC-IRBA and SEC-SA approaches.

Counterparty credit risk

The current regulatory capital approach used to calculate EAD of derivative transactions is based on SA-CCR. This methodology is applied by allocating trades to margin/netting sets, which determine key features such as how exposure netting is applied, as well as specific unmargined or margined treatment. EAD is determined by measuring the replacement cost, i.e. current exposure net of collateral, combined with the potential future exposure. Potential future exposure, in this regulatory context, is a simplified method to determine the variability in the future valuation of the applicable trades based on notional position and supervisory factors per asset class. Additionally, exposure reduction is considered for over-collateralised or far-out-of-the-money positions via an exposure multiplier. Final EAD is quantified at a counterparty level by summing the replacement cost and the net potential future exposure across margin/netting sets, before finally scaling by an alpha factor of 1.4.

The regulatory capital approach to calculate EAD of SFTs is based on the comprehensive approach with standardised haircuts. This approach considers a potential increase in the exposure, whilst applying a haircut to the collateral used to offset the exposure. The collateral offset is either applied at a transaction or a margin/netting set level, depending on the presence of a master netting agreement. The size of the standardised supervisory haircut or exposure increase is dependent on the prescribed holding period for the transaction, which is in turn dependent on the type of instrument, type of transaction, residual maturity and the frequency of margining.

Regulatory default risk RWA and capital for counterparty credit risk is based on the credit risk model approach, i.e. AIRB approach for domestic entities, using four primary inputs namely EAD, effective maturity, LGD and PD. Similarly, for counterparty and credit risk for the remaining non-domestic entities, the regulatory default risk RWA is based on the standardised approach where regulatory risk weights are prescribed based on counterparty sector. In addition, capital is held for CVA risk, limited to derivative transactions under the current regulatory regime. CVA refers to the fair value adjustment to reflect counterparty credit risk in the valuation of financial transactions. It is the mark-to-market adjustment required to account for credit quality deterioration experienced by a counterparty. CVA capital, for all domestic and foreign entities, is computed in accordance with the standardised method.

For domestic entities, the economic capital calculation for default risk capital is based on regulatory capital EAD with an applied internal default model, while for CVA as well as the remainder of the group entities for both default and CVA capital, regulatory capital serves as a proxy for economic capital.

Traded market risk

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 are calculated at the 99% confidence level, 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 predefined static stress period (2008 – 2009). For internal risk reporting purposes, an expected shortfall methodology calculated at a 99% confidence level, 10-day actual holding period is used over the same periods as VaR and sVaR. One-day VaR calculations are also used as an additional tool in the assessment of market risk.

The group's subsidiaries in broader Africa and the bank's foreign branches are measured using the standardised approach for regulatory capital. Internal stress loss methodology applies to broader Africa 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 for domestic trading units, the group's subsidiaries in broader Africa and the bank's foreign branches.

Equity investment risk

The simple risk-weighted method under the market-based approach (300% for listed equities or 400% for unlisted equities) is applied with the scaling factor for the quantification of RWA. In terms of Regulation 38, a specific risk weight is applied to qualifying investments in financial, banking and insurance entities (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, i.e. deduction of IFRS consolidated net asset value (NAV) and risk weighting of investment into insurance entity. 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.

Equity investments in funds are risk weighted using LTA, MBA or FBA, depending on the criteria met by the fund. For LTA, the underlying exposures in the funds are risk weighted as if those exposures were directly held by the group. For MBA, funds are risk weighted according to the fund's mandate or information obtained from other relevant fund disclosures. Where the fund mandate further permits the use of leverage and/or derivatives, RWA is adjusted to take these into account. FBA applies a 1 250% risk weighting, which is the maximum risk weighting permissible under either of the approaches.

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 for 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. FRIMHL and Aldermore also apply 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 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.

As part of the Basel III reform, the group will be implementing the new standardised approach effective 1 July 2025.

Other assets

The group applies the standardised approach to cash, investment property, property and equipment, accounts receivable and other assets. Deferred tax assets relating to temporary differences, and qualifying investments in financial, banking and insurance entities, are also included under other assets, and are risk weighted at 250% subject to the threshold 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

A change in interest rates impacts the group's short-term financial performance (earnings) and its long-term economic value. The internal funds transfer pricing process is used to transfer interest rate risk in the banking book (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 group 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 variety of ALM strategies to manage endowment risk. It actively monitors the macroeconomic environment to assess the stage of the cycle and utilises financial instruments to manage this risk from an earnings and economic value perspective. Only instruments for which a liquid market exists are used and, where possible, hedge accounting is applied 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 finance portfolios in FNB, WesBank and Aldermore are secured by the underlying assets financed.
- FNB and Aldermore commercial credit exposures are secured by the assets of small and medium-sized enterprise (SME) counterparties. Commercial property finance deals are secured by the underlying property and associated cash flows.
- Personal loans, overdrafts and credit card exposures are generally unsecured or secured by guarantees and sureties.
- For FNB and WesBank retail customers, life insurance and insurance against disability and retrenchment are prescribed, where applicable.
- 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.
- Working capital facilities in RMB 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 methods 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 Global Master Repurchase 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 through a combination of counterparty risk limits and market risk limits. The 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 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 monthly 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 nature of the collateral determines its effectiveness in mitigation, where tradable and highly liquid collateral is preferable and will typically attract lower economic and regulatory haircuts.

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 against 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, and property. The group does not consider insurance as a mitigant in the calculation of capital for operational risk purposes.

Risk-return and risk appetite

The group's risk-return and risk appetite frameworks inform decision-making and are aligned to FirstRand's strategic objectives. Business and strategic decisions are aligned to risk-return and risk appetite targets and measures to ensure that these are met through the cycle. Constraints are also set for stressed conditions. 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.

The risk-return framework drives the discipline of balancing risk, return and sustainable growth across all portfolios and helps the group achieve an optimal trade-off between its ability to take on risk, and the sustainability of the returns delivered to shareholders. The framework connects the group's performance targets, resource constraints and aggregated risk appetite statement, establishing a link between returns, growth and risk. Through the risk-return and financial resource management frameworks, the group sets quantitative measures, thresholds and targets which underpin its commitments to stakeholders.

The group risk appetite statement is the overarching summary of the aggregate level and type of acceptable risk the group is willing to take in pursuit of its strategic objectives. This is constrained ultimately by the group's risk capacity-informed by its size, capital structure, financial resources and expected risk-adjusted returns. As such, risk appetite is captured by a number of qualitative principles and quantitative measures. The qualitative principles are designed to drive a strong risk culture within the organisation in pursuit of the strategic objectives. Risk appetite is approved by the board.

GROUP RISK APPETITE STATEMENT

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

The risk appetite framework, in conjunction with the risk-return framework, aims to ensure that the group maintains an appropriate balance between risk and reward. Return targets and risk appetite limits are set to ensure the group achieves its overall strategic objectives, namely to:

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

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

Qualitative risk appetite principles

The group has implemented qualitative risk appetite principles that support the group's risk culture and drive appropriate behaviour and conduct. The quantitative measures (outlined on page 26) as well as the qualitative principles listed below are integral to the group's risk appetite.

1	Inculcate a sound risk culture across the group through aligned risk management beliefs and values. Act consistently with FirstRand's promises at all times. Do not take risk without a deep understanding thereof. Adhere to escalation mandates for risk concerns. Openly debate to reach consensus.
2	Always act with a fiduciary mindset. Ensure honourable and ethical market, business and employee conduct in dealings with stakeholders. Treat customers and stakeholders fairly. Always deliver excellent customer service.
3	Drive effective compliance with all accounting and regulatory requirements, legislation and corporate governance in its widest sense, including, amongst others, anti-money laundering, anti-bribery and anti-corruption, and data privacy and protection measures.
4	Always consider and actively mitigate risks to the group's reputation and franchise.
5	Commit to creating shared prosperity and upholding sound environmental, social and governance principles in all business activities to build a long-term sustainable business. Balance the needs of all stakeholders (investors, customers, society and employees).
6	Ensure that climate change risks (physical and transition risks) are prudently considered, understood and managed in the group's own operations and financing and investment activities, and that disclosure of these risks improves in alignment with the TCFD principles.
7	Drive operational excellence and efficiency within a robust control environment.
8	Manage the group's financial resources responsibly and efficiently. Ensure appropriate allocation of all financial resources including capital, funding, liquidity, risk appetite and capacity in support of portfolio optimisation. Explicitly manage trade-offs between risk, return, NIACC and growth.
9	Manage the business on a sustainable basis. This requires a through-the-cycle view but with an understanding of the cyclicality and behaviour of the business under stressed conditions, taking the lifetime risk profile of each transaction/customer into account. Manage risk appetite to ensure acceptable earnings volatility for the overall portfolio, as well as for each risk type and business segment.
10	Build and maintain a strong balance sheet which reflects prudence in funding, liquidity, capital, credit origination and provisioning strategies. Avoid excessive gearing through on- or off-balance sheet leverage. Avoid excessive concentrations in risky asset classes, sectors, instruments, segments and customer sets. Ensure the group's earnings mix remains appropriately diversified across segments, business lines, products, markets and regions.

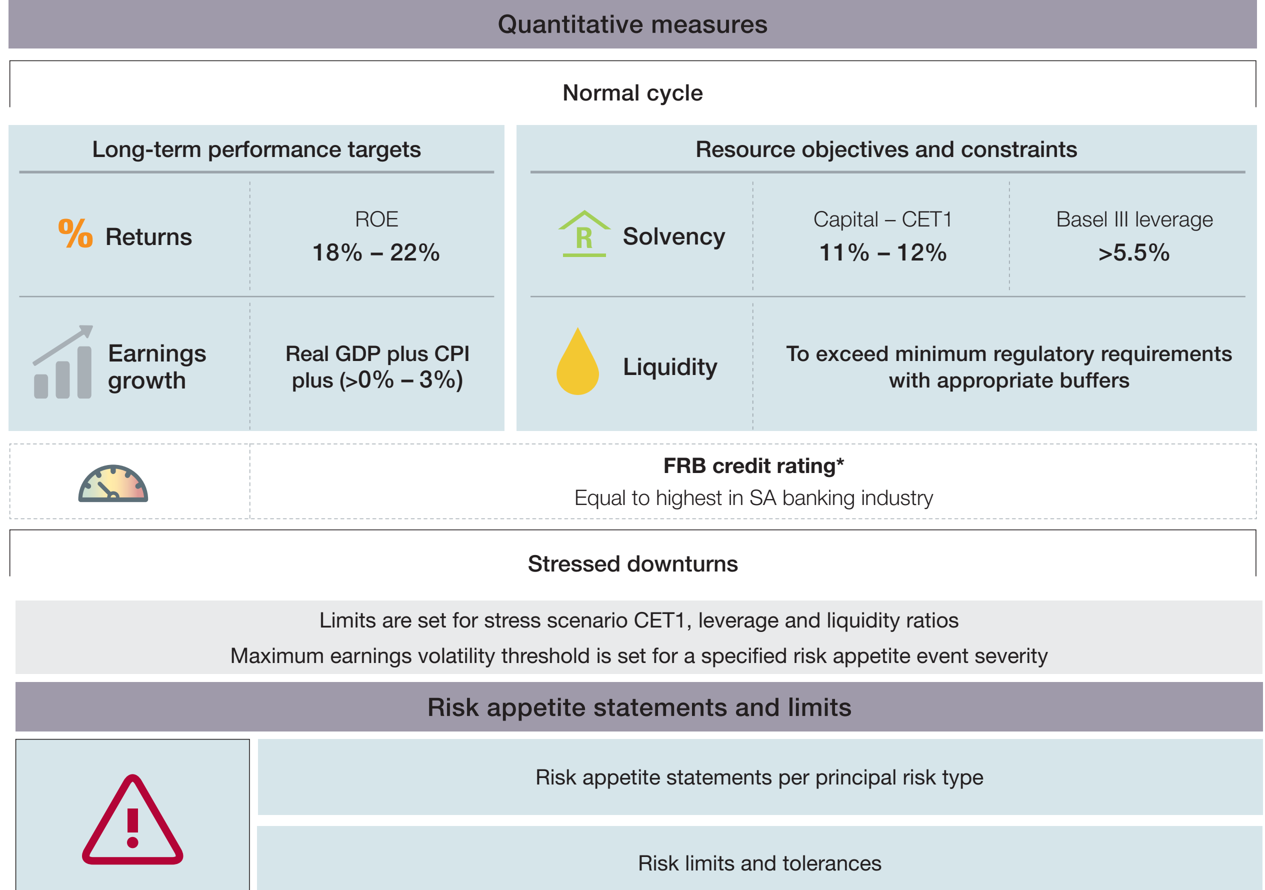
The following diagram illustrates the processes to align risk and return metrics with the group's strategic objectives, commitments to stakeholders, performance measurement objectives and the management of financial resources.

GROUP RISK AND RETURN METRICS

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. Business performance targets for ROE and NIACC are set to ensure delivery of appropriate sustainable risk-adjusted returns given financial resource utilisation. Principles are set to ensure these are appropriately captured in pricing.

Quantitative risk appetite measures

The following diagram outlines the long-term quantitative measures of the risk-return framework, supported by the risk appetite statements per risk type, risk limits and qualitative principles.



* *Refers to a rating agency's measure of a bank's intrinsic creditworthiness before considering external factors.*

Application of the risk-return and risk appetite frameworks 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, risk-taking activities and strategies. The risk- return and risk appetite 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 it will deliver on its commitments at a defined confidence level. Risk management roles and responsibilities are outlined in the group risk management framework. The specific risk-type appetites are described in the applicable risk sections.

Financial resource management

The management of the group's financial resources, which it defines as capital, funding and liquidity, and risk appetite, is a critical enabler to ensure FirstRand achieves its stated growth and return targets, and is driven by the group's overall risk appetite. Group Treasury is mandated to execute on FRM strategic initiatives.

Group Treasury also manages the interest rate and foreign exchange risk inherent in the balance sheet activities within prudential and management limits and risk appetite. The aim is to protect and enhance earnings without adding to the natural risk profile.

FirstRand's performance, in particular the composition and quality of its earnings and high return profile, continues to reflect the consistent and disciplined execution on strategies designed to maximise shareholder value, tightly managed through the group's FRM process.

FirstRand uses the group's macroeconomic house view for budgeting, forecasting and business origination strategies. The house view focuses on the key macroeconomic variables that affect the group's financial performance and risk position.

The group adopts a disciplined and measured approach to the management of its foreign currency investments in subsidiaries and their balance sheets. Approved risk frameworks guide the allocation of resources and management of local and foreign currency risks. The group's framework for the management of external debt considers sources of sovereign risk and foreign currency funding capacity, as well as the macroeconomic vulnerabilities of South Africa. The group continues to employ self-imposed structural borrowing and liquidity risk limits which are more conservative than the regulatory macroprudential limits.

The group's philosophy is that, in the longer term, foreign currency assets should be supported by foreign currency liabilities, primarily in the same jurisdiction. It aligns with one of the group's strategic priorities to increase geographic diversification, which is evidenced by the integration of the MotoNovo business into the Aldermore group in the UK, as well as the utilisation of the RMB International (Mauritius) platform for the group's broader Africa foreign exchange exposures.

Stress testing and scenario planning

Stress testing and scenario planning serve a number of regulatory and internal business purposes. 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 or other 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 management actions/responses.

Stress tests are conducted throughout the group for all regulated entities and several unregulated legal entities. The various stress test processes are supported by a robust and holistic framework, underpinned by principles and sound governance, and aligned to best practice and regulatory requirements (where relevant).

Stress testing and scenario analysis provide the board and management with useful insight into 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 impacting 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. The macroeconomic scenarios range from a mild downturn to severe stress. In addition to macroeconomic scenarios, the group incorporates event risks 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 risks and reverse stress tests.

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

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

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

- determination of the capital buffer and 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).

These stress events and scenario analyses are not only focused on the downside impacts on earnings and capital, but generally allow the group to also assess its operational resilience. The process is further used to identify and deploy mitigating measures to support customers and the broader economy within the boundaries of prudential constraints.

The group continues to evolve its approach to incorporate climate change and related risks in stress testing and scenario analysis.

Given its classification as a domestic systemically important bank (D-SIB) FirstRand participated in the SARB's common stress and scenario analysis (CSST) during 2023. The CSST consists of a comprehensive set of top-down and bottom-up macroprudential stress tests covering D-SIBs' solvency and liquidity profiles. As in prior years, it is expected that the consolidated results of the CSST for D-SIBs in South Africa will be published in the SARB's financial stability report towards the end of 2023.

It is the SARB's intention to run a further climate stress test in 2024. Similarly to the 2023 CSST, the climate stress test will consist of both top-down and bottom-up assessments to test the resilience of the banking sector to transition and physical risk, and to evaluate the vulnerabilities of the sector's credit and market risk exposures in the event of certain climate risks materialising. Further information on climate risk scenarios is provided in the *Climate risk* section of this report.

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 the *Key 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 the group's board and management, including its operating businesses and key subsidiaries, namely FRB (including its foreign branches), Aldermore Group, FirstRand 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 or bank 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);
- considers how to limit the impact of the event(s) and reduce or prevent any negative contagion across the group;
- 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 to then reconcile these exposures to its own risk mitigation, 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 critical functions for customers and the financial system, as well as which assets are most marketable to facilitate recovery. Where inefficiencies are identified, these can be addressed to ensure the group is more streamlined, adaptable and resilient to stress.

FirstRand has submitted multiple annually revised versions of its recovery plan to the PA, most recently in December 2022.

Resolution framework

In line with its commitment to implement the key attributes and end the "too big to fail" phenomenon, South Africa's National Treasury and the SARB jointly published a discussion paper, entitled *Strengthening South Africa's resolution framework for financial institutions* (the resolution paper) in August 2015. The proposals set out in the discussion paper were incorporated into the Financial Sector Laws Amendment Bill, 2018 (FSLAB) and tabled in Parliament in 2018. In January 2022, the President signed into law the Financial Sector Laws Amendment Act 23 of 2021 (FSLAA), which amends the Financial Sector Regulation Act 9 of 2017.

The objective of the FSLAA is to assist in maintaining financial stability by:

- making provision for the orderly resolution of designated institutions, which include all banks and non-bank systemically important financial institutions (SIFIs); and
- protecting depositors through the establishment of an explicit deposit insurance scheme to protect covered depositors in the event of a bank's failure.

A commencement schedule for the provisions of the FSLAA has been published and sets out the implementation dates for key elements of the resolution framework.

One of the pivotal provisions effected by the schedule was the designation of the SARB as the resolution authority effective 1 June 2023 and providing it with the necessary powers to operationalise an effective resolution regime and issue resolution standards. The SARB has commenced engagements with SIFIs on resolution planning.

To date the SARB has released the following two standards relating to the resolution framework:

- Stays on early-termination rights and resolution moratoria on contracts of designated institutions in resolution.
- Transfers of assets and liabilities of a designated institution in resolution.

The Corporation for Deposit Insurance (CoDI) was created as a legal entity on 24 March 2023 and will be fully operational in April 2024. The CoDI has also issued a draft deposit insurance standard, *CoDI 1: Funding liquidity*, in June 2023.

The SARB and CoDI are expected to release numerous resolution and deposit insurance scheme standards over the next 12 months.

link between financial statements
and regulatory exposures

Basis of consolidation

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

REGULATORY AND IFRS 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, AT1, Tier 2 and total loss-absorbing capacity (TLAC)):
• Amount exceeding 10% CET1 – deduction against corresponding component of capital except TLAC deducted against Tier 2 capital.
• 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 ratings-based approach:
• Maximum risk weight of 1 250%.</td><td>Financial asset equity instruments at mandatory fair value through profit or loss, or fair value through other comprehensive income.</td></tr>
<tr><td>Between 10% and 20%</td><td colspan="2">CET1:
• Individual investments in excess of 10% CET1 – deduction against CET1.
• Individual investments up to 10% apply threshold rules.
AT1 and Tier 2:
• Deduct against corresponding component of capital.
TLAC:
• Deduct full amount of TLAC holdings from Tier 2 capital.</td><td>As noted above, except 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 20% and 50%</td><td>• Legal or de facto support (other significant shareholder) – proportionately consolidate.
• No other significant shareholder – apply threshold rules as set out above for shareholding between 10% and 20%.</td><td rowspan="2">• Apply deduction methodology, with 100% derecognition of IFRS consolidated NAV.
• Cost of investment subject to threshold rules.</td><td rowspan="2">Standardised and internal ratings-based approach:
• Individual investment greater than 15% of CET1, AT1 and Tier 2: risk weight at 1 250%.
• 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 1 250% (standardised only).</td><td>Equity accounting, as the group is deemed to have 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 transaction indicates that the group has joint control, in which case equity accounting will apply.</td></tr>
</table>

* *As per Regulation 38.*

Threshold rules

As per Regulation 38(5), investments are aggregated as part of threshold deductions (significant investments and deferred tax assets relating to temporary differences). Aggregate investments up to 15% of CET1 capital are risk weighted at 250% and amounts exceeding 15% of CET1 capital are deducted against CET1 capital.

Insurance entities

Material wholly owned insurance subsidiaries incorporated in South Africa include FirstRand Life Assurance Limited with a NAV of R1 922 million (2022: R2 030 million), FRISCOL with a NAV of R515 million (2022: R422 million) and FirstRand Short Term Insurance with a NAV of R883 million (2022: R126 million).

Mapping of financial statement categories to regulatory risk categories

The 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 risk measurement approaches to calculate regulatory capital, applicable to each of the risk frameworks, are described on page 20.

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

LI1: DIFFERENCES BETWEEN ACCOUNTING AND REGULATORY SCOPES OF CONSOLIDATION AND MAPPING OF FINANCIAL STATEMENT CATEGORIES WITH REGULATORY RISK CATEGORIES

	As at 30 June 2023							
	Carrying values							
			Items under regulatory frameworks					
R million	**Statement of financial position**	**Regulatory scope**	**Credit risk**	**Counter-party credit risk**	**Securi-tisation**	**Market risk**	**Equity investment risk**	**No capital/ deducted from capital**
Assets								
Cash and cash equivalents	175 304	175 160	162 360	10 645	2 155	–	–	–
Derivative financial instruments*	85 956	85 956	–	85 572	383	65 434	–	–
Commodities	17 252	17 252	1 790	–	–	17 252	–	–
Investment securities**	419 140	408 640	285 004	–	–	116 849	10 009	–
Advances#	1 539 375	1 539 375	1 432 891	69 236	37 248	–	–	–
Other assets	3 760	3 333	3 333	–	–	–	–	–
Current tax asset	925	925	925	–	–	–	–	–
Non-current assets and disposal groups held for sale	1 359	1 359	–	–	–	–	1 359	–
Reinsurance assets	554	–	–	–	–	–	–	–
Investments in associates	10 400	10 400	–	–	–	–	10 400	–
Investments in joint ventures	3 105	3 105	–	–	–	–	3 105	–
Property and equipment	21 155	21 129	21 129	–	–	–	–	–
Intangible assets	10 278	10 133	–	–	–	–	–	10 133
Investment properties	353	353	353	–	–	–	–	–
Defined benefit post-employment asset	25	25	–	–	–	–	–	25
Deferred income tax asset	8 669	8 663	8 299		–	–	–	364
Investment in subsidiaries	–	2 312	–	–	–	–	2 312	–
Total assets	2 297 610	2 288 120	1 916 084	165 453	39 786	199 535	27 185	10 522
Liabilities								
Short trading positions	12 753	12 753	–	–	–	12 753	–	–
Derivative financial instruments*	70 354	70 354	–	70 214	140	67 485	–	–
Creditors, accruals and provisions	43 389	43 127	–	–	–	–	–	43 127
Current tax liability	471	436	–	–	–	–	–	436
Liabilities directly associated with disposal groups classified as held for sale	–	–	–	–	–	–	–	–
Deposits	1 923 103	1 923 051	–	37 068	29 372	–	–	1 856 611
Employee liabilities	17 074	16 896	–	–	–	–	–	16 896
Other liabilities	7 033	7 030	–	–	–	–	–	7 030
Policyholder liabilities	8 131	–	–	–	–	–	–	–
Tier 2 liabilities	16 869	14 947	–	–	–	–	–	14 947
Deferred income tax liability	752	709	–	–	–	–	–	709
Amounts due to holding company and fellow subsidiary companies	–	388	–	–	–	–	–	388
Total liabilities	2 099 929	2 089 691	–	107 282	29 512	80 238	–	1 940 144

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

** *The amounts shown in the regulatory scope 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, and listed and unlisted equities under the equity investment risk framework.*

Advances net of impairments.

The amounts from different balance sheet line items included in the risk frameworks are described in the following table.

Balance sheet line items included in different risk frameworks

Risk framework	Description
Credit risk	• Cash and cash equivalents, debt investment securities and commodities in the banking book. • Advances included in the credit risk framework are shown net of impairments 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. • Other assets including accounts receivable; non-current assets (and related liabilities) and disposal groups held for sale, if applicable; current tax assets, property and equipment; investment properties and deferred tax assets related to temporary differences are included in the credit risk framework.
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 both to trading and banking book activities.
Securitisations	Cash, advances, derivative financial instruments held for trading, payables and deposits. Capital is determined on the investment security note exposure retained by the group.
Market risk	Derivative financial instruments (assets and liabilities), commodities, held for trading and elected fair value investment securities and short trading position liabilities.
Equity investment risk	Listed and non-listed equity investment securities, investments in money market funds, non-current assets held for sale related to equity investments, if applicable, and investments in associates and joint ventures.
No capital/deducted from capital	Intangible assets, defined benefit post-employment assets and deferred tax assets, excluding temporary differences, are deducted from capital.

LI2: MAIN SOURCES OF DIFFERENCES BETWEEN REGULATORY EXPOSURE AMOUNTS AND CARRYING VALUES IN FINANCIAL STATEMENT

	As at 30 June 2023				
	Items subject to regulatory frameworks				
R million	Credit risk	Counter-party credit risk	Securi-tisation	Market risk	Equity investment risk
Assets carrying value per regulatory scope of consolidation	1 916 084	165 453	39 786	199 535	27 185
Liabilities carrying value per regulatory scope of consolidation	–	107 282	29 512	80 238	–
Total net amount under regulatory scope of consolidation	1 916 084	58 171	10 274	119 297	27 185
Off-balance sheet amounts	277 618	–	613	–	–
Differences in valuations	275 508	34 150	–	–	–
Differences due to netting rules and credit risk mitigation (CRM)	(308 432)	(51 088)	–	–	–
Differences due to provisions	46 179	–	–	–	–
Difference due to potential future exposure for counterparty credit risk (CCR)	–	10 268	–	–	–
Differences due to prudential filters	(101 971)	–	17 838	–	(10 026)
Exposure amounts considered for regulatory purposes	2 104 986	51 501	28 725	119 297	17 159
Reconciliation to regulatory amounts in Pillar 3 tables	–	–	–	–	–
CR6: AIRB – FRBSA EAD post credit conversion factors (CCF) and CRM	1 410 956	–	–	–	–
CR4: Standardised approach on- and off-balance sheet amount of exposure post CCF and CRM	693 548	–	–	–	–
CR10: Specialised lending exposures under slotting on- and off-balance sheet amount	482	–	–	–	–
CCR1: EAD post CRM	–	45 451	–	–	–
CCR3: Standardised approach for derivatives for subsidiaries in broader Africa and foreign branches – total credit exposure	–	6 050	–	–	–
SEC1: Total securitisation exposures in the banking book	–	–	28 725	–	–
Carrying value of investments*	–	–	–	–	17 159
Total	2 104 986	51 501	28 725	119 297	17 159

* *For the carrying value of investments refer to page 118 of this report.*

Prudent valuations

Valuation methodology and validation process

The group has established control frameworks and processes at segment/operating business level for independent price verification (IPV) and bid offer, which ensure that asset and liability prices are verified against independently sourced instrument prices or market data to ensure trading positions are correctly valued. The IPV is therefore the adjustment to assets or liabilities valued using a valuation technique, to observable market data levels, i.e. to fair value. Bid-offer is the adjustment to assets or liabilities valued at mid-market value by the trading system, and used in profit and loss reporting, to a fair value figure. At an operating business level, valuation specialists are responsible for the selection and implementation of the valuation techniques used to determine fair value measurements, as well as any changes required.

Valuation committees comprising key management representatives have been established within each segment/operating business and at an overall group level. They 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 an operating business level by the required valuation specialists, valuation committees and relevant risk committees annually, or more frequently if considered appropriate.

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.
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, deposits, other liabilities and OTC derivatives or exchange-traded derivatives where a market price is not available. Valuation techniques include: • discounted cash flows; • option pricing models; • industry standard models; and • specific debt market bond pricing models.
Instruments where fair value is determined using inputs from unobservable 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, unlisted equities, certain debt instruments, OTC derivatives or exchange-traded derivatives where a market price is not available, non-recourse investments, non-recourse deposits, deposits, and other liabilities. Valuation techniques include: • discounted cash flows; • option pricing models; and • industry standard models.

Non-financial assets

Non-financial assets that are measured at fair value include commodities and investment properties.

- Commodities are classified as level 1 in the fair value hierarchy and fair value is measured using quoted prices in active markets.
- Investment properties are classified as level 3 and fair value is determined using a discounted cash flow valuation technique.

Prudent valuation adjustments

Capital regulatory frameworks require financial institutions to apply prudent valuations to all fair value assets and liabilities. The difference between prudent value and fair value in terms of IFRS is called a prudent valuation adjustment (PVA), and is deducted from CET1 capital. The following table provides descriptions and methodologies adopted for 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	This PVA is required to take account of the valuation uncertainty to adjust for the fact that the position level valuations calculated do not reflect an exit price for the position or portfolio (for example, where such valuations are calibrated to a mid-market price).
• 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 market liquidity.
Early termination	This PVA 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	Reflect 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. These include 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 into any of the categories listed above.

The group has opted to apply the simplified approach for the calculation of PVAs for the subsidiaries in broader Africa, as this is permitted for subsidiaries that make up less than 5% of a group's gross assets and liabilities. The simplified approach requires banks to set the PVA at 0.1% of the sum of the absolute value of fair-valued assets and liabilities, which are included in the materiality threshold calculation.

PV1: PRUDENT VALUATION ADJUSTMENT (PVA)

		As at 30 June 2023							
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:	**43**	**261**	**2.02**	**–**	**0.83**	**307**	**222**	**85**
2.	*Mid-market value*	**43**	**106**	**–**	**–**	**–**	**149**	**140**	**9**
3.	*Close-out cost*	**–**	**155**	**2.02**	**–**	**0.83**	**158**	**82**	**76**
4.	Concentration	**–**	**80**	**–**	**–**	**–**	**80**	**80**	**–**
9.	Unearned credit spreads	**–**	**–**	**–**	**3**	**–**	**3**	**3**	**–**
11.	Other	**–**	**13**	**–**	**–**	**–**	**13**	**13**	**–**
12.	**Total adjustment**	**43**	**354**	**2.02**	**3**	**0.83**	**403**	**318**	**85**

		As at 30 June 2022							
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:	42	436	0.47	–	1.77	480	342	138
2.	*Mid-market value*	42	147	–	–	–	189	162	27
3.	*Close-out cost*	–	289	0.47	–	1.77	291	180	111
4.	Concentration	–	–	–	–	–	–	–	–
9.	Unearned credit spreads	–	–	–	8	–	8	8	–
11.	Other	–	2	–	–	–	2	2	–
12.	**Total adjustment**	42	438	0.47	8	1.77	490	352	138

Mid-market value, close-out cost and concentration are the most significant PVAs for the group. A decrease in close-out spreads and reduced fair value adjustments contributed to a decrease in interest rate close-out uncertainty. Other refers to the simplified approach PVA result that was estimated for broader Africa. The group estimates operational risk, model risk, early termination, investing and funding and costs future administration cost PVAs to be zero. Lines 5–8 and 10 of the PV1: *Prudent valuation adjustments* template have, therefore, been omitted.

capital
management

Introduction and objectives

The group actively manages capital aligned to strategy and risk appetite/profile. The capital planning process ensures that the CET1, Tier 1 and total capital adequacy ratios remain within or above target ranges and regulatory minima 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. The group aims to back all economic risk with loss-absorbing capital and remains well capitalised in the current environment. FirstRand actively manages its capital stack to ensure an efficient capital structure, closely aligned to group internal targets and strategic growth plans. The optimal level and composition of capital are determined after taking the following into account:

- prudential requirements, including prescribed buffers;
- rating agencies' considerations;
- investor expectations;
- peer comparisons;
- strategic and organic growth plans, including the management buffer;
- economic capital;
- proposed regulatory, tax and accounting changes;
- macroeconomic environment and stress test impacts; and
- the issuance of capital instruments.

ICAAP is integral to the group's risk, capital management and decision-making processes and is deeply embedded across the group. Best-practice standards and methodologies are adopted to assess the overall risk profile of the group. A key input into ICAAP is an assessment of economic risk, with the outcome used to evaluate the group's capital position and targeted level of capitalisation. The group is capitalised at the higher of economic or regulatory capital requirements.

ICAAP is considered in:

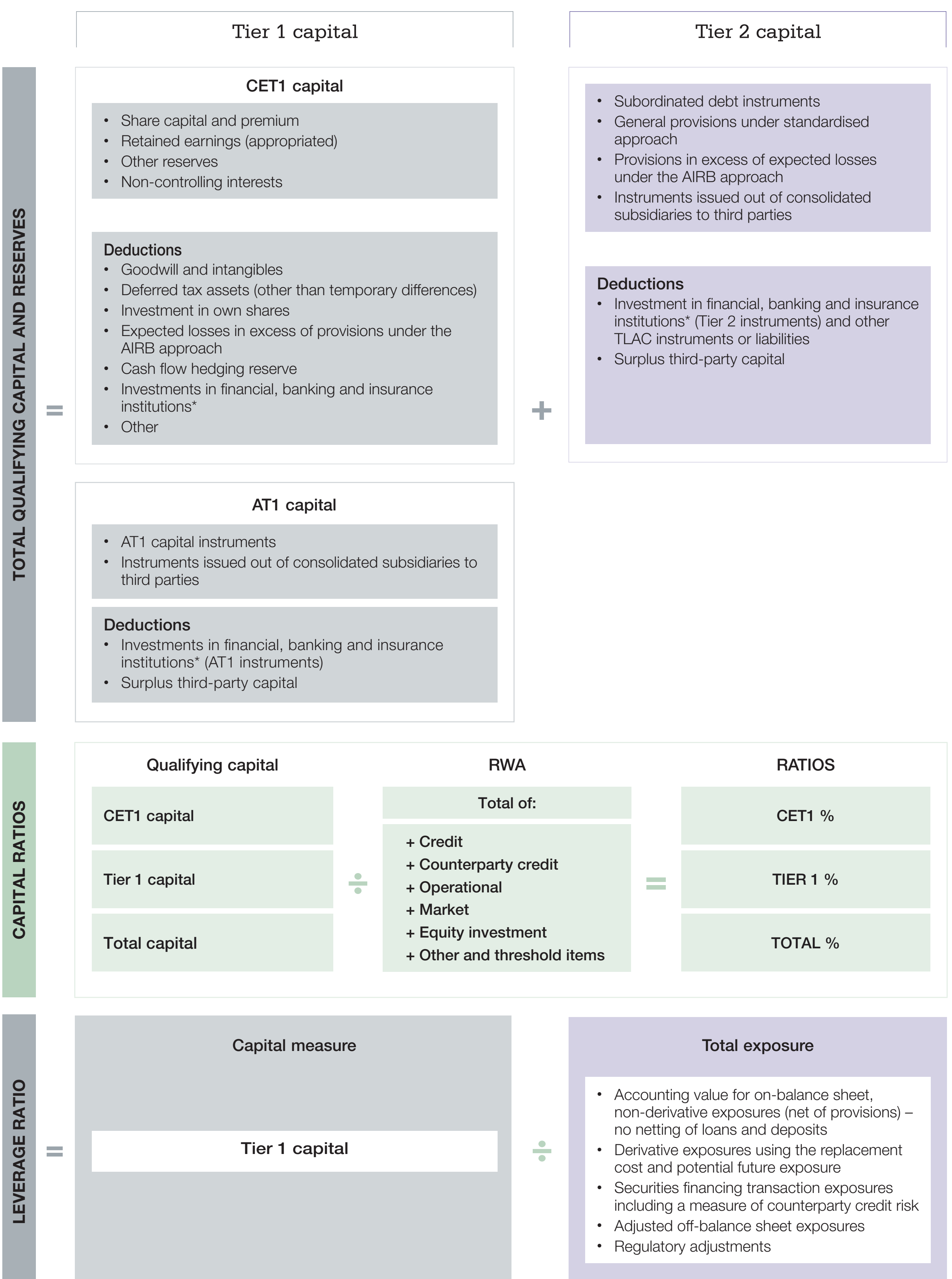
- the setting of strategy and risk appetite;
- risk assessment and management;
- forward-looking capital planning:
  - budget and earnings volatility;
  - stress and scenario analysis;
  - capital target setting; and
  - dividend decisions;
- performance measurement; and
- recovery planning, which is an extension of ICAAP.

The group's ICAAP includes the assessment of all new and emerging risks. Climate risk continues to feature prominently in strategic and business conversations and is currently captured as part of the group's stress and scenario analysis.

Capital adequacy and leverage

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

CAPITAL AND LEVERAGE



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

Year under review

During the year the group reported strong capital and leverage ratios in excess of the regulatory minima and internal targets.

CAPITAL ADEQUACY AND LEVERAGE POSITIONS

	As at 30 June 2023			
	Capital			Leverage
%	CET1	Tier 1	Total	Total
Regulatory minimum*	8.8	11.0	13.3	4.0
Internal target	11.0 – 12.0	>12.0	>14.75	>5.5
FirstRand actual				
– Including unappropriated profits	**13.2**	**13.8**	**15.6**	**7.8**
– Excluding unappropriated profits	12.7	13.4	15.2	7.6
FRB actual**				
– Including unappropriated profits	**12.6**	**13.5**	**15.4**	**6.6**
– Excluding unappropriated profits	12.0	12.9	14.8	6.3

* *Excluding the individual capital requirement (Pillar 2B). The D-SIB requirement for both the group and bank is 1.5% and the group's CCyB add-on was 28 bps at 30 June 2023.*

** *FRB including foreign branches.*

The Bank of England reinstated the UK CCyB add-on during December 2022 and lifted it further to 2% in July 2023. The CCyB add-on increases the overall minimum requirement for FirstRand given the reciprocity agreement in place with the Prudential Authority in South Africa. This requirement has been incorporated in the group's internal target range and capital plan. The group's total capital adequacy target for FY24 has increased 50 bps to >14.75% and no changes were made to the group's CET1 and Tier 1 targets. The bank's internal targets remain unchanged.

A detailed analysis of key drivers of the year-on-year movements in the supply of capital and RWA, as well as a regulatory update is included in the *FirstRand analysis of financial results for the year ended 30 June 2023* booklet, and the *FRB annual report for the year ended 30 June 2023* booklet which can be found at https://www.firstrand.co.za/investors/integrated-reporting-hub/financial-reporting/.

Supply of capital

COMPOSITION OF CAPITAL

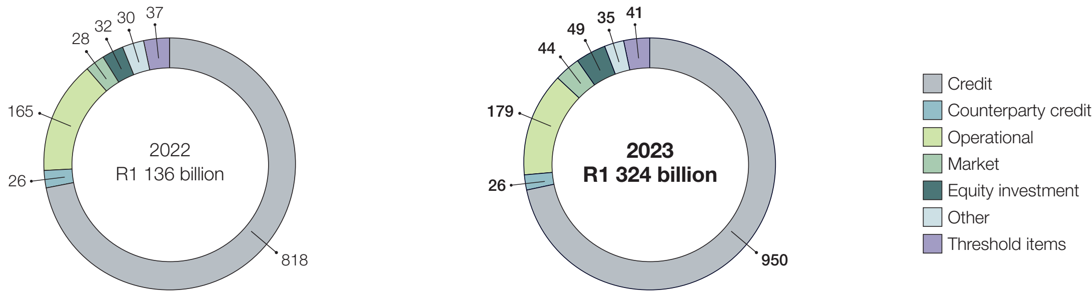
	As at 30 June			
	FirstRand		FRB*	
R million	**2023**	2022	**2023**	2022
CET1 capital excluding unappropriated profits	**168 647**	137 189	**101 027**	92 145
Unappropriated profits	**5 487**	20 799	**5 141**	15 566
CET1 capital including unappropriated profits	**174 134**	157 988	**106 168**	107 711
AT 1 capital	**9 194**	7 040	**7 343**	4 971
Tier 1 capital	**183 328**	165 028	**113 511**	112 682
Tier 2 capital	**23 433**	24 834	**16 496**	20 997
Total qualifying capital	**206 761**	189 862	**130 007**	133 679

* *FRB including foreign branches.*

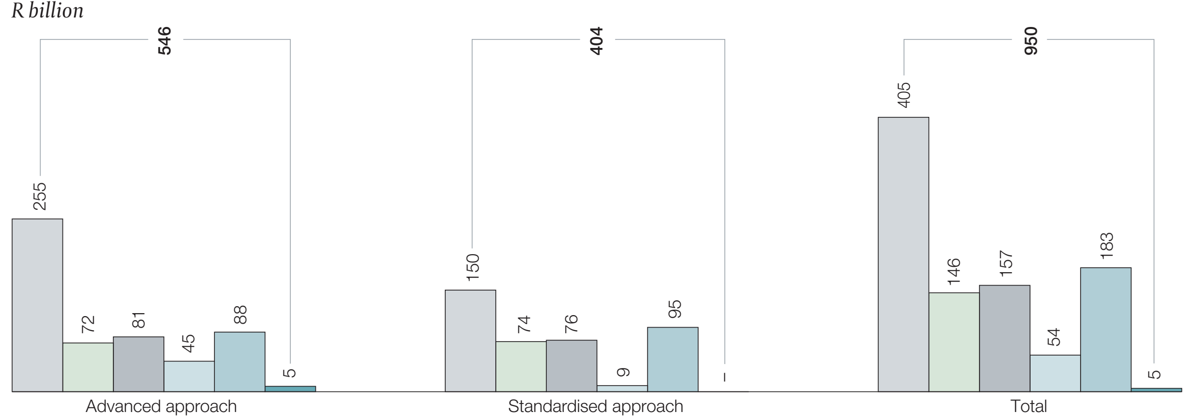
Demand for capital

The following sections provide an analysis of RWA per risk type, as well as a breakdown of credit RWA for FirstRand and FRB (including foreign branches).

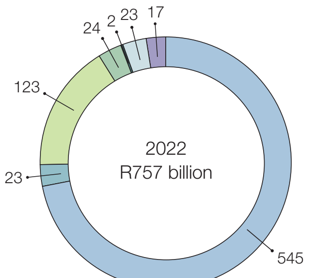
Group RWA analysis
R billion

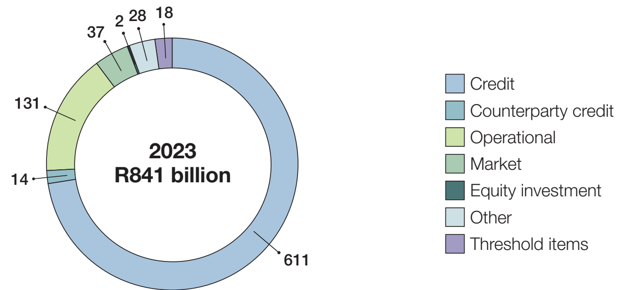


Overview of group credit RWA – June 2023
R billion



FRB RWA analysis
R billion





Refer to the *Standardised disclosures* section of this report for additional capital and leverage disclosures required in terms of the Regulations:

- KM1: Key prudential requirements
- CC1: Composition of regulatory capital
- CC2: Reconciliation of regulatory capital to balance sheet
- CCA: Main features of regulatory capital instruments
- OV1: Overview of RWA
- LR1: Summary comparison of accounting assets vs leverage ratio
- LR2: Leverage ratio common disclosure template
- CCYB1: Geographical distribution of credit exposures used in the countercyclical capital buffer

Capital adequacy position for the group and its regulated entities

The group's registered banking subsidiaries and foreign branches must comply with PA regulations and those of their respective in-country regulators, with primary focus placed on Tier 1 and total capital adequacy ratios. The group's approach is that all entities must be adequately capitalised on a standalone basis. Based on the outcome of detailed stress testing, each entity targets a capital level in excess of in-country regulatory minimums.

Adequate controls and processes are in place to ensure that each entity is adequately capitalised to meet regulatory and economic capital requirements. Capital generated by subsidiaries in excess of targeted levels is returned to FirstRand, usually in the form of dividends unless retained for organic or inorganic growth. No restrictions were experienced on the repayment of dividends during the year under review.

Capital for insurance entities is calculated on a regulatory basis in line with the Insurance Act 18 of 2017 and Regulations, as well as on an economic basis. Capital requirements are risk sensitive and also used to understand the exposure to insurance risk. The insurance group's own risk and solvency assessment (ORSA) assesses the impact of various stresses on the solvency position of the insurance entities and informs capital targets. Target levels for capital coverage are specified in the insurance risk appetite statement and have been met over the year under review. Insurance entities remain appropriately capitalised.

CAPITAL ADEQUACY POSITIONS OF FIRSTRAND AND ITS REGULATED ENTITIES

	As at 30 June				
	2023				2022
	Total minimum requirement* %	**RWA** R million**	**Tier 1 %**	**Total capital adequacy %**	Total capital adequacy %
BANKING (%)					
Basel III (PA regulations)					
FirstRand[#]	**13.3**	**1 323 864**	**13.8**	**15.6**	16.7
FirstRand Bank[#,†]	**13.0**	**841 472**	**13.5**	**15.4**	17.7
FirstRand Bank South Africa[#]	**13.0**	**806 072**	**13.1**	**15.1**	17.4
FirstRand Bank London	**13.3**	**35 812**	**18.5**	**19.6**	21.6
FirstRand Bank India[‡]	**13.0**	**592**	**>100**	**>100**	>100
FirstRand Bank Guernsey	**13.0**	**890**	**68.5**	**68.5**	43.0
Basel III (local regulations)					
Aldermore Bank	**13.6**	**155 820**	**19.4**	**21.0**	19.6
FNB Namibia	**10.0**	**34 571**	**16.1**	**17.1**	20.4
Basel II (local regulations)					
FNB Botswana	**12.5**	**29 086**	**13.8**	**18.1**	17.9
RMB Nigeria	**10.0**	**6 938**	**22.6**	**22.6**	35.7
FNB Eswatini	**8.0**	**5 933**	**20.3**	**21.5**	23.2
First National Bank Ghana	**10.0**	**3 175**	**16.1**	**16.1**	34.1
FNB Mozambique	**12.0**	**3 825**	**20.5**	**20.5**	28.7
Basel I (local regulations)					
FNB Zambia	**10.0**	**7 689**	**29.3**	**29.3**	34.0
FNB Lesotho	**8.0**	**1 193**	**15.2**	**16.5**	19.9
INSURANCE (times)^					
FirstRand Life Assurance (FNB Life)	**1.0**		**1.8**		1.9
FirstRand STI (FNB Short Term Insurance)	**1.0**		**5.0**		1.9
FRISCOL	**1.0**		**2.5**		1.8

* *Excluding any confidential bank-specific add-ons.*

** *RWA for entities outside of South Africa converted to rand using the closing rates at 30 June 2023.*

[#] *Including unappropriated profits.*

† *FRB including foreign branches.*

‡ *The branch is in the process of being wound down.*

^ *Solvency capital requirements per quarterly returns as at 30 June 2023.*

Economic capital

Economic capital (EC) is included in the group's strategic capital planning, risk measurement and portfolio management. It is defined as an internal measure of risk which estimates the amount of capital required to cover unexpected losses. EC is incorporated in the group's internal target assessment, more specifically the level of loss-absorbing capital required to cover the group's economic risk. A granular bottom-up calculation, incorporating correlations, concentration risks and diversification benefits attributable to the group's aggregate portfolio, forms the basis for the risk-based capital methodology. The group continues to enhance the use of EC by facilitating risk-based decisions, including capital allocation.

The assessment of economic risk aligns with FirstRand's economic capital framework to ensure the group remains solvent at a confidence interval of 99.93%, and that it can deliver on its commitments to stakeholders over a one-year horizon. The economic capital framework is subject to annual review and appropriate governance, and covers the following:

- the risk universe and refinements;
- consistent standards and measurements for each risk type;
- transparent and verifiable results; and
- alignment and integration with the group's risk and capital frameworks.

EC incorporates inter-risk aggregation/diversification for both FirstRand and FRBSA. Various approaches (such as variance-covariance, copula, constant factor), which vary in complexity, are used in aggregating EC across risk types and legal entities.

Regular reviews of the EC position are carried out across businesses, enabling efficient portfolio optimisation with respect to financial resources and portfolio behaviour.

The group and bank's EC demand, available financial resources and EC multiple are summarised in the table below.

EC DEMAND* AND MULTIPLE

	As at 30 June 2023	
	FirstRand	FRBSA
Credit risk**	66 379	39 372
Market risk	1 633	1 312
Operational risk	12 369	6 826
Equity investment risk	5 221	204
Model risk	1 927	1 548
Interest rate risk in the banking book	8 464	7 221
Business risk	4 070	4 056
Other	11 596	5 554
Total EC requirement	**111 659**	**66 093**
Available financial resources	**162 391**	**98 168**
EC multiple	**1.5**	**1.5**

* *Post intra-risk diversification and inter-risk diversification (which has been allocated on a proportionate basis).*

** *Including counterparty credit risk.*

liquidity
risk and funding

Introduction and objectives

The group recognises two types of liquidity risk:

Funding liquidity risk – the risk that the group is unable 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 inhibit the group's ability to trade in specific markets without affecting market prices significantly.

Liquidity risk is a natural outcome of the group's business activities. To manage and mitigate this risk, the group optimises its funding composition within structural and regulatory constraints to enable its businesses to operate in an efficient and sustainable manner. The group aims to fund its activities from diverse and sustainable funding pools, targeting a funding profile with natural liquidity risk offsets. Compliance with prudential liquidity ratios is a key consideration in the group's funding strategy.

The group's primary funding objective is to maintain and enhance its deposit market share by appropriately rewarding depositors. The group continues to offer innovative and competitive products to further grow its deposit franchise whilst also optimising its institutional funding profile.

The group continues to monitor key liquidity risk metrics and early warning indicators closely. It regularly forecasts its liquidity position and uses scenario analysis in its decision-making process. FirstRand continues to be well funded, with appropriate liquidity buffers in place to meet both prudential liquidity requirements and internal targets.

SARB monetary policy implementation framework

Following the initial implementation of the updated monetary policy implementation framework (MPIF), which concluded in September 2022, the SARB introduced further revisions to the framework in February 2023. The revisions followed the anticipated drawdowns of National Treasury's sterilisation reserve deposits at the SARB. To accommodate the additional market liquidity and avoid market disruptions or any weakening of monetary policy transmission, the SARB increased the quotas for market participants. This final phase of the MPIF implementation concluded in April 2023.

The initial intention of the revised monetary policy transmission remains intact, with the additional market liquidity affording market participants greater payment capacity, improved liquidity availability and transmission, and enhanced financial market stability.

Organisational structure and governance

LIQUIDITY RISK AND FUNDING GOVERNANCE STRUCTURE FOR GROUP AND BANK

Board-level oversight

RCCC

Provides oversight of the group's liquidity risk and funding risk profile.

Group ALCCO

- Provides oversight of ALM functions and ALCCOs across the group.
- Monitors implementation of ALM framework.
- The ALM framework prescribes the standards, principles and policies for effective liquidity risk management across the group.
- Approves liquidity risk appetite across the group.

Broader Africa ALCCO

The broader Africa ALCCO provides oversight of ALM risk management for the group's subsidiaries in broader Africa.

Executive management oversight

FRM executive committee

Ensures appropriate and optimal funding for the group's activities.

Segment FRM executive committees

Ensures appropriate and optimal funding for segment activities.

Management structures*

Group Treasury

- Manages the group's liquidity and funding position.
- Sets and implements liquidity strategies in line with risk appetite and prudential liquidity limits across all entities in the group.
- Responsible for the group's liquidity risk management processes.

FCC risk management

- Supports management in identifying and quantifying key ALM risks.
- Ensures that board-approved risk policies, frameworks, standards, methodologies and tools are adhered to.
- Recommends and reviews liquidity risk appetite.
- Compiles, analyses and escalates risk reports on performance, risk exposures and corrective actions.

Segment RCCCs

Provides oversight of liquidity and funding risks as part of the segment risk profile.

Group Internal Audit

- Assesses the adequacy and effectiveness of liquidity risk management controls.
- Identifies risk control shortcomings and recommends corrective actions.

* *The group's liquidity position, exposures and management aspects are reported daily, weekly and monthly to various management committees, Group Treasury and FCC Risk Management, as appropriate.*

LIQUIDITY RISK AND FUNDING GOVERNANCE STRUCTURE FOR BROADER AFRICA AND FOREIGN BRANCHES

Board-level oversight

RCCC

Provides oversight of the group's liquidity risk and funding risk profile.

Group ALCCO

- Provides oversight of ALM functions and ALCCOs across the group.
- Monitors implementation of ALM framework.
- The ALM framework prescribes the standards, principles and policies for effective liquidity risk management across the group.
- Approves liquidity risk appetite across the group.

Broader Africa ALCCO

- The broader Africa ALCCO provides oversight of ALM risk management for the group's subsidiaries in broader Africa.
- Meets quarterly to discuss region specific liquidity issues.

Subsidiary ALCCO

Manages liquidity in each subsidiary in line with group principles.

Management structures*

Subsidiary treasury function

- Provides day-to-day management of subsidiary funding and liquidity risk.
- Manages within country capital base.
- Focuses on growing the deposit franchise.

Group Treasury

- Overall ALM framework and mandates.
- Dedicated resources to assist with technical expertise in ALM and fundraising activities.
- Alignment to international best practice and latest regulatory developments.

Group Internal Audit

- Assesses the adequacy and effectiveness of liquidity risk management controls.
- Identifies risk control shortcomings and recommends corrective actions.

* *The group's liquidity position, exposures and management aspects are reported daily, weekly and monthly to various management committees, Group Treasury and FCC Risk Management, as appropriate.*

Funding management

South Africa is characterised by a low discretionary savings rate and a high degree of contractual savings captured by institutions such as pension funds, life insurers and asset managers. A portion of these contractual savings is transformed into institutional funding for banks, which is riskier from a liquidity perspective than funding raised through banks' deposit franchises. South African corporates and the public sector also make use of financial intermediaries that provide bulking and maturity transformation services for their cyclical cash surpluses. Liquidity risk is, therefore, structurally higher in South Africa than in most financial markets. The risk is, however, to some extent mitigated by the following market dynamics:

- the concentration of customer current accounts with large South African banks;
- the closed rand system, where rand transactions are cleared and settled through registered banks and clearing institutions domiciled in South Africa;
- the prudential exchange control framework; and
- South African banks' low dependence on foreign currency funding.

Considering the structural features of the South African market, the group's focus remains on achieving an improved risk-adjusted and diversified funding profile, enabling it to meet prudential liquidity requirements.

FRB remains the primary debt-issuing entity in the group. Although its funding profile reflects the structural features described earlier, it derives a greater proportion of total funding from customer deposits and therefore has a lower reliance on institutional funding compared to the South African banking industry aggregate. The group utilises both domestic and international debt programmes to maximise efficiency and flexibility in accessing institutional funding opportunities. The group's strategy for domestic vanilla public issuances is to offer benchmark tenor bonds to meet investor requirements and facilitate secondary market liquidity. This enables the group to identify cost-effective funding opportunities whilst maintaining an understanding of available market liquidity.

In addition to vanilla issuances, the group also seeks to issue thematic debt utilising its sustainability bond framework, which targets funding for identified green, social, and sustainability asset origination. This aligns to the group's shared prosperity purpose. Securitisation transactions are concluded periodically, which provides the group with access to alternative funders and a means to assess market clearing levels for typically illiquid assets.

Funds transfer pricing

The group operates a funds transfer pricing framework that incorporates the relevant base interest rates and the cost or benefit of liquidity into product pricing by currency, for all significant business activities on- and off-balance sheet. Where fixed-rate commitments are undertaken (fixed-rate loans or deposits), transfer pricing also includes the cost of immunising businesses against interest rate risk. Businesses are thus incentivised to:

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

Funding measurement and activity

The group manages its funding profile by source, counterparty type, market, product and currency. The deposit franchise remains the most efficient and stable source of funding, representing 74% of total group funding liabilities at June 2023 (2022: 75%).

Growing its deposit franchise across all market segments remains the group's primary focus from a funding perspective, with continued emphasis on savings and investment products. The group continues to develop and refine its product offering to attract a greater proportion of available deposits, with improved client pricing adjusted for source and behaviour. In addition to customer deposits, the group accesses the domestic money markets frequently and the debt capital markets from time to time. The group issues various capital and funding instruments in the capital markets on an auction and reverse-enquiry basis, with strong support from investors.

Refer to the group's *Analysis of financial results for the year ended 30 June 2023* booklet, which is available at https://www.firstrand.co.za/investors/integrated-reporting-hub/financial-reporting for an update on the group's funding portfolio.

Foreign currency balance sheet

Funding structure of operations

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

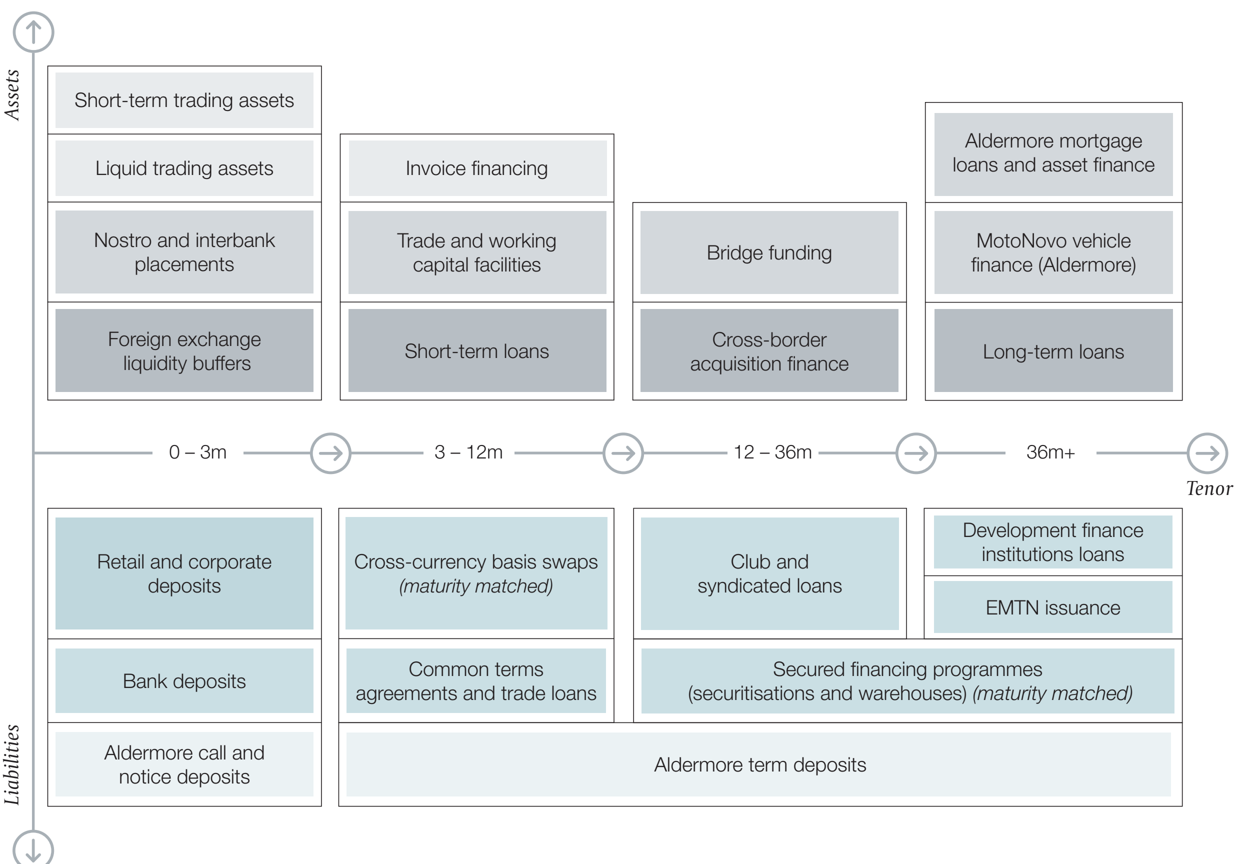
- **Mature deposit franchises:** All assets are largely funded in-country. The pricing of funding is determined via in-country funds transfer pricing frameworks.
- **Growing deposit franchises:** Assets are first funded in-country at relevant funds transfer pricing rates. Any excess funding requirement over and above in-country capacity is funded by the group's hard currency funding platforms. This is a temporary arrangement, which enables these entities to develop adequate in-country deposit bases.
- **No deposit franchises:** All activities are funded by the group's hard currency funding platforms in the professional market.

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

Group funding support

Any funding provided by the group is constrained by the appetite set independently by the credit risk management committee. In arriving at limits, the credit risk management committee considers the operating jurisdiction and any sovereign risk limits that should apply. Group Treasury must, therefore, ensure that any resources provided to foreign entities are priced appropriately at arm's length and do not exceed agreed credit limits.

GRAPHICAL REPRESENTATION OF THE FOREIGN CURRENCY BALANCE SHEET



Liquidity risk management

Overview

Liquidity risk is a consequential risk. The group, therefore, continually monitors and analyses the potential impact of other risks and events on its funding and liquidity position to ensure that the group's activities preserve and improve funding stability. This ensures that the group can operate through periods of stress when access to funding could be constrained.

Mitigation of funding and market 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

Daily liquidity risk	Structural liquidity risk	Contingency liquidity risk
Ensuring that intraday and day-to-day anticipated and unforeseen payment obligations are met by maintaining a sustainable balance between liquidity inflows and outflows.	Managing the risk that structural, long-term, on- and off- balance sheet exposures cannot be funded timeously or at reasonable cost.	Maintaining several contingent funding sources to draw upon in times of economic stress.
• Managing intraday liquidity positions. • Managing daily payment queues. • Monitoring net funding requirements. • Performing short-term cash flow projections for all currencies (individually and in aggregate). • Managing intragroup liquidity. • Managing central bank clearing. • Managing net daily cash positions. • Managing and maintaining market access. • Managing and maintaining collateral.	• Setting liquidity risk tolerance. • Setting liquidity strategy. • Ensuring diversification of funding sources. • Assessing the impact of future funding and liquidity needs considering anticipated liquidity shortfalls or excesses. • Setting the approach to liquidity management in different currencies and countries. • Ensuring compliance with prudential liquidity ratios. • Ensuring an appropriate structural liquidity gap. • Maintaining a funds transfer pricing methodology and process.	• Managing early warning and key risk indicators. • Performing stress testing, including sensitivity analysis and scenario testing. • Maintaining product behaviour and optionality assumptions. • Ensuring that an adequate and diversified portfolio of liquid assets with appropriate buffers is in place. • Maintaining the contingency funding plan.

Liquidity risk appetite

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 liquid asset buffers. These strategies are impacted by prudential requirements that include regulatory liquidity requirements LCR and NSFR, among others. These regulatory constraints and risk appetite levels are incorporated into the group's internal funds transfer pricing framework.

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 contractual, behavioural and stress survival periods. Survival periods are the minimum timeframes over which the cumulative cash inflows and liquidity buffers 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. 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.

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 high-quality liquid assets (HQLA) and contingency management processes.

The group's ability to meet its daily funding obligations and emergency liquidity needs is of paramount importance, and 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 designed 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-defined response mechanism to facilitate swift and effective responses to stress events necessitating access to contingent funding. 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 an externally facilitated liquidity stress simulation exercise to ensure the plan remains current, relevant and familiar to all key personnel within the group who have a role to play, should it ever experience an extreme liquidity stress event.

Liquidity risk position

The following table summarises the group's available sources of liquidity.

COMPOSITION OF GROUP HQLA*

	As at 30 June	
R billion	**2023**	2022
Cash and deposits with central banks	**99**	60
Short-term liquidity instruments	**114**	119
Long-term investment securities	**176**	128
Other liquid assets	**27**	34
Total liquid assets	**416**	341

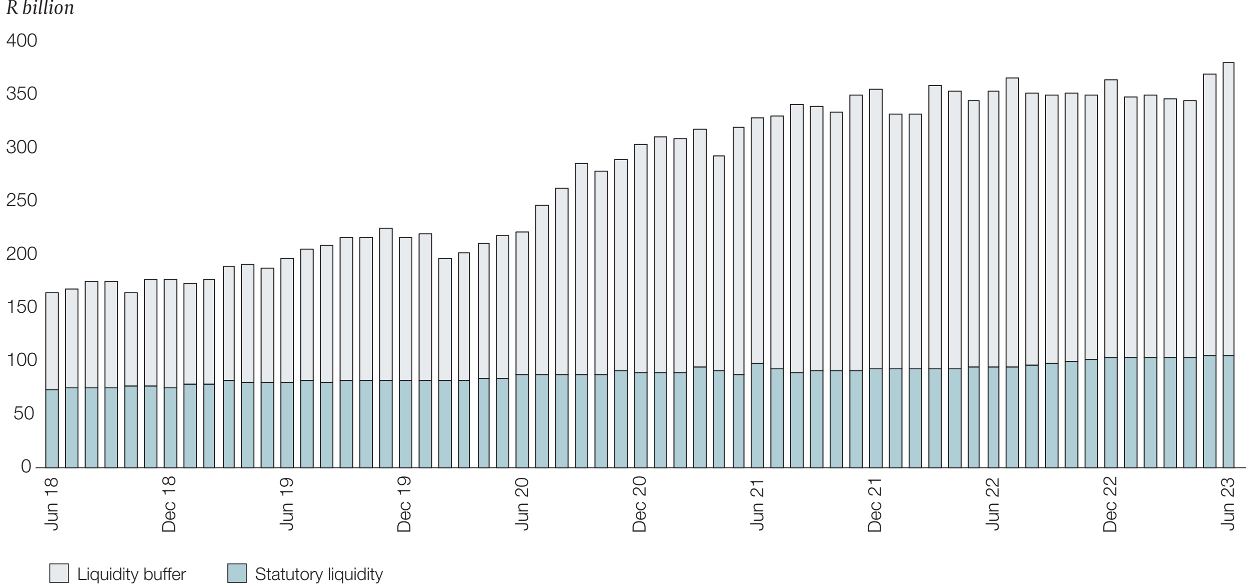
* *The composition of HQLA is calculated as a simple average of 91 days of daily observations over the period ended 30 June 2023 for FRBSA and the London branch, as well as FNB Botswana and FNB Namibia. The remaining banking entities, including Aldermore, and the India and FNB Channel Island branches, are based on quarter-end values.*

The group's portfolio of HQLA provides a liquidity buffer against unexpected liquidity stress events or market disruptions, and serves to facilitate the changing liquidity needs of the operating businesses. The composition and quantum of available liquid assets is defined behaviourally by considering both the funding liquidity-at-risk and the market liquidity depth of these instruments. Additional liquidity overlays in excess of prudential requirements are determined based on stress testing and scenario analysis of cash inflows and outflows.

The group has built its liquid asset holdings in accordance with asset growth, risk appetite and regulatory requirements. The HQLA portfolio is continually assessed and actively managed to ensure optimal composition, cost and quantum.

FRBSA assets held as a source of stress funding*

R billion



* *The assets held as a source of stress funding, observed at each month end, consist of highly liquid assets that can secure funding and form part of FRBSA's liquidity buffer and statutory liquidity portfolio.*

Liquidity ratios for the group and bank at June 2023 are summarised below.

	Group*		FRBSA*	
%	**LCR**	**NSFR**	**LCR**	**NSFR**
Regulatory minimum	**100**	**100**	**100**	**100**
Actual	**124**	**121**	**129**	**120**

* *The group's LCR and NSFR include FRB, and all other banking subsidiaries. The FRBSA LCR and NSFR reflect South African operations only. The group LCR is calculated as a simple average of 91 days of daily observations over the period ended 30 June 2023 for FRBSA, the London branch, FNB Botswana and FNB Namibia. The remaining banking entities, including Aldermore, and the India and FNB Channel Island branches, are based on quarter-end values. The FRBSA LCR is calculated as a simple average of 91 days of daily observations over the period ended 30 June 2023.*

Funding from institutional clients is a large contributor to the group's net cash outflows measured under the LCR. Other significant contributors to cash outflows are corporate funding and retail and commercial deposits. The group continues to execute on strategies to increase deposit franchise funding whilst selectively accessing institutional funding sources.

Refer to the *Standardised disclosures* section of this report for additional liquidity disclosures required in terms of the Regulations:

- LIQ1: LCR
- LIQ2: NSFR

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, securitisation risk and climate risk (physical and transitional risks).

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 is offered by WesBank and FNB to businesses that are mainly single-banked, and also includes structured and specialist finance in Aldermore; and
- corporate credit is offered by RMB and WesBank to large corporate and institutional multi-banked clients.

As advances are split across the operating businesses, default risk is allocated to the income generating portfolio.

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 the 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.

The objective 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 management objectives are twofold:

Risk control: Appropriate limits are placed on credit risk. There are also processes in place to ensure the accuracy of credit risk assessments and reports. Deployed and central credit risk management teams are responsible for risk control.

Management: Credit risk is taken within the constraints of the group's return and risk appetite, and credit risk appetite frameworks. 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.

Credit risk appetite

The group aims to manage credit in such a way that it can achieve its overall earnings growth target, 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 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 credit risk 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.

The group aims to manage its credit portfolio and outcomes:

- within a long-run through-the-cycle target impairment loss range reflecting portfolio credit quality;
- whilst ensuring that variability around the impairment loss target range resulting from economic cycles is kept to acceptable levels; and
- ensuring its credit concentrations and portfolio structure is managed within risk appetite in such a way that the group does not become an outlier relative to its peer group due to outsized downside volatility arising from event risks or amplification of macroeconomic downturns through high-volatility portfolio overconcentration.

Business unit-level credit risk appetite statements are reviewed and approved annually. Risk utilisation against limits is reported quarterly to and monitored by business unit credit or executive committees and the relevant portfolio credit policy and risk appetite approval committees (subcommittees of the group credit risk management committee). In the credit risk appetite process, ERM Group Credit Risk Management is responsible for:

- setting credit risk appetite framework requirements;
- articulating a top-down group credit risk appetite statement;
- assessing alignment between the top-down statement with the aggregation of individual business unit credit risk appetite statements;
- reporting risk appetite breaches to the FirstRand credit risk management committee jointly with the credit portfolio heads; and
- reporting prudential limit breaches to RCCC jointly with the operating business/segment CROs.

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.

Types of credit risk limits are outlined below.

Business unit limits	
Counterparty	Borrower's risk grades are mapped to the FirstRand rating scale.
Collateral	For secured loans, limits are based on collateral profiles, e.g. loan-to-value bands.
Capacity	Customer affordability measures.
Concentration	Limits for concentrations to, for example, customer segments or high-collateral risk.
Portfolio-level limits	
Additional limits for subportfolios subject to excessive credit loss volatility and elevated climate risk, e.g. thermal coal, and oil and gas (refer to the *Climate risk* section of this report).	

YEAR UNDER REVIEW AND FOCUS AREAS

Year under review	Risk management focus areas
• Explored opportunities related to renewable energy across customer segments. • Monitored and responded to the impact of the higher interest rate and inflation environment. • Enhanced monitoring of sovereign risk profiles and strengthened mitigation efforts where applicable. • Despite continued challenging economic conditions, the group benefited from prudent risk mitigation and proactive portfolio provisioning.	• Ongoing monitoring of the impact of the higher interest rate and inflation environment on credit outcomes, and ensuring origination criteria, provisions and collection capacity remain appropriately positioned. • Aldermore compliance with BCBS 239 requirements. • Leverage BCBS 239 capabilities to integrate credit risk aggregation, reporting and stress testing activities. • Preparing for the implementation of remaining Basel III reforms. • Extend credit risk aggregation capability to include climate risk-related metrics.

Credit risk reporting

Credit risk information reporting follows the credit governance structure illustrated on the next page. Segment (retail, commercial, wholesale (corporate) and Aldermore) credit performance, outlook and adherence to credit risk appetite are reported to the relevant segment portfolio committees. A consolidated group credit risk report is thereafter tabled by Group Credit Risk Management in ERM at the FirstRand credit risk management committee and RCCC.

Organisational structure and governance

CREDIT RISK GOVERNANCE STRUCTURE

Board-level oversight

Large exposures committee

Approves credit applications:

- in excess of 10% of the group's qualifying Tier 1 capital and reserves.

RCCC

Reviews reports on:

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

Credit risk management committee

- Oversees credit risk profile, adequacy of impairments and management across the group.
- Monitors implementation of the credit risk management framework.
- The credit risk management framework prescribes the governance structures, roles, responsibilities and lines of accountability for credit risk management.

Model risk and validation committee

Reviews and approves material changes to credit risk capital, credit rating, estimation and provision models.

Executive management oversight

Segment credit committees

Segment credit portfolio oversight, credit policy and risk appetite approval and approval of credit applications (corporate and SME corporate) per level of delegated mandate. Segment credit committees include representation from segment CEOs and business unit heads.

Management structures

Business credit risk functions

Portfolio heads (retail, commercial, wholesale (corporate) and Aldermore).

- Accountable to the group's governance forums.
- Ensure alignment with credit origination strategy and appetite.
- Implement and assess frameworks/policy compliance.
- Calculate volatility profile for aggregate portfolios.

ERM group credit risk management

- Provides an independent view of the group credit risk profile.
- Responsible for credit risk governance.
- Monitors implementation of credit risk-related frameworks across the group.
- Implements methodologies and capabilities. Facilitates credit risk appetite processes.

Segment credit technical committees

Approve and recommend credit risk models used across the credit value chain (e.g. underwriting, impairments and capital).

Group Internal Audit

- Assesses the adequacy and effectiveness of credit risk management controls.
- Identifies risk control shortcomings and recommends corrective actions.
- Verifies the appropriateness and use of credit rating systems, credit risk models and scorecards.

Credit assets

CREDIT ASSETS BY TYPE, SEGMENT AND PA APPROACH

	As at 30 June				
	2023				2022
		AIRB approach	Standardised approach		
R million	**Total**	**FRBSA**	**Regulated banking entities in broader Africa**	**Other subsidiaries and foreign branches**	Total
On-balance sheet exposures	**2 103 206**	**1 412 502**	**123 823**	**566 881**	1 828 915
Cash and short-term funds	**164 210**	**92 900**	**13 731**	**57 579**	131 925
– Money at call and short notice	**107 372**	**47 558**	**3 533**	**56 281**	77 773
– Balances with central banks	**56 838**	**45 342**	**10 198**	**1 298**	54 152
Gross advances*	**1 590 447**	**1 062 557**	**77 159**	**450 731**	1 382 058
Less: impairments**	**51 072**	**35 095**	**4 140**	**11 837**	47 734
Net advances	**1 539 375**	**1 027 462**	**73 019**	**438 894**	1 334 324
Debt investment securities (excluding non-recourse investments)#	**399 621**	**292 140**	**37 073**	**70 408**	362 666
Off-balance sheet exposures	**277 619**	**221 669**	**12 135**	**43 815**	252 973
Total contingencies†	**78 002**	**48 466**	**5 277**	**24 259**	73 237
– Guarantees	**63 894**	**35 066**	**4 569**	**24 259**	59 117
– Letters of credit	**14 108**	**13 400**	**708**	**–**	14 120
Irrevocable commitments	**193 026**	**166 612**	**6 858**	**19 556**	172 796
Credit derivatives	**6 591**	**6 591**	**–**	**–**	6 940
Total	**2 380 825**	**1 634 171**	**135 958**	**610 696**	2 081 888

* *The business split of gross advances is provided in the CR1: Credit quality of assets table.*
** *Impairments include expected credit losses on both on- and off-balance sheet exposures.*
# *Debt investment securities are net of allowances and impairments.*
† *Include acceptances.*

Credit quality of assets

The group has adopted IFRS 9, which uses an expected credit loss (ECL) model for the recognition of impairment losses. The ECL model considers the significant changes to asset credit risk and the expected loss that will arise in the event of default.

The group adopted the PD/LGD approach for the calculation of ECL for advances. ECL is based on an average of three macroeconomic scenarios incorporating a base scenario, upside scenario and downside scenario, weighted by the probability of occurrence. An additional stress scenario was introduced during the financial year ended 30 June 2021 given the event-driven uncertainty in the global and South African economy. The scenario was initially introduced to capture the uncertainty around the impact of the Covid-19 pandemic and subsequently to address risks brought about by the impact of Russia's invasion of Ukraine and inflation and interest rate forecasting risks. Since June 2022, the forecasting risk associated with inflation and interest rates have manifested in actual inflation and interest rate outcomes with provisions increasing as the impairment models incorporate these impacts, therefore, the application of this scenario is not required at 30 June 2023. The relevance of the scenarios are reviewed on an ongoing basis. Regression modelling techniques are used to determine which borrower and transaction characteristics are predictive of certain behaviours, based on relationships observed in historical data related to the group of accounts to which the model will be applied. This results in the production of models that are used to predict impairment parameters (PD, LGD and EAD) based on the predictive characteristics identified through the regression process.

Impairment of financial assets

The adequacy of impairments is assessed through an ongoing review of the quality of credit exposures in line with IFRS 9 requirements. Individual advances are classified into one of the following categories and an impairment allowance is recognised accordingly.

Credit risk has not increased significantly since initial recognition (stage 1)	Credit risk has increased significantly since initial recognition, but asset is not credit impaired (stage 2)	Asset has become credit impaired since initial recognition (stage 3)	Purchased or originated credit impaired
Twelve-month expected credit losses are recognised.	Lifetime expected credit losses (LECL) recognised.	LECL recognised.	Movement in LECL since initial recognition.

IMPAIRMENT CLASSIFICATION

Description	
Determination of whether the credit risk of financial instruments has increased significantly since initial recognition	In order to determine whether an advance has experienced a significant increase in credit risk, the PD of the asset calculated at the origination date is compared to that calculated at the reporting date. The origination date is defined as the most recent date at which the group has repriced an advance/facility. A change in terms results in derecognition of the original advance/facility and recognition of a new advance/facility. Significant increase in credit risk test thresholds are reassessed and, if necessary, updated on at least an annual basis. Any facility that is more than 30 days past due, or in the case of instalment-based products, one instalment past due, is automatically considered to have experienced a significant increase in credit risk. In addition to the quantitative assessment based on PDs, qualitative considerations are applied when determining whether individual exposures have experienced a significant increase in credit risk. One such qualitative consideration is the appearance of wholesale or commercial SME facilities on a credit watchlist. Any up-to-date facility that has undergone a distressed restructure (i.e. a modification of contractual cash flows to prevent a client from going into arrears) will be considered to have experienced a significant increase in credit risk and will be disclosed as stage 2 at a minimum. The credit risk on an exposure is no longer considered to be significantly higher than at origination if no qualitative indicators of a significant increase in credit risk are triggered, and if comparison of the reporting date PD to the origination date PD no longer indicates that a significant increase in credit risk has occurred. No minimum period for transition from stage 2 back to stage 1 is applied, with the exception of cured distressed restructured exposures that are required to remain in stage 2 for a minimum period of six months before re-entering stage 1, as per the requirements of Directive 7 of 2015.
Credit-impaired financial assets	Advances are considered credit impaired if they meet the definition of default. The group's definition of default applied for calculating provisions under IFRS 9 has been aligned to the definition applied for regulatory capital calculations across all portfolios, as well as those applied in operational management of credit and for internal risk management purposes. Exposures are considered to be in default when they are more than 90 days past due or, in the case of amortising products, have more than three unpaid instalments. In addition, an exposure is considered to have defaulted when there are qualitative indicators that the borrower is unlikely to pay their credit obligations in full without any recourse by the group to actions such as the realisation of security. Indicators of unlikeliness to pay are determined based on the requirements of Regulation 67 of the Banks Act. Examples include application for bankruptcy or obligor insolvency. Any distressed restructures of accounts which have experienced a significant increase in credit risk since initial recognition are defined as default events. Retail accounts are considered to no longer be in default if they meet the stringent cure definition, which has been determined at portfolio level based on analysis of re-defaulted rates. Curing from default within wholesale is determined judgmentally through a committee process.
Purchased or originated credit impaired	Financial assets that meet the above-mentioned definition of credit-impaired at initial recognition.

IMPAIRMENT ASSESSMENT

Impairment classification	Description
Significant increase in credit risk since initial recognition	Quantitative and qualitative factors are considered when determining whether there has been a significant increase in credit risk. **Quantitative test:** The PDs used to perform the test for a significant increase in credit risk are calculated by applying the PD model in force as at the reporting date. This model is retro-applied using data as at the origination date to determine origination date PDs. **Qualitative test:** Furthermore, a qualitative assessment is performed in order to assess if additional exposures should be migrated from stage 1 to stage 2. This assessment would consider, at a minimum, forward-looking information not taken into account in the quantitative assessment. Origination date PDs are measured at initial recognition of an instrument, unless there has been a subsequent risk-based repricing, or a change in terms has taken place which requires the derecognition of the initial advance and recognition of a new advance. Where the models used to determine PDs cannot discriminate good credit risks from bad credit risks effectively at initial recognition due to a lack of behavioural information, proxy origination dates of up to six months post initial recognition are applied. Where proxy origination dates are applied, early qualitative indicators of significant increases in credit risk, such as fraudulent account activity or partial arrears, are applied to trigger movement into stage 2. Reporting date PDs are calculated on a forward-looking basis, with PDs adjusted where appropriate to incorporate the impacts of multiple forward-looking macroeconomic scenarios.
Credit-impaired financial assets	Exposures are classified as stage 3 if there are qualitative indicators that the obligor is unlikely to pay his/her/its credit obligations in full without any recourse by the group to action, such as the realisation of security. Distressed restructures of accounts in stage 2 are also considered to be default events. For a retail account to cure from stage 3 to either stage 2 or stage 1, the account needs to meet a stringent cure definition. Cure definitions are determined on a portfolio level with reference to suitable analysis and are set such that the probability of a previously cured account re-defaulting is equivalent to the probability of default for an account that has not defaulted in the past. In most retail portfolios curing is set at 12 consecutive payments. For wholesale exposures, cures are assessed on a case-by-case basis, subsequent to an analysis by the relevant debt restructuring credit committee. A default event is a separate default event only if an account has met the portfolio-specific cure definition prior to the second or subsequent default. Default events that are not separate are treated as a single default event when developing LGD models and the associated term structures.

PD, EAD and LGD estimates that are derived from regulatory capital models are used in models to determine stage 1 estimates. The outputs from the regulatory capital models are used as inputs into term structure models used for stage 2 and 3 ECL calculations.

For credit risk measurement requirements FirstRand employs the AIRB approach for FRBSA and the standardised approach for the remaining group entities. The following table, *CR1: Credit quality of assets*, provides a breakdown of defaulted exposures, non-defaulted exposures and impairment allowances split between the standardised approach specific and general accounting provisions, and AIRB accounting provisions. Under the IFRS 9 ECL model, these provisions represent the impairments outlined in the following table.

Regulatory classification – Standardised and AIRB approaches	ECL impairment classification (IFRS 9)
General provision	Stage 1 and 2 impairments – performing book
Specific provision	Stage 3 impairments – non-performing book

Use of an ECL model results in earlier recognition of impairments, which generally leads to an increase in provisions held against the performing book. The approach applied under IFRS 9 for the calculation of specific provisions does not result in significant changes in coverage held for defaulted accounts.

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

CR1: CREDIT QUALITY OF ASSETS

		As at 30 June 2023						
		Gross carrying values of			Of which ECL accounting provisions for credit losses on standardised approach exposures#			
R million		(a) Defaulted exposures*	(b) Non-defaulted exposures**	(c) Allowances/ impairments	Allocated in regulatory category of specific	Allocated in regulatory category of general	Of which ECL accounting provisions for credit losses on AIRB exposures	(a+b-c) Net value
1.	**Gross advances**	**57 432**	**1 533 015**	**51 072**	**5 649**	**8 463**	**36 960**	**1 539 375**
	FNB	**34 884**	**494 244**	**28 389**	**2 899**	**2 581**	**22 909**	**500 739**
	– Retail	**26 601**	**327 661**	**19 660**	**792**	**692**	**18 176**	**334 602**
	– Commercial	**4 773**	**111 675**	**5 003**	**93**	**177**	**4 733**	**111 445**
	– Broader Africa	**3 510**	**54 908**	**3 726**	**2 014**	**1 712**	**–**	**54 692**
	WesBank	**7 235**	**155 756**	**6 595**	**–**	**–**	**6 595**	**156 396**
	RMB investment banking	**3 889**	**409 045**	**5 361**	**–**	**–**	**5 361**	**407 573**
	RMB corporate banking	**1 282**	**70 433**	**1 519**	**–**	**–**	**1 519**	**70 196**
	Aldermore	**9 222**	**361 928**	**7 831**	**2 560**	**5 271**	**–**	**363 319**
	Centre (including Group Treasury)	**920**	**41 609**	**1 377**	**190**	**611**	**576**	**41 152**
2.	**Debt investment securities†**	**–**	**400 401**	**780**	**–**	**–**	**780**	**399 621**
3.	**Off-balance sheet exposures**	**210**	**277 408**	**–**	**–**	**–**	**–**	**277 618**
4.	**Total**	**57 642**	**2 210 824**	**51 852**	**5 649**	**8 463**	**37 740**	**2 216 614**

* *Defaulted exposure is stage 3/NPLs.*
** *Non-defaulted exposure is the sum of stage 1 and stage 2 gross advances.*
# *ECL = expected credit loss.*
† *Exclude non-recourse investments.*

CR1: CREDIT QUALITY OF ASSETS *continued*

		As at 30 June 2022						
		Gross carrying values of			Of which ECL accounting provisions for credit losses on standardised approach exposures[#]			
R million		(a) Defaulted exposures*	(b) Non-defaulted exposures**	(c) Allowances/ impairments	Allocated in regulatory category of specific	Allocated in regulatory category of general	Of which ECL accounting provisions for credit losses on AIRB exposures	(a+b-c) Net value
1.	**Gross advances**	50 886	1 331 172	47 734	5 069	5 563	37 102	1 334 324
	FNB	31 665	459 172	27 816	2 783	2 379	22 654	463 021
	– Retail	23 720	306 388	18 982	739	634	17 608	311 126
	– Commercial	4 627	103 196	5 292	128	118	5 046	102 531
	– Broader Africa	3 318	49 588	3 542	1 916	1 627	–	49 364
	WesBank	7 106	137 376	6 237	1	4	6 232	138 245
	RMB investment banking	2 757	326 115	5 828	–	–	5 828	323 044
	RMB corporate banking	1 430	64 835	1 550	–	–	1 550	64 715
	Aldermore	7 002	291 566	4 676	2 026	2 650	–	293 892
	Centre (including Group Treasury)	926	52 108	1 627	259	530	838	51 407
2.	**Debt investment securities[†]**	–	362 980	314	–	–	314	362 666
3.	**Off-balance sheet exposures**	435	252 538	–	–	–	–	252 973
4.	**Total**	51 321	1 946 690	48 048	5 069	5 563	37 416	1 949 963

* *Defaulted exposure is stage 3/NPLs.*
** *Non-defaulted exposure is the sum of stage 1 and stage 2 gross advances.*
[#] *ECL = expected credit loss.*
[†] *Exclude non-recourse investments.*

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

R million		**Total**
1.	**Defaulted credit exposures at 30 June 2022**	**51 322**
2.	Advances defaulted	**28 787**
3.	Return to non-defaulted status	**(6 385)**
4.	Amounts written off	**(13 160)**
5.	Payment received	**(5 558)**
6.	Other changes	**2 636**
7.	**Defaulted credit exposures at 30 June 2023**	**57 642**

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 dates are determined. The level of risk on these types of products is assessed and reported with reference to the counterparty ratings of exposures.

The following tables provide the age analysis of the group's loans and advances, debt securities and off-balance sheet items. In these tables, defaulted exposures represent stage 3/NPLs. Non-defaulted exposures are the sum of stage 1 and stage 2 gross advances, and allowances/impairments are total balance sheet provisions.

AGE ANALYSIS OF CREDIT EXPOSURES

	As at 30 June 2023			
	Gross carrying values of			
R million	**Defaulted exposures**	**Non-defaulted exposures**	**Allowances/ impairments**	**Net value**
FNB	**34 884**	**494 244**	**28 389**	**500 739**
– Retail	**26 601**	**327 661**	**19 660**	**334 602**
– Commercial*	**4 773**	**111 675**	**5 003**	**111 445**
– Broader Africa	**3 510**	**54 908**	**3 726**	**54 692**
WesBank	**7 235**	**155 756**	**6 595**	**156 396**
RMB investment banking	**3 889**	**409 045**	**5 361**	**407 573**
RMB corporate banking	**1 282**	**70 433**	**1 519**	**70 196**
Aldermore	**9 222**	**361 928**	**7 831**	**363 319**
Centre (including Group Treasury)	**920**	**41 609**	**1 377**	**41 152**
Total	**57 432**	**1 533 015**	**51 072**	**1 539 375**
Percentage of total book (%)	**3.6**	**96.4**		**100.0**

	As at 30 June 2022			
	Gross carrying values of			
R million	Defaulted exposures	Non-defaulted exposures	Allowances/ impairments	Net value
FNB	31 665	459 172	27 816	463 021
– Retail	23 720	306 388	18 982	311 126
– Commercial*	4 627	103 196	5 292	102 531
– Broader Africa	3 318	49 588	3 542	49 364
WesBank	7 106	137 376	6 237	138 245
RMB investment banking	2 757	326 115	5 828	323 044
RMB corporate banking	1 430	64 835	1 550	64 715
Aldermore	7 002	291 566	4 676	293 892
Centre (including Group Treasury)	926	52 108	1 627	51 407
Total	50 886	1 331 172	47 734	1 334 324
Percentage of total book (%)	3.7	96.3		100.0

* *Includes public sector.*

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.

Refer to the group's *Analysis of financial results for the year ended 30 June 2023*, available on the group's website at https://www.firstrand.co.za/investors/integrated-reporting-hub/financial-reporting/, for NPL and impairment history graphs and a description of normalised credit performance.

Sector and geographical analysis of defaulted advances

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

SECTOR ANALYSIS OF DEFAULTED ADVANCES*

	As at 30 June 2023			
R million	**Defaulted advances before write-offs**	**Less: write-offs excluding interest in suspense**	**Defaulted advances net of write-offs**	**Specific impairments**
Agriculture	**2 765**	**187**	**2 578**	**1 346**
Financial institutions	**396**	**107**	**289**	**212**
Building and property development	**2 360**	**659**	**1 701**	**836**
Government, Land Bank and public authorities	**2 184**	**34**	**2 150**	**279**
Individuals	**52 000**	**10 105**	**41 895**	**18 622**
Manufacturing and commerce	**5 493**	**902**	**4 591**	**2 687**
Mining	**192**	**34**	**158**	**114**
Transport and communication	**1 135**	**140**	**995**	**385**
Other services	**4 067**	**992**	**3 075**	**1 556**
Total	**70 592**	**13 160**	**57 432**	**26 037**

	As at 30 June 2022			
R million	Defaulted advances before write-offs	Less: write-offs excluding interest in suspense	Defaulted advances net of write-offs	Specific impairments
Agriculture	2 827	354	2 473	1 306
Financial institutions	498	160	338	252
Building and property development	1 864	434	1 430	823
Government, Land Bank and public authorities	207	16	191	115
Individuals	49 347	12 135	37 212	17 067
Manufacturing and commerce	5 108	755	4 353	3 046
Mining	131	28	103	78
Transport and communication	1 166	286	880	394
Other services	4 908	1 002	3 906	2 241
Total	66 056	15 170	50 886	25 322

* *There were no defaulted advances in the banks sector.*

GEOGRAPHIC ANALYSIS OF DEFAULTED ADVANCES

	As at 30 June 2023			
R million	**Defaulted advances before write-offs**	**Less: write-offs excluding interest in suspense**	**Defaulted advances net of write-offs**	**Specific impairments**
South Africa	**53 221**	**11 767**	**41 454**	**19 569**
Broader Africa	**6 495**	**782**	**5 713**	**2 312**
UK	**10 757**	**608**	**10 149**	**4 056**
Other Europe	**12**	**2**	**10**	**3**
Asia, Americas and Australia	**107**	**1**	**106**	**97**
Total	**70 592**	**13 160**	**57 432**	**26 037**

	As at 30 June 2022			
R million	Defaulted advances before write-offs	Less: write-offs excluding interest in suspense	Defaulted advances net of write-offs	Specific impairments
South Africa	53 078	13 662	39 416	20 244
Broader Africa	4 395	948	3 447	2 030
UK	8 397	467	7 930	2 959
Other Europe	8	3	5	3
Asia, Americas and Australia*	178	90	88	86
Total	66 056	15 170	50 886	25 322

* *Restated. North and South America, Australia and Asia were previously disclosed separately.*

Restructured exposures

A restructure is defined as any formal agreement between a 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. a 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 preceding six months; or
- from an up-to-date position, in order to prevent the customer from going into arrears.

This section describes restructures and distressed restructures that are concluded in the normal course of business.

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 the group's South African retail operations. 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					
	2023			2022		
R million	**Impaired**	**Not impaired**	**Total**	Impaired	Not impaired	Total
Advances	**8 262**	**15 766**	**24 028**	7 259	13 266	20 525
Off-balance sheet exposures	**–**	**–**	**–**	–	–	–
Total	**8 262**	**15 766**	**24 028**	7 259	13 266	20 525

* *There were no restructured debt investment securities (excluding non-recourse investments and equities).*

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 and portfolio risks, and to act on any early warning indicators. The performance and financial condition of borrowers are monitored based on information from internal sources, credit bureaux and borrowers, as well as publicly available information. The frequency of monitoring and contact with the borrower is determined by 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, maturity or climate risk (physical and transitional risks). This concentration typically exists when several 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. This is achieved by setting maximum exposure guidelines to manage this risk, e.g. individual counterparty, country or sector level. The group continually reviews its concentration levels and maximum exposure guidelines.

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 splits 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			
	2023		2022	
R million	**Gross advances and debt investment securities***	**Significant off-balance sheet exposures**	Gross advances and debt investment securities*	Significant off-balance sheet exposures
South Africa	**1 290 700**	**189 767**	1 150 947	181 471
Broader Africa	**174 204**	**21 561**	139 463	23 450
UK	**421 124**	**41 852**	354 616	37 769
Other Europe	**36 535**	**13 227**	49 714	5 302
Asia, Americas and Australia**	**68 285**	**11 212**	50 298	4 981
Total	**1 990 848**	**277 619**	1 745 038	252 973

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

** *Restated. North and South America, Australia and Asia were previously disclosed separately.*

BREAKDOWN OF EXPOSURES ACROSS INDUSTRIES

	As at 30 June			
	2023		2022	
R million	**Gross advances and debt investment securities***	**Significant off-balance sheet exposures**	Gross advances and debt investment securities*	Significant off-balance sheet exposures
Agriculture	**59 098**	**4 192**	52 136	3 094
Banks and financial services	**300 184**	**77 963**	269 230	62 305
Building and property development	**93 644**	**6 902**	80 606	3 615
Government, Land Bank and public authorities	**371 418**	**7 954**	328 487	5 736
Individuals	**727 059**	**65 669**	655 793	62 528
Manufacturing and commerce	**199 934**	**48 397**	164 707	43 281
Mining	**14 402**	**24 072**	8 094	28 350
Transport and communication	**51 471**	**20 359**	40 661	14 296
Other services	**173 638**	**22 111**	145 324	29 768
Total	**1 990 848**	**277 619**	1 745 038	252 973

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

BREAKDOWN OF EXPOSURES BY RESIDUAL MATURITY

	As at 30 June			
	2023		2022	
R million	**Gross advances and debt investment securities***	**Significant off-balance sheet exposures**	Gross advances and debt investment securities*	Significant off-balance sheet exposures
Less than one year (including call)	**673 115**	**249 157**	638 255	224 517
Between one year and five years	**706 601**	**4 036**	597 670	26 944
Over five years	**549 060**	**24 426**	456 507	1 512
Non-contractual amounts	**62 072**	**–**	52 606	–
Total	**1 990 848**	**277 619**	1 745 038	252 973

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

Credit risk mitigation

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

CR3: CREDIT RISK MITIGATION TECHNIQUES

	As at 30 June 2023				
	Exposures*				
		Secured by collateral		**Secured by financial guarantees**	
R million	**Unsecured carrying value**	**Carrying value**	**Secured amount**	**Carrying value**	**Secured amount**
Advances	**235 715**	**1 303 660**	**1 303 660**	**14 911**	**14 911**
Debt securities	**78 666**	**320 955**	**320 955**	**–**	**–**
Total advances and debt securities	**314 381**	**1 624 615**	**1 624 615**	**14 911**	**14 911**
Of which defaulted	**4 131**	**27 263**	**27 263**	**–**	**–**

	As at 30 June 2022				
	Exposures*				
		Secured by collateral		Secured by financial guarantees	
R million	Unsecured carrying value	Carrying value	Secured amount	Carrying value	Secured amount
Advances	212 190	1 122 134	1 122 134	12 038	12 038
Debt securities	61 354	301 312	301 312	–	–
Total advances and debt securities	273 544	1 423 446	1 423 446	12 038	12 038
Of which defaulted	3 800	21 765	21 765	–	–

* *No exposures were secured by credit derivatives.*

Credit risk under the standardised approach

For regulatory capital purposes, the group predominantly uses the AIRB approach for FRBSA exposures, and the standardised approach for the group's other legal entities, the bank's foreign 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, S&P Global Ratings (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 internal rating grades and S&P grades (refer to the *Mapping of FirstRand grades to rating agency scales* section on page 67).

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

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

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. There are no exposures to multilateral development banks, secured by commercial real estate, equity, past due advances, higher-risk categories and other asset categories. Rows 3 and 10 – 13 were therefore excluded from this table.

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

		As at 30 June 2023					
		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**	**RWA density %**
	Asset classes						
1.	Sovereigns and their central banks	**126 197**	**44**	**123 958**	**10**	**41 888**	**33.79**
2.	Non-central government public sector entities	**5 860**	**2 471**	**4 862**	**272**	**2 568**	**50.02**
3.	Multilateral development banks	**–**	**–**	**–**	**–**	**–**	**–**
4.	Banks	**37 398**	**15**	**32 666**	**328**	**9 834**	**29.81**
5.	Securities firms	**1 398**	**–**	**1 398**	**–**	**1 398**	**100.00**
6.	Corporates	**93 282**	**55 563**	**100 895**	**7 731**	**106 575**	**98.11**
7.	Regulatory retail portfolios	**175 942**	**13 682**	**175 928**	**4 528**	**135 719**	**75.21**
8.	Secured by residential property	**208 651**	**7 342**	**208 652**	**2 167**	**75 528**	**35.83**
9.	Secured by commercial real estate	**28 692**	**4 252**	**28 692**	**1 461**	**30 153**	**100.00**
14.	**Total**	**677 420**	**83 369**	**677 051**	**16 497**	**403 663**	**58.20**

		As at 30 June 2022					
		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	RWA density %
	Asset classes						
1.	Sovereigns and their central banks	105 485	2 025	101 533	997	45 549	44.43
2.	Non-central government public sector entities	3 762	1 493	2 684	207	1 445	49.98
4.	Banks	29 720	82	26 622	309	9 273	34.43
5.	Securities firms	1 364	43	1 364	21	693	50.04
6.	Corporates	66 746	48 266	70 640	25 616	73 741	76.61
7.	Regulatory retail portfolios	135 138	14 038	134 964	2 820	102 231	74.20
8.	Secured by residential property	170 631	9 667	170 639	2 417	62 138	35.91
9.	Secured by commercial real estate	25 986	5 258	25 986	1 386	27 372	100.00
14.	**Total**	538 832	80 872	534 432	33 773	322 442	56.75

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. There are no exposures to multilateral development banks secured by commercial real estate, equity, past due advances, higher-risk categories or other asset categories. Rows 3 and 10 – 13 were therefore excluded from this table.

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

		As at 30 June 2023									
		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	**83 980**	**–**	**–**	**–**	**9 053**	**–**	**18 082**	**12 853**	**–**	**123 968**
2.	Non-central government public sector entities	**–**	**–**	**–**	**–**	**5 133**	**–**	**1**	**–**	**–**	**5 134**
3.	Multilateral development banks	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**
4.	Banks	**3 721**	**13 245**	**9 403**	**–**	**3 203**	**–**	**3 229**	**193**	**–**	**32 994**
5.	Securities firms	**–**	**–**	**–**	**–**	**1 398**	**–**	**–**	**–**	**–**	**1 398**
6.	Corporates	**–**	**–**	**6 886**	**3 214**	**8 794**	**6 966**	**74 928**	**7 838**	**–**	**108 626**
7.	Regulatory retail portfolios	**1 203**	**–**	**–**	**417**	**1 221**	**169 030**	**1 869**	**6 716**	**–**	**180 456**
8.	Secured by residential property	**–**	**–**	**–**	**208 264**	**–**	**2 373**	**182**	**–**	**–**	**210 819**
9.	Secured by commercial real estate	**–**	**–**	**–**	**–**	**–**	**–**	**30 153**	**–**	**–**	**30 153**
14.	**Total**	**88 904**	**13 245**	**16 289**	**211 895**	**28 802**	**178 369**	**128 444**	**27 600**	**–**	**693 548**

		As at 30 June 2022									
		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	60 825	–	–	–	7 418	–	19 181	15 106	–	102 530
2.	Non-central government public sector entities	–	–	–	–	2 891	–	–	–	–	2 891
4.	Banks	–	1 646	19 792	–	1 945	–	2 638	910	–	26 931
5.	Securities firms	–	–	–	–	1 385	–	–	–	–	1 385
6.	Corporates	1 611	–	4 794	2 554	6 019	5 008	71 243	5 027	–	96 256
7.	Regulatory retail portfolios	1 132	–	–	335	–	132 585	3 351	381	–	137 784
8.	Secured by residential property	–	–	–	171 264	–	1 683	109	–	–	173 056
9.	Secured by commercial real estate	–	–	–	–	–	–	27 372	–	–	27 372
14.	**Total**	63 568	1 646	24 586	174 153	19 658	139 276	123 894	21 424	–	568 205

Credit risk under the AIRB approach

The use of quantitative models is crucial to the successful management of credit risk. Models are used across the credit value chain in decision-making and in credit risk measurement and reporting.

Technical requirements for the development of credit risk models are captured in model-type specific development frameworks. 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 AIRB approach requirements and the group's model building frameworks.

Credit risk approaches employed across the group are shown below.

Basel approach	**FRBSA**	**Remaining group entities**
AIRB approach	✓	
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 approach**	**Standardised approach**
Retail	**58**	**42**
Commercial	**60**	**40**
Corporate	**76**	**24**

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;
- exposure at default; and
- loss given default.

Management of the credit portfolio is reliant on these three credit risk measures. PD, EAD and LGD are inputs in 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 and are inputs in economic and regulatory capital calculations. • Point-in-time PD measures that reflect default expectations based on the incorporation of forward-looking information and thus tend to be more cyclical than through-the-cycle PD estimates. These PDs are used in credit portfolio management, setting 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 rating scales.

MAPPING OF FIRSTRAND GRADES TO RATING AGENCY SCALES

FirstRand 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+, CCC
100	100%	D (defaulted)

- 1 represents the lowest PD and 100 the highest in the FirstRand rating scale.
- External ratings have also been mapped to the master rating scale for reporting purposes.

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

Loss given default	
Definition	The economic loss on a particular facility upon default of the counterparty is expressed as a percentage of exposure outstanding at the time of default.
Dependent on	• Type, quality and level of subordination. • Value of collateral held compared to the size of overall exposure. • Effectiveness of the recovery process and timing of cash flows received during the work-out 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	
Definition	The product of the primary risk measures PD, EAD and LGD, and is a forward-looking measure of portfolio or transaction risk.
Application	It is used for a variety of purposes along with other risk measures.
Distinctions	Expected loss (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 and 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.

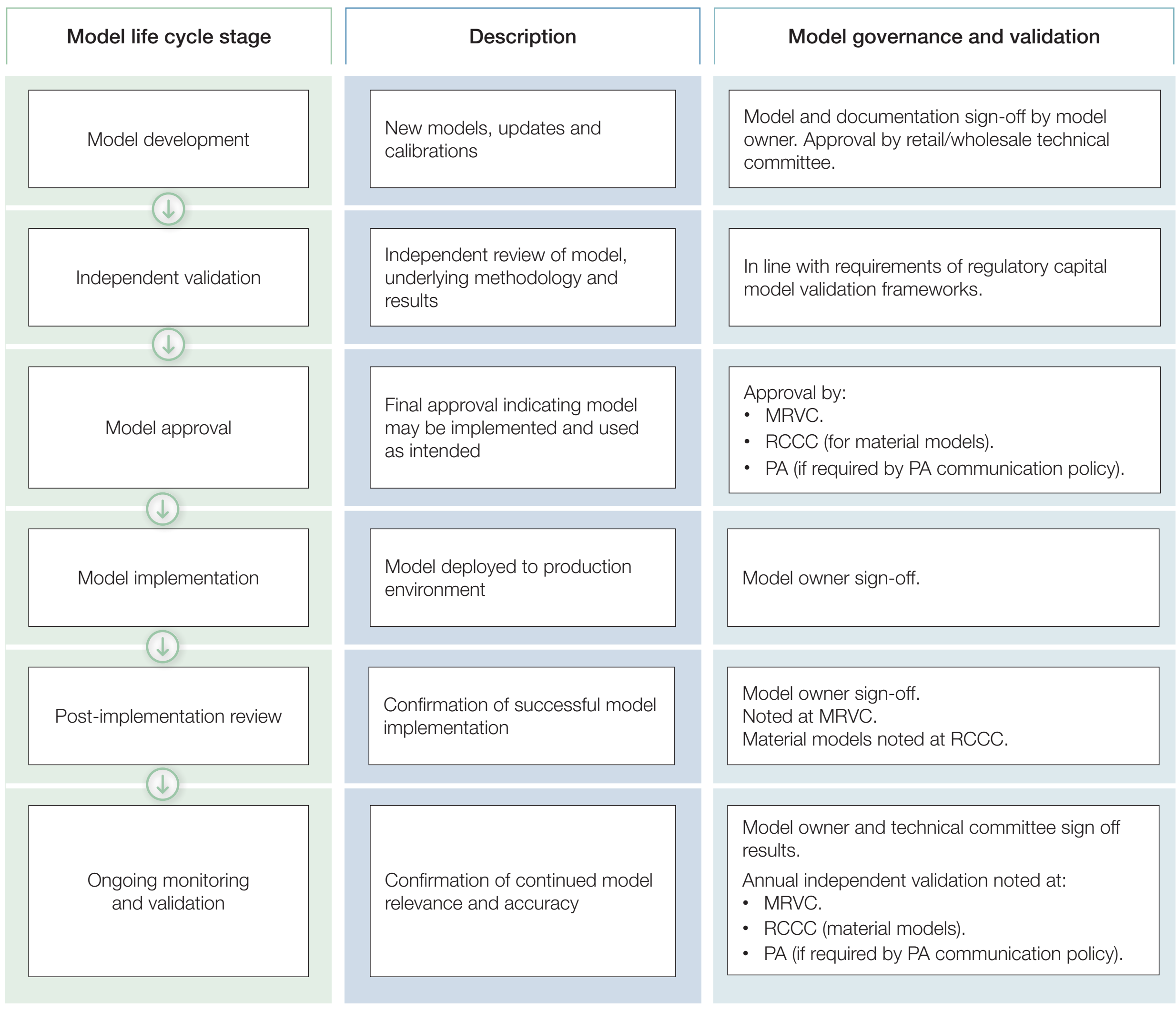
Roles and responsibilities related to the model risk management process, as well as model governance and validation requirements, are defined in this framework with reference to the stages of the credit risk model life cycle. Governance and validation requirements for new model developments also apply 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 to 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** – Performs 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 developer.
- **Model approver** – Responsible for the final approval of the model for its intended use. Model approval is the responsibility of RCCC or its designated subcommittee, and final model approval 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



Model 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. • RCCC (for material models). • PA (if required by PA communication policy).
Model implementation	Model deployed to 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 RCCC.
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. • RCCC (material models). • 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. Retail portfolio models are developed using methodologies described in the retail AIRB model development and validation framework. Corporate models are developed using statistical, expert judgement and hybrid and simulation approaches, with the approach selected according to the characteristics of the exposures modelled.

Parameter floors are applied to the model 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 of the exposure depends on the type of collateral (if any) assigned to the underlying exposure. In 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. For 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. Results are 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.	9	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 is 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 appropriately. 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.	9	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 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, WesBank) Exposures to SME corporate and retail clients. Products include loan facilities, contingent products and term lending products.	12	PD	• **SME commercial** – 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 sub pools through an automated scoring process using statistical models that incorporate product type, customer behaviour and delinquency status. PDs are estimated for each sub-pool based on internal product level history associated with the respective homogeneous pools and sub-pools.
		LGD	• **SME commercial** – 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 commercial** – 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.	3	PD	• Portfolios/products are segmented into homogeneous pools and sub-pools 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 sub-pool based on internal product level history associated with the respective homogeneous pools and sub-pools.
		LGD	• LGD estimates are based on subsegmentation with reference to collateral or product type, time in default and post-default payment behaviour. Final estimates are based on associated analyses and modelling of historical internal loss data.
		EAD	• EAD estimates are based on subsegmentation with reference to product-level analyses and modelling of historical internal exposure data.
Qualifying revolving retail exposures (FNB retail) Exposures to individuals providing a revolving limit through credit card or overdraft facility.	6	PD	• Portfolios/products are segmented into homogeneous pools and sub-pools 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 sub-pool based on internal product level history associated with the respective homogeneous pools and sub-pools.
		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 (Personal loans and vehicle asset finance (VAF))	15	PD	• Portfolios/products are segmented into homogeneous pools and sub-pools 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 sub-pool based on internal product-level history associated with the respective homogeneous pools and sub-pools.
		LGD	• LGD estimates are based on subsegmentation with reference to collateral (in the case of 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.

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. • Credit 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 FirstRand 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	• Macroeconomic models, PD, EAD and LGD used for stage 1, stage 2 and stage 3 ECL. • Judgemental assessment to determine adequacy of impairments.	• Macroeconomic models, PD, EAD and LGD used for stage 1, stage 2 and stage 3 ECL.
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 RCCC.	• Portfolio reports discussed at business and business unit risk committee meetings. • Quarterly portfolio reports submitted to credit risk management and RCCC.

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

- regulatory supplied CCF are used;
- CRM measures applied are described on page 22;
- 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 – FRBSA CREDIT RISK EXPOSURES BY PORTFOLIO AND PD RANGE

	Total FRBSA					
	As at 30 June 2023					
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	86 371	40 048	43.04	112 860	0.07	90 920
0.15 to <0.25	77 607	54 964	54.08	109 911	0.20	95 778
0.25 to <0.50	415 055	93 123	55.67	462 836	0.44	329 530
0.50 to <0.75	114 274	39 876	60.73	134 402	0.65	291 009
0.75 to <2.50	282 548	73 922	65.13	328 282	1.54	1 262 683
2.50 to <10	152 894	25 625	64.91	170 745	4.56	1 625 089
10 to <100	46 733	3 125	66.32	49 290	26.41	2 019 645
100 (default)	42 396	123	26.60	42 630	100.00	535 097
Total	**1 217 877**	**330 806**	**57.41**	**1 410 956**	**5.08**	**6 249 751**

	Total FRBSA					
	As at 30 June 2023					
PD scale	Average LGD (%)	Average maturity (years)	RWA* (R million)	RWA density (%)	Expected loss (R million)	Provisions (R million)
0.00 to <0.15	19.84	0.29	5 130	4.55	16	
0.15 to <0.25	26.29	1.55	22 591	20.55	58	
0.25 to <0.50	15.26	2.19	87 739	18.52	293	
0.50 to <0.75	25.01	2.20	45 103	33.56	218	
0.75 to <2.50	28.65	1.94	147 154	44.83	1 479	
2.50 to <10	42.98	2.16	133 147	77.98	3 558	
10 to <100	37.07	2.54	58 316	118.31	4 713	
100 (default)	45.62	2.42	30 125	70.67	18 953	
Total	**25.56**	**1.95**	**527 305**	**37.37**	**29 288**	**33 002**

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

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

	Total FRBSA					
	As at 30 June 2022					
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	78 104	18 465	38.35	82 292	0.06	127 425
0.15 to <0.25	49 937	53 713	52.31	81 209	0.20	110 140
0.25 to <0.50	325 979	83 744	55.61	355 210	0.44	367 810
0.50 to <0.75	102 586	33 436	58.65	119 671	0.65	296 128
0.75 to <2.50	313 791	84 983	66.10	368 934	1.51	1 453 326
2.50 to <10	151 821	25 306	64.83	166 687	4.48	3 109 917
10 to <100	36 622	3 878	58.42	39 105	24.86	1 959 557
100 (default)	37 105	184	1.63	37 164	100.00	784 485
Total	1 095 945	303 709	58.02	1 250 272	5.00	8 208 788

	Total FRBSA					
	As at 30 June 2022					
PD scale	Average LGD (%)	Average maturity (years)	RWA* (R million)	RWA density (%)	Expected loss (R million)	Provisions (R million)
0.00 to <0.15	22.17	0.36	3 746	4.55	12	
0.15 to <0.25	29.38	1.42	17 983	22.14	47	
0.25 to <0.50	16.01	2.01	66 711	18.78	237	
0.50 to <0.75	24.37	2.27	37 327	31.19	187	
0.75 to <2.50	26.76	2.11	163 292	44.26	1 533	
2.50 to <10	39.70	1.98	126 824	76.09	3 148	
10 to <100	39.44	2.59	47 743	122.09	3 879	
100 (default)	48.94	2.55	26 421	71.09	18 205	
Total	26.13	1.95	490 047	39.20	27 248	31 801

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

The CR6: Credit risk exposure and PD range by asset class portfolio tables are presented in more detail, as part of the standardised disclosures on page 201.

Effect on RWA of credit derivatives used as credit risk mitigation

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 derivative 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 and, consequently, the RWA amounts are the same as the pre-RWA amounts tabled below. There were no exposures in the equity and purchased receivables portfolios in the year under review. Rows 14 and 16 were therefore excluded from this table.

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

		Pre-credit derivatives RWA	
	R million	**As at 30 June 2023**	As at 30 June 2022
2.	Sovereign	**33 504**	29 156
4.	Banks and securities firms	**12 492**	14 689
6.	Corporate	**129 737**	110 994
8.	Specialised lending	**53 264**	50 060
	SME corporate	**52 413**	45 102
9.	Retail revolving	**44 619**	38 662
10.	Retail mortgages	**66 948**	80 890
11.	SME retail	**45 878**	40 790
12.	Other retail	**88 450**	79 706
17.	**Total**	**527 305**	490 049

RWA flow statement of credit risk exposure under the AIRB approach

The calculation of credit RWA for FRBSA 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. Although 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 STATEMENTS OF CREDIT RISK EXPOSURES UNDER AIRB

	R million	**RWA**
1.	**RWA at 31 March 2023**	**517 467**
2.	Asset size	**11 169**
3.	Asset quality	**(1 331)**
4.	Model updates	**–**
5.	Methodology and policy	**–**
6.	Acquisitions and disposals	**–**
7.	Foreign exchange movements	**–**
8.	Other	**–**
9.	**RWA at 30 June 2023***	**527 305**

* *The RWA represents AIRB credit risk exposures excluding securitisation exposure per the OV1: Overview of RWA template on page 188.*

The *CR9: AIRB – Backtesting of PD per portfolio* tables are presented as part of the standardised disclosures on page 219.

Specialised lending exposures under slotting approach

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

CR10: AIRB – SPECIALISED LENDING

R million		As at 30 June 2023							
		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	**–**	**–**	**70%**	**–**	**–**	**–**	**–**	**–**
Good	Less than 2.5 years	**–**	**–**	**70%**	**–**	**–**	**–**	**–**	**–**
	Equal to or more than 2.5 years	**–**	**–**	**90%**	**–**	**–**	**–**	**–**	**–**
Satisfactory		**303**	**–**	**115%**	**–**	**310**	**310**	**378**	**11**
Weak		**179**	**–**	**250%**	**–**	**179**	**179**	**474**	**18**
Default		**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**
Total		**482**	**–**		**–**	**489**	**489**	**852**	**29**

R million		As at 30 June 2022							
		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	25	–	70%	–	25	25	24	–
Good	Less than 2.5 years	–	–	70%	–	–	–	–	–
	Equal to or more than 2.5 years	–	–	90%	–	–	–	–	–
Satisfactory		314	–	115%	–	314	314	423	12
Weak		41	–	250%	–	41	41	109	4
Default		–	–	–	–	–	–	–	–
Total		380	–	–	–	380	380	556	16

Risk analysis

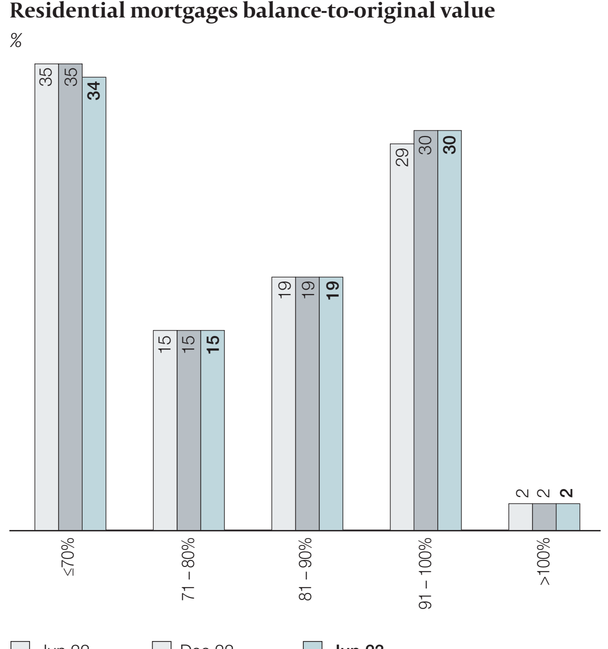
FNB residential mortgages

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

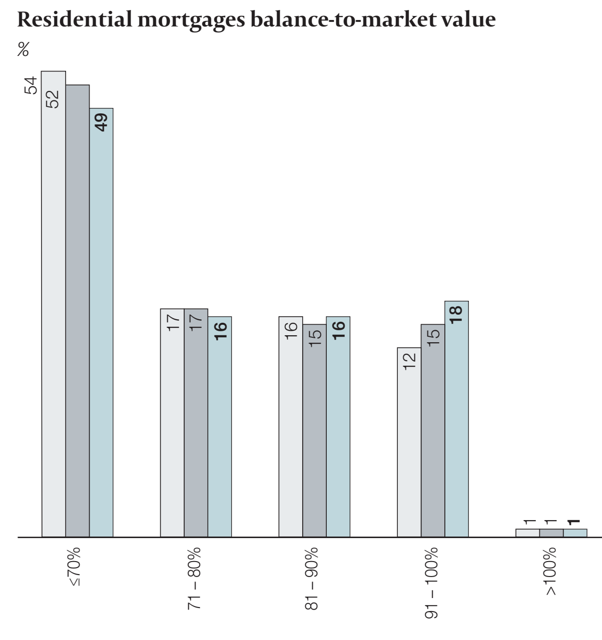
Increased origination in the year under review resulted in a marginal increase in the loan-to-value profile and younger account age distribution. The risk profile remains well within credit risk appetite levels.

Aldermore total mortgages

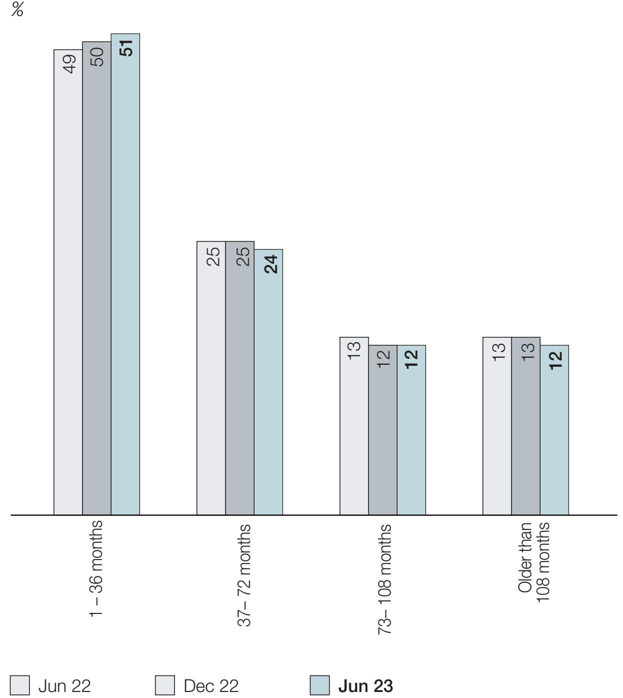
Residential mortgages balance-to-original value



Residential mortgages balance-to-market value

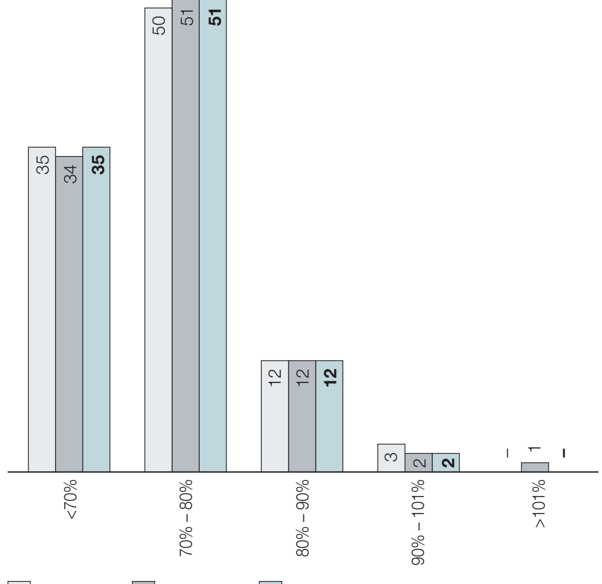


Residential mortgages age distribution total

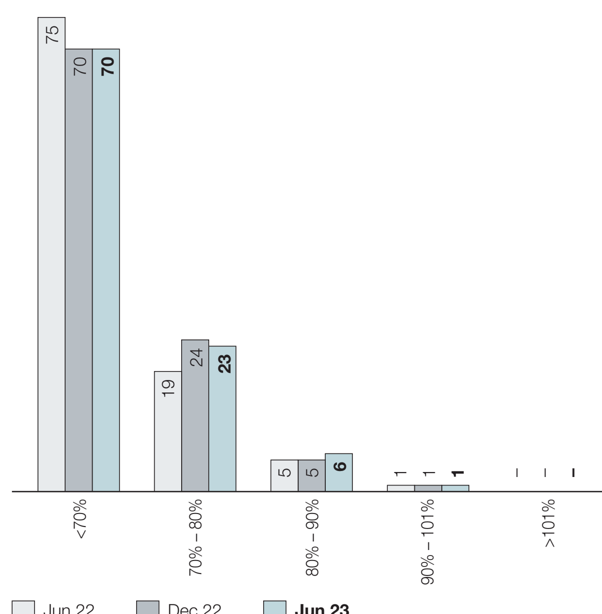


The graphs below provide loan balance-to-value ratios and age distributions of total mortgages.

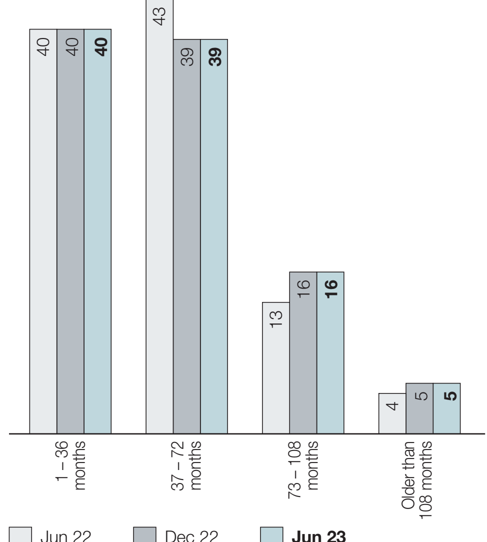
Aldermore mortgages balance-to-original value
%



Aldermore mortgages balance-to-market value
%



Aldermore mortgages age distribution total
%



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 where there is a bilateral risk of loss.

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 counterparty.

Counterparty credit risk is 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.

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 and monitoring of limit utilisation, as well as collateral management and ongoing portfolio risk management.

YEAR UNDER REVIEW AND FOCUS AREAS

Year under review	Risk management focus areas
• Enhanced counterparty credit risk monitoring methodology, through the build-out of a new platform with extended capabilities aligned to market best practice. • Continued to embed the SA-CCR regulatory capital methodology following external audit reviews and internal model validation exercises. • Achieved full BCBS 239 compliance for counterparty credit risk. • Implemented the PA's variation margin requirements for non-centrally cleared derivatives.	• Focus on analysis and readiness for the credit impact of the Basel III reforms including revisions to the credit risk methodology and approach to CVA. • Ongoing management and monitoring of new reporting requirements under the revised large exposure methodology. • Develop systems to enable the exchange of non-cash collateral for derivative trading.

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 based on 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 RCCC, with the support of RMB executive management oversight functions. Refer to the *Risk governance* section and organisational structure and governance in the *Credit risk* section of this report 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.

COUNTERPARTY CREDIT RISK GOVERNANCE STRUCTURE

Board-level oversight

RCCC

- Adequacy and robustness of counterparty risk identification, management and control.
- Current and projected counterparty risk profile.

Model risk and validation committee

Reviews and approves changes to regulatory and economic capital models.

Market and investment risk committee

- Oversees counterparty risk exposures, profile and management across the group.
- Monitors implementation of the counterparty credit risk management framework.

Credit risk management committee

- Oversees credit risk exposures, profile and management across the group.
- Monitors implementation of the credit risk management framework.

Executive management oversight

C&I FRM executive committee

- Defines C&I portfolio and return and risk appetite levels.
- Allocates limits and ensures that business remains within approved appetite levels.
- Approves strategies for counterparty risk activities across the group.

Management structures

C&I RCCC

- Provides independent oversight of all risk types in the C&I segment.
- Receives input from the business unit and in-country risk committees as appropriate.

Derivatives counterparty risk management committee

- Ensures consistent application of market and credit risk methodologies in the quantification of counterparty credit risk.
- Monitors implementation of the counterparty credit risk framework.

Business unit risk and management committees

RMB wholesale credit risk function

RMB derivative counterparty risk function

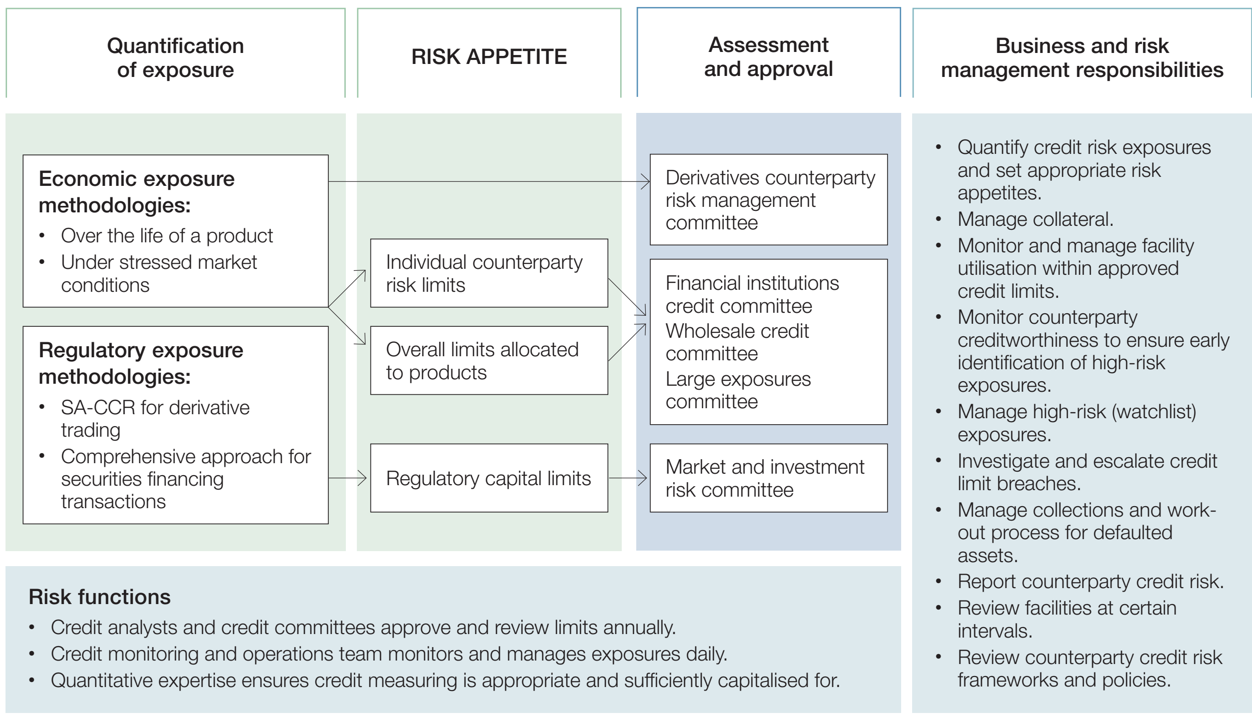
Group Internal Audit

- Assesses the adequacy and effectiveness of counterparty risk controls.
- Identifies risk control shortcomings and recommends corrective actions.

Assessment and management

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

QUANTIFICATION OF COUNTERPARTY CREDIT RISK EXPOSURE



The historical tail loss or expected tail loss or profit (ETL/ETP) 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 appetite

Risk appetite for OTC derivatives and the 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, the 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 for 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 from a prudential perspective. 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.

Counterparty credit risk mitigation

The group's counterparty credit risk mitigation approach is described on page 23.

Wrong-way risk exposure

Wrong-way risk exposure occurs when exposure to a counterparty is adversely correlated with the credit quality of that counterparty. 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 market value 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 BCBS with the intention to implement new standards by July 2025. 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, ISDA agreements have been entered into where both parties would be required to post additional collateral in the event of a credit rating downgrade. The group is phasing out ISDA agreements with these provisions.

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. 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 number of trades with counterparties with these types of agreements (and the associated risk) is immaterial.

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 securities financing transactions (SFT). The information provided in row 1 corresponds to the requirements of SA-CCR as applied by FRBSA and other group entities. EAD under the standardised approach is quantified by scaling the sum of replacement cost and the potential future exposure by a factor of 1.4 (alpha). The group does not apply the internal model method or the simple approach for credit risk mitigation for derivatives and SFTs. Rows 2 and 3 of the CCR1 template are therefore excluded from CCR1.

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 standardised approach. This approach is typically applied to SFT and repo type 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 simultaneously, less the market value of available collateral.
Potential future exposure	The maximum expected credit exposure over a specified time. 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 CRM	Refers to the amount relevant to the calculated capital requirement after 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).

CCR1: ANALYSIS OF COUNTERPARTY CREDIT RISK BY APPROACH FOR FIRSTRAND*

		As at 30 June 2023				
R million		**Replacement cost**	**Potential future exposure**	**Alpha used for computing regulatory EAD**	**EAD post CRM**	**RWA**
1.	SA-CCR (for derivatives)**	**12 959**	**10 268**	**1.4**	**32 122**	**13 138**
4.	Comprehensive approach for credit risk mitigation for securities financing transactions#				**13 329**	**1 474**
6.	**Total**	**12 959**	**10 268**		**45 451**	**14 612**

		As at 30 June 2022				
R million		Replacement cost	Potential future exposure	Alpha used for computing regulatory EAD	EAD post CRM	RWA
1.	SA-CCR (for derivatives)**	22 540	13 259	1.4	50 119	14 115
4.	Comprehensive approach for credit risk mitigation for securities financing transactions#				6 554	1 607
6.	**Total**	22 540	13 259		56 673	15 722

* *Replacement cost, potential future exposure, EEPE, alpha used for computing regulatory EAD, EAD post CRM and RWA are not inputs into the VaR model calculation for SFTs. Row 5 is therefore excluded from these tables.*

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

\# *Replacement cost, potential future exposure, EEPE and alpha used for computing regulatory EAD are not calculated under the comprehensive approach for credit mitigation for SFTs.*

The reduction in exposure is driven by the maturity of significant commodity derivative hedging positions and further recognition of OTC-cleared derivative trading, which is now aggregated in CCR8. The reduction in RWA was partially offset by an increase in mark-to-market movements on foreign exchange derivative exposures against sovereigns in the broader Africa portfolio.

The following table provides the EAD post CRM and RWA amounts for portfolios subject to the standardised CVA capital charge. As the group does not apply the advanced approach for CVA charge, rows 1 and 2 are excluded from CCR2. As seen in CCR1, the reduction in CVA capital is driven by the maturity of the commodity derivative hedging positions which was, again, offset by the increased derivative exposure to sovereigns in the broader Africa portfolio.

CCR2: CVA CAPITAL CHARGE

		As at 30 June 2023		As at 30 June 2022	
R million		**EAD post CRM**	**RWA***	EAD post CRM	RWA
3.	All portfolios subject to the standardised CVA capital charge	**32 122**	**11 006**	50 119	10 373
4.	**Total subject to the CVA capital charge**	**32 122**	**11 006**	50 119	10 373

* *CVA RWA includes the subsidiaries in broader Africa and the UK but excludes the bank's foreign branches.*

CCR3: STANDARDISED APPROACH FOR COUNTERPARTY CREDIT RISK EXPOSURES BY REGULATORY PORTFOLIO AND RISK WEIGHTS*

	As at 30 June 2023					
	Risk weight**					
R million	**0%**	**20%**	**50%**	**100%**	**150%**	**Total credit exposure**
Asset classes#						
Sovereigns	**–**	**–**	**–**	**3 784**	**0.2**	**3 784**
Non-central government public sector entities	**–**	**–**	**64**	**–**	**–**	**64**
Banks	**–**	**55**	**937**	**245**	**2**	**1 239**
Corporates	**–**	**–**	**–**	**938**	**25**	**963**
Total	**–**	**55**	**1 001**	**4 967**	**27**	**6 050**

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

** *There were no exposures in the 10%, and 75% risk weight buckets at 30 June 2023.*

\# *There were no exposures in the multilateral development banks, securities firms, regulatory retail portfolios and other assets classes at 30 June 2023.*

	As at 30 June 2022					
	Risk weight**					
R million	0%	20%	50%	100%	150%	Total credit exposure
Asset classes#						
Sovereigns	–	–	–	2 044	–	2 044
Banks	584	–	1	1	116	702
Corporates	–	0.2	302	173	2	477
Total	584	0.2	303	2 218	118	3 223

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

** *There were no exposures in the 10%, and 75% risk weight buckets at 30 June 2022.*

\# *There were no exposures in the non-central government public sector entities, multilateral development banks, securities firms, regulatory retail portfolios and other assets classes at 30 June 2022.*

Intragroup regulated bank exposures, which attract a 0% risk weight, will be removed from these tables to provide a group view of exposure. Overall, the increased exposures reflect the increased mark-to-market movements on foreign exchange derivative positions against sovereigns in the broader Africa portfolio.

The following tables provide the counterparty credit risk exposures per portfolio and PD range where the AIRB approach is used for credit risk. They also show the main parameters used in the calculation of RWA. These exposures are for FRBSA, where AIRB for credit risk is applied. In the year under review, the risk aggregation process was enhanced, including EAD post CRM, number of obligors and risk density.

An explanation of the information provided in the table columns is provided below:

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

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

	Total FRBSA						
	As at 30 June 2023						
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	**14 673**	**0.07**	**25**	**32.35**	**1.85**	**1 740**	**11.86**
0.15 to <0.25	**7 697**	**0.19**	**64**	**33.13**	**1.48**	**1 136**	**14.77**
0.25 to <0.50	**6 035**	**0.42**	**144**	**31.00**	**1.12**	**2 039**	**33.79**
0.50 to <0.75	**3 031**	**0.69**	**77**	**28.62**	**1.24**	**1 241**	**40.95**
0.75 to <2.50	**2 438**	**1.76**	**173**	**40.02**	**1.21**	**2 005**	**82.22**
2.50 to <10	**310**	**4.76**	**47**	**40.51**	**1.23**	**298**	**96.33**
10 to <100	**67**	**20.34**	**16**	**38.23**	**1.27**	**97**	**144.94**
100 (default)	**15**	**100**	**1**	**37.00**	**1.00**	**–**	**–**
Total	**34 266**		**547**			**8 556**	**24.97**

	Total FRBSA						
	As at 30 June 2022						
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	19 074	0.07	15	23.17	1.27	2 521	13.22
0.15 to <0.25	7 462	0.21	50	38.46	0.59	1 048	14.05
0.25 to <0.50	8 443	0.46	91	21.44	1.08	2 705	32.03
0.50 to <0.75	7 024	0.72	37	38.78	1.03	4 060	57.80
0.75 to <2.50	2 178	1.86	97	26.47	0.70	1 394	64.03
2.50 to <10	388	4.61	32	31.94	1.18	383	98.60
10 to <100	176	10.48	19	27.41	2.27	218	124.11
100 (default)	–	–	–	–	–	–	–
Total	44 745		341			12 329	36.97

The overall reduction in exposure and RWA in the 0 to <0.15 PD band was as a result of further recognition of collateral offsets for exposures to counterparties in the banks sector.

The FRBSA movements were mainly driven by movements in banks, securities, the public sector and local government, and corporates (refer to the subsections of CCR4 tables).

The asset class specific portfolio movements are included in the standardised disclosures section on page 228.

The following tables provide the composition of collateral for counterparty credit risk exposures per category, 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. The increase in collateral was largely driven by the recognition of equity securities received as collateral against derivative positions. Furthermore, the increase in fair value of collateral received in secured financing transactions was driven by an increase in trade volumes of repo-style transactions.

CCR5: COMPOSITION OF COLLATERAL FOR COUNTERPARTY CREDIT RISK EXPOSURE*

	As at 30 June 2023					
	Collateral used in derivative transactions				**Collateral used in securities financing 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	**9 074**	**11 588**	**707**	**8 377**	**–**	**–**
Cash – other currencies	**–**	**7 036**	**–**	**4 983**	**–**	**–**
Domestic sovereign debt	**–**	**2 460**	**–**	**–**	**92 253**	**39 263**
Other sovereign debt	**–**	**109**	**–**	**–**	**8 827**	**1 706**
Government agency debt	**–**	**–**	**–**	**–**	**3 966**	**–**
Corporate bonds	**–**	**4 095**	**–**	**–**	**2 161**	**1 905**
Other collateral	**–**	**12 415**	**–**	**–**	**–**	**–**
Total	**9 074**	**37 703**	**707**	**13 360**	**107 207**	**42 874**

	As at 30 June 2022*					
	Collateral used in derivative transactions				Collateral used in securities financing 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	9 238	6 575	–	10 942	–	–
Cash – other currencies	–	5 990	–	7 611	–	–
Domestic sovereign debt	–	2 744	–	1 238	78 326	35 313
Other sovereign debt	–	–	–	–	4 130	–
Government agency debt	–	–	–	–	2 629	109
Corporate bonds	–	–	–	–	3 796	2 870
Total	9 238	15 309	–	19 791	88 881	38 292

* *There was no collateral in the equity securities and other collateral categories.*

The increase in collateral was largely driven by the recognition of equity securities received as collateral against derivative positions. Furthermore, the increase in fair value of collateral received in secured financing transactions was driven by an increase in trade volumes of repo-style transactions.

The group employs credit derivatives for the purposes of protecting credit positions, facilitating the hedging of structured notes and general market making in specific underlying securities, as indicated in the following tables.

CCR6: CREDIT DERIVATIVES EXPOSURES

	As at 30 June 2023		As at 30 June 2022	
R million	**Protection bought**	**Protection sold**	Protection bought	Protection sold
Notionals*				
– Single-name credit default swaps	**4 807**	**7 304**	12 025	6 940
Total notionals	**4 807**	**7 304**	12 025	6 940
Fair values	**24**	**37**	13	(78)
– Positive fair value (asset)	**50**	**76**	35	59
– Negative fair value (liability)	**(26)**	**(39)**	(22)	(137)

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

The template *CCR7: RWA flow statements of CCR exposures under the internal model method* is not applicable as the group does not use the internal model method for measuring EAD of counterparty credit risk EAD.

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 2023		As at 30 June 2022	
	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:	**13 305**	**272**	5 919	118
3.	– OTC derivatives	**6 515**	**130**	2 314	46
4.	– Exchange-traded derivatives	**6 790**	**142**	3 605	72
5.	– Securities financing transactions	**–**	**–**	–	–
6.	– Nettings sets where cross-product netting has been approved	**–**	**–**	–	–
7.	Segregated initial margin*	**11 655**		9 238	
8.	Non-segregated initial margin	**–**	**–**	–	–
9.	Pre-funded default fund contributions	**405**	**38**	352	70
10.	Unfunded default fund contributions	**–**	**–**	–	–
1.	**Total exposures to qualifying central counterparties****	**25 365**	**310**	15 509	188

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

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

The increase in exposures to central counterparties was driven by the further recognition of OTC-cleared derivative trades and the increase in the volume of cleared and exchange-traded derivatives in the portfolio.

securitisations

Introduction and objectives

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

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

The group 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 possible exposures that could be securitised within market constraints.

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.

Organisational structure and governance

THE GROUP'S ROLE IN SECURITISATION AND CONDUIT STRUCTURES

Transaction	Cash manager	Originator	Sponsor	Servicer	Investor	Liquidity provider	Credit enhancement provider	Swap counterparty
Own traditional securitisations								
Nitro securitisations 6 (RF) Limited	✓	✓	✓	✓				
Nitro Programme (RF) Limited - Nitro 7	✓	✓	✓	✓				✓
FAST Issuer SPV (RF) Limited	✓	✓	✓	✓	✓			✓
MotoFirst Limited		✓	✓	✓	✓			
MotoWay Limited	✓	✓	✓	✓	✓			✓
Oak No.2 PLC*		✓	✓	✓	✓			
Oak No.3 PLC*		✓	✓	✓	✓			
Oak No.4 PLC*	✓	✓	✓	✓	✓			
MotoMore Limited*		✓	✓	✓	✓			
Turbo Finance 9 PLC*		✓	✓	✓	✓			
Conduit structures								
iVuzi Investments (RF) Limited**	✓		✓	✓		✓	✓	✓
iNguza Investments (RF) Limited#	✓			✓				✓
Third party								
Velocity Finance Issuer Trust	✓				✓			✓
Velocity Finance (RF) Limited	✓				✓			✓
Agri Harvest Investment (RF) Limited	✓		✓		✓			✓
Spartan House 2018 (RF) Limited	✓							

* *Aldermore's Oak, MotoMore and Turbo Finance 9 securitisations have not derecognised assets in terms of the securitisation framework and therefore remain on-balance sheet.*

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

Conduits incorporated under regulations relating to commercial paper.

The RCCC has delegated responsibility for the independent oversight and monitoring of securitisation exposures to group ALCCO. Group ALCCO is also responsible for the allocation of sublimits and any remedial action in the event of limit breaches. The FirstRand wholesale credit committee approves credit limits for retained securitisation exposures per special purpose 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.

Key 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 against approved limits by ALCCO, the RCCC and the board;
- changes to retained exposures (as a result of rating changes, reviews, note redemptions and credit losses) are reflected in the monthly BA 500 regulatory return for FRBSA and the quarterly BA 600 for other entities; and
- transaction investor reports, alignment with SPV financial reporting and the impact of underlying asset performance are reflected on the semi-annual 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 an 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 the group 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

Agri Harvest Investments (RF) Limited

This agricultural structure was established in July 2022. The first transaction utilised Griekwaland Wes Korporatief Beperk (GWK) originated assets and consists of five notes: class A RCF note, class B, C, D and E notes. The transaction occurred through three tranches of R412.6 million (July 2022), R270 million (August 2022) and R330 million (October 2022).

Velocity Finance (RF) Limited

There were five issuances that were executed in the year under review: R2.3 billion in July 2022, R2.1 billion in October 2022, R2.2 billion in December 2022, R2.8 billion in February 2023 and R2.5 billion in May 2023.

Velocity Finance Issuer Trust

The clean-up call option was exercised in October 2022. The remaining assets were sold back to Volkswagen Financial Services (VWFS) at fair value (R147 million), all outstanding notes were redeemed, and a final preference dividend was declared after the financial statements were finalised. The structure will be liquidated.

Spartan House 2018 (RF) Limited

The clean-up call option for series 1 and series 2 of Spartan House 2018 (RF) Limited was exercised in October 2022 and in April 2023, respectively. The remaining assets for each of the applicable series were sold back to Toyota Financial Services South Africa (TFSSA) at the respective fair values. All outstanding notes relating to series 1 and series 2 were redeemed. Spartan House will continue being used as a secured funding mechanism for TFSSA.

Nitro Securitisation 6 (RF) Limited

The class A notes of R420 million were fully redeemed in March 2020. The class B notes of R1.4 billion were fully redeemed in March 2023. The class C, D, E notes remain outstanding.

Oak No.2 PLC and Oak No.4 PLC

This is the public UK structure containing Aldermore originated residential mortgage loans. The Oak 2 transaction was closed out in February 2023. The Oak 4 transaction occurred in May 2023.

External credit assessment institutions

The group employs eligible ratings issued by nominated external credit assessment institutions (ECAIs) to risk weight its securitisation and resecuritisation exposures where the use is permitted. The ECAIs nominated by the group for this purpose are Global Credit Ratings (GCR), Moody's, S&P and DBRS Ratings Limited (DBRS). 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.

OWN SECURITISATION TRANSACTIONS*

Traditional securitisations	Asset type	Rating agency	Year initiated	Expected close
Nitro Securitisation 6 (RF) Limited	Retail: auto loans	GCR	2018	Closed
Nitro Programme (RF) Limited - Nitro 7	Retail: auto loans	Moody's	2019	2023
Fast Issuer SPV (RF) Limited	Retail: auto loans	Unrated	2016	2024
MotoFirst Limited	Retail: auto loans	Unrated	2017	Closed
MotoWay Limited	Retail: auto loans	Unrated	2019	Closed

	As at 30 June						
	Assets securitised	**Assets outstanding****		**Notes outstanding**		**Retained exposure**	
R million		**2023**	2022	**2023**	2022	**2023**	2022
Nitro Securitisation 6 (RF) Limited	**–**	**–**	27	**–**	–	**–**	–
Nitro Programme (RF) Limited - Nitro 7	**142**	**215**	477	**170**	412	**–**	–
FAST Issuer SPV (RF) Limited	**3 175**	**3 846**	7 129	**2 768**	6 222	**2 240**	2 073
MotoFirst Limited#	**–**	**–**	2	**–**	–	**–**	–
MotoWay Limited#		**–**	1 985	**–**	2 120	**–**	2 120
Total	**3 317**	**4 061**	9 620	**2 938**	8 754	**2 240**	4 193

* *Represents transactions structured by the group where the assets have been derecognised from the balance sheet.*

** *Assets outstanding do not include cash reserves.*

Non-rand denominated.

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 portfolios where the group acts as originator, sponsor, investor, or originator and sponsor.

SEC1: SECURITISATION EXPOSURES IN THE BANKING BOOK PER PORTFOLIO

		As at 30 June 2023*				
		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	**2 240**	**–**	**25 358**	**–**	**27 598**
6.	**Corporate**					
7.	– Loans to corporates	**–**	**–**	**–**	**1 127**	**1 127**
	Total	**2 240**	**–**	**25 358**	**1 127**	**28 725**

		As at 30 June 2022*				
		Traditional securitisations				
	R million	Group acts as originator	Group acts as sponsor	Group acts as investor	Group acts as originator and sponsor	Total
1.	**Retail**					
4.	– Auto loans	4 193	–	23 358	–	27 551
6.	**Corporate**					
7.	– Loans to corporates	–	–	–	3 706	3 706
	Total	4 193	–	23 358	3 706	31 257

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

The regulatory approaches for securitisation exposures are explained in the tables below. Securitisation exposure capital calculations under the revised framework follow a hierarchy of approaches, which reduces reliance on external credit ratings and enhances risk-sensitivity. Calculations of 30 June 2023 capital figures were based on the hierarchy of approaches in the following table.

SEC-IRBA	• Must be a supervisory approved internal ratings-based model. • Must have sufficient information to estimate the capital charge for these underlying exposures.
SEC-ERBA	• Must be allowed by the regulator. • SEC-ERBA is based on external ratings of the exposure, or inferred ratings.
SEC-SA	• Must be used if the bank cannot apply SEC-IRBA and SEC-ERBA. • Conservative calibration.
1 250%	• Risk weighting of 1 250% must be applied if any of the above approaches cannot be applied.

In the old framework, the application of the hierarchy depends on the role the bank plays in the securitisation or on the credit risk approach that the bank applies to the type of underlying exposures. Figures as at 30 June 2022 are based on the approaches in the following table.

Internal ratings-based (IRB) approach	**Ratings-based approach** Securitisation exposures to notes rated by an external credit assessment institution (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 formula approach (SSFA).
Unrated notes	Exposures to unrated notes are risk weighted at 1 250%.

There were no synthetic securitisations during the year under review.

The *SEC2: Securitisation exposure in the trading book* table is not applicable as the group does not have securitisation exposures in the trading book.

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

		As at 30 June 2023*								
		Exposure values by risk-weighted (RW) bands					**Exposure values by regulatory approach**			
	R million	**≤20% RW**	**>20% to 50% RW**	**>50% to 100% RW**	**>100% to <1 250% RW**	**1 250% RW**	**SEC-IRBA**	**SEC-ERBA**	**SEC-SA**	**1 250%**
	Securitisation									
4.	– Retail	**2 240**	**–**	**–**	**–**	**–**	**2 240**	**–**	**–**	**–**
5.	– Corporate	**460**	**667**	**–**	**–**	**–**	**667**	**–**	**460**	**–**
	Total	**2 700**	**667**	**–**	**–**	**–**	**2 907**	**–**	**460**	**–**

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

** *The capital requirement was calculated at 13.3% of RWA. The minimum requirement excludes the Pillar 2B capital requirement. The difference to the BCBS base minimum (8%) relates to the buffer add-ons for Pillar 2A, CCyB, capital conservation and the D-SIB as prescribed in the Regulations.*

		As at 30 June 2022*								
		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 <1 250% RW	1 250% RW	RBA	SFA	SSFA	1 250%
	Securitisation									
4.	– Retail	2 073	342	1 778	–	–	–	2 073	2 120	–
5.	– Corporate	–	3 706	–	–	–	–	–	3 706	–
	Total	2 073	4 048	1 778	–	–	–	2 073	5 826	–

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

** *The capital requirement was calculated at 13% of RWA. The minimum requirement excludes the Pillar 2B capital requirement. The difference to the BCBS base minimum (8%) relates to the buffer add-ons for Pillar 2A, CCyB, capital conservation and the D-SIB as prescribed in the Regulations.*

As at 30 June 2023*							
RWA by regulatory approach				**Minimum capital requirements****			
SEC-IRBA	**SEC-ERBA**	**SEC-SA**	**1 250%**	**SEC-IRBA**	**SEC-ERBA**	**SEC-SA**	**1 250%**
336	**–**	**–**	**–**	**45**	**–**	**–**	**–**
223	**–**	**69**	**–**	**30**	**–**	**9**	**–**
559	**–**	**69**	**–**	**75**	**–**	**9**	**–**

As at 30 June 2022*							
RWA by regulatory approach				Minimum capital requirements**			
IRB		SA		IRB		SA	
RBA	SFA	SSFA	1 250%	RBA	SFA	SSFA	1 250%
–	154	1 778	–	–	20	232	–
–	–	1 458	–	–	–	189	–
–	154	3 236	–	–	20	421	–

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

		As at 30 June 2023*						
		Exposure values by RW bands**	**Exposure values by regulatory approach#**		**RWA by regulatory approach#**		**Minimum capital requirements#,†**	
R million		**≤20% RW**	**SEC-IRBA**	**SEC-SA**	**SEC-IRBA**	**SEC-SA**	**SEC-IRBA**	**SEC-SA**
	Securitisation							
4.	– Retail	**25 358**	**25 358**	**–**	**4 731**	**–**	**628**	**–**
5.	– Corporate	**–**	**–**	**–**	**–**	**–**	**–**	**–**
	Total	**25 358**	**25 358**	**–**	**4 731**	**–**	**628**	**–**

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

** *There were no exposures in the >20% to 50%, >50% to 100%, >100% to <1 250% and 1 250% RW bands.*

\# *There were no exposures under the SEC-ERBA or risk weighted at 1 250%.*

† *The capital requirement was calculated at 13.3 of RWA. The minimum requirement excludes the confidential individual capital requirement (Pillar 2B). The difference to the BCBS base minimum (8%) relates to the buffer add-ons for Pillar 2A, CCyB, capital conservation and the D-SIB as prescribed in the Regulations.*

		As at 30 June 2022*						
		Exposure values by RW bands**	Exposure values by regulatory approach#		RWA by regulatory approach		Minimum capital requirements†	
			IRB		IRB		IRB	
R million		≤20% RW	RBA	SFA	RBA	SFA	RBA	SFA
	Securitisation							
4.	– Retail	23 358	–	23 358	–	1 733	–	225
5.	– Corporate	–	–	–	–	–	–	–
	Total	23 358	–	23 358	–	1 733	–	225

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

** *There were no exposures in the >20% to 50%, >50% to 100%, >100% to <1 250% and 1 250% RW bands.*

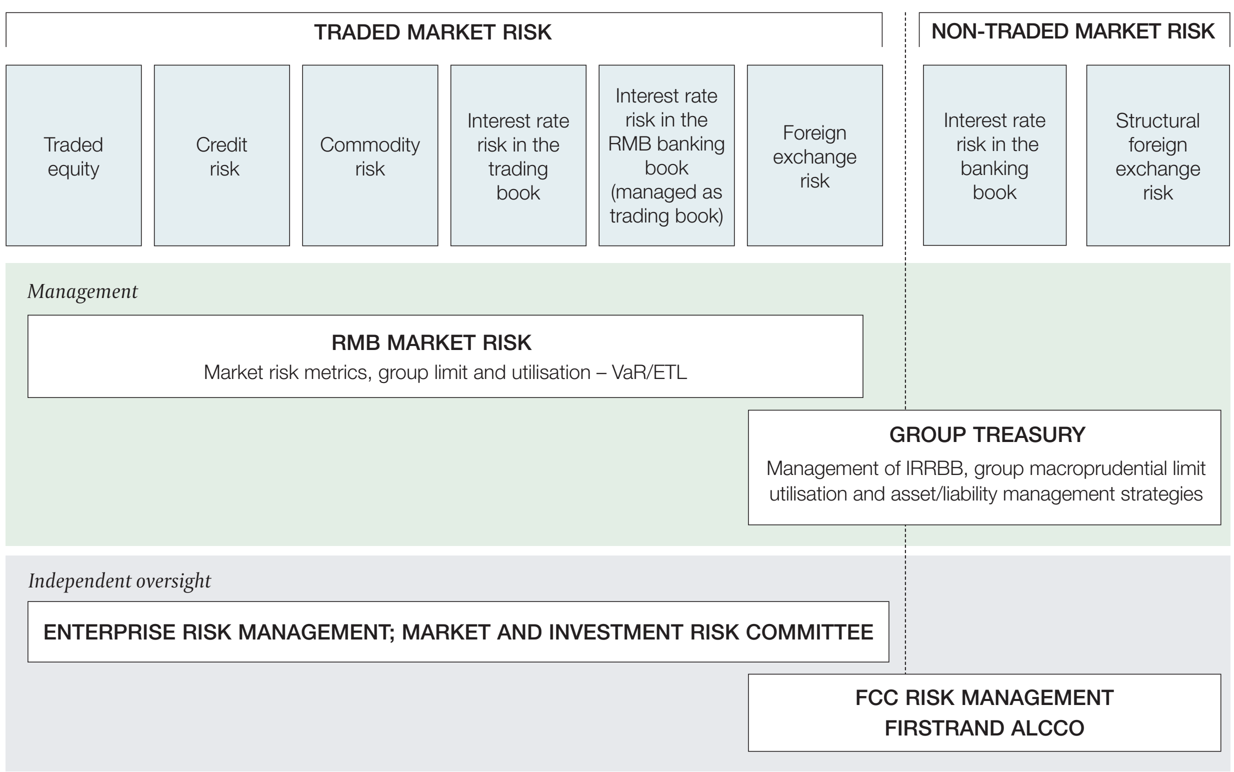
\# *There were no exposures under the standardised approach or to unrated notes risk weighted at 1 250%.*

† *The capital requirement was calculated at 13% of RWA. The minimum requirement excludes the confidential individual capital requirement (Pillar 2B). The difference to the BCBS base minimum (8%) relates to the buffer add-ons for Pillar 2A, CCyB, capital conservation and the D-SIB as prescribed in the Regulations.*

market
risk

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

TRADED AND NON-TRADED MARKET RISK



traded market
risk

Introduction and objectives

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 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:

- **business mix** – ensure that RMB's current and future strategies, spanning various activities and geographies, achieve their 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 various activities; and
- **risk and capital impact** – only accept an appropriate level of risk commensurate with performance objectives and 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 disclosure 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 forums 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 as well as 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 are split between the RMB banking book and the remaining domestic banking book (which is covered in the *Interest rate risk in the banking book* section of this report). 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 FirstRand MIRC. The RMB banking book interest rate risk exposure was R103 million on a 10-day ETL basis at 30 June 2023 (2022: R81 million).

YEAR UNDER REVIEW AND FOCUS AREAS

Year under review	Risk management focus areas
• Persistent inflation resulted in a tighter monetary policy stance by central banks. • Refined the trading risk appetite statement. • In the broader Africa trading environment, the global macros continued to impact sovereigns' ability to maintain dollar-denominated issued debt, impacting both hard currency and local currency liquidity in-country. • Systemic failures of banks in developed markets raised fears of contagion, which introduced increased levels of volatility in credit markets. • Geopolitical tensions between Ukraine and Russia continued to present pressures on global supply chains. However, this remains priced in the market. • Domestic macroeconomic and political events led to short periods of increased volatility in the local foreign exchange and rates markets. • Regulatory reforms including the fundamental review of the trading book (FRTB) remained a key focus. • RMB successfully transitioned all dollar London Interbank Offered Rate (LIBOR) exposures that were earmarked for transition before the 30 June 2023 dollar LIBOR cessation date with the exception of banking book contractual agreements based on dollar LIBOR which will transition on the respective next reset dates.	• Implement and operationalise the FRTB calculation and standards. • Continue to refine governance and risk management structures and approaches.

Organisational structure and governance

TRADED MARKET RISK GOVERNANCE STRUCTURE

Board-level oversight

RCCC

Provides oversight of the group's traded market risk profile.

Market and investment risk committee

- Oversees market risk exposures, profile and management across the group.
- Monitors implementation of market risk frameworks.

Model risk and validation committee

- Review and approve material changes to market risk capital, exposure methodologies and valuation models.

Executive management oversight

C&I FRM executive committee

- Defines the C&I segment's portfolio and risk/reward appetite levels.
- Allocates limits and ensures that business remains within approved appetite levels.
- Approves strategies for market risk activities across the group.

Management structures

Segment market risk functions and committees

- Management of day-to-day market risk processes and overall monitoring of market risk.
- Consolidation, validation and submission of daily market risk information for regulatory reporting purposes.

Market risk technical committee

- Reviews and approves independent validation of market risk, valuation and curve construction models.
- Reports to the model risk validation committee.

C&I RCCC

- Provides oversight of all risk types (including market risk) in the C&I segment.
- Receives input from the business unit and in-country risk committees, as appropriate.

ERM

- Provides second-line independent view of market risk profiles, oversees market risk management practices and monitors implementation of group market risk frameworks.

Group Internal Audit

- Assesses the adequacy and effectiveness of market risk controls and assesses risk maturity.
- Identifies risk control shortcomings and recommends corrective actions.

Traded market risk appetite

The group aims to manage its trading activities:

- with a suitably diversified asset class and industry spread and appropriately scaled market risk factor sensitivity to ensure sufficient predictability of earnings from trading activities and acceptable variability around predicted earnings; and
- it also manages event risks from concentrated market risk factors, single-name counterparty credit risk and market dislocations across traded assets such that the group does not become an outlier relative to its peer group, suffer reputational damage from the perspective of regulators or funders, or suffer rating action.

Quantitative market risk limits are set in line with the group's risk appetite, supported by qualitative risk appetite measures. The group sets quantitative limits for income volatility at a very high confidence level (99%) under distressed conditions for a specified time horizon. These are expressed as:

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

Qualitative risk appetite measures include business and desk 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.

Market risk reporting

High-quality risk reporting enables senior management and governance committees to make well-informed decisions to achieve objectives and manage key risks. The group regularly reviews market risk reports to ensure their relevance and that reporting reflects the group's market risk profile adequately and accurately. 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 the information requirements of the target audience.

Market risk reports are provided to the C&I FRM executive committee on a monthly basis, and to the C&I RCCC and MIRC quarterly. Daily and monthly reports on market risk movements, risk factors and limit utilisation are provided to senior management and executive committees. 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 backtesting results;
- model risk; and
- *ad hoc* reporting to MIRC during stress periods and specific events outside of the normal governance cycle.

Model risk reports on counterparty credit and market risk, valuation and curve construction models, as well as on the independent validation of models, are provided to the FirstRand MRVC and the C&I RCCC on a quarterly basis. Information in the model risk reports includes, but is not limited to, an overview of activities of the market risk technical committee, approval of independently validated models, model risk classifications, and material issues and corrective actions.

Internal models approach: domestic trading portfolios

The group uses the internal models approach (IMA) for its domestic trading units – The internal VaR model for general market risk was approved by the PA for domestic trading units. For all other 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.

Market risk 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.

Market risk in the trading book is taken and managed by RMB using risk limits approved by the C&I FRM executive committee and MIRC. ETL/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 according to the market risk framework. The ETL/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). 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 stress (2008/2009). The stress period is periodically reviewed for suitability. 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 stressed 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. 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. For regulatory capital purposes, this is supplemented with an sVaR, calibrated to a one-year period of stress observed in recent history (2008/2009). The choice of period 2008/2009 is based on the assessment of the most volatile period in recent history and is reviewed for suitability. sVaR calculations are based on the same systems, trade information and processes as VaR calculations. 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.

There are limitations to the VaR 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 outlined for VaR);
- the use of a one-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 continually, 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. The following flow statement explains the variations in the market risk RWA determined under IMA.

MR2: RWA FLOW STATEMENTS OF MARKET RISK EXPOSURES UNDER AN IMA*

R million		VaR	sVaR	Total RWA
1.	**RWA at 31 March 2023**	**10 341**	**11 162**	**21 503**
2.	Movement in risk levels	**4 401**	**4 869**	**9 270**
3.	Model updates/changes	–	–	–
4.	Methodology and policy	–	–	–
5.	Acquisitions and disposals	–	–	–
6.	Foreign exchange movements	–	–	–
7.	Other	–	–	–
8.	**RWA at 30 June 2023**	**14 742**	**16 031**	**30 773**

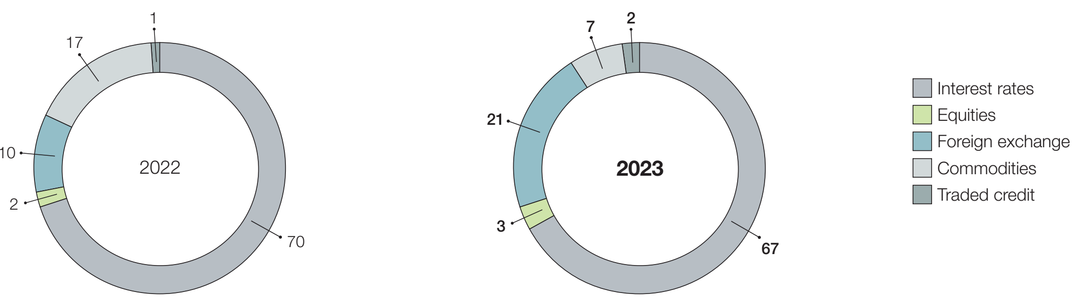
* *The group does not use the incremental risk charge and comprehensive risk measure approaches.*

The increase in RWA during the period under review was driven by trading book positioning and client flow across interest rate, foreign exchange and traded credit asset classes in response to both global and local market factors, with exposures in traded credit and foreign exchange being the largest drivers of the increase in RWA.

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 2023 based on the VaR methodology.

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



* *2022 figures have been updated as the 1-day VaR per asset class measure has been discontinued and will not be reported going forward as it is not used for limit and management monitoring with the exception of the diversified 1-day VaR used in backtesting.*

IMA values

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

		FRBSA*						
		As at 30 June 2023**						
	R million	**Equities**	**Interest rates**	**Foreign exchange**	**Commodities**	**Traded credit**	**Diversification effect**	**Diversified total**
	VaR (10-day 99%)							
1.	Maximum value	**79.3**	**520.6**	**114.0**	**69.5**	**49.3**		**435.5**
2.	Average value	**22.9**	**309.0**	**54.8**	**33.1**	**15.2**		**266.6**
3.	Minimum value	**5.8**	**134.0**	**13.9**	**17.4**	**1.8**		**140.5**
4.	Period end	**14.0**	**296.9**	**91.6**	**31.6**	**11.4**	**(172.2)**	**273.3**
	sVaR (10-day 99%)							
5.	Maximum value	**84.2**	**553.6**	**248.7**	**79.5**	**211.1**		**479.9**
6.	Average value	**30.8**	**349.4**	**101.2**	**42.4**	**72.4**		**296.2**
7.	Minimum value	**10.4**	**168.1**	**21.9**	**27.8**	**2.7**		**173.1**
8.	Period end	**25.5**	**225.2**	**166.7**	**58.3**	**12.6**	**(225.1)**	**263.1**

		FRBSA*						
		As at 30 June 2022						
	R million	Equities	Interest rates	Foreign exchange	Commodities	Traded credit	Diversification effect	Diversified total
	VaR (10-day 99%)							
1.	Maximum value	86.5	329.7	121.4	71.3	33.1		277.7
2.	Average value	15.7	196.7	43.0	35.8	16.2		188.3
3.	Minimum value	4.6	126.8	8.1	9.6	1.5		101.2
4.	Period end	6.9	257.8	34.6	62.9	2.2	(175.0)	189.4
	sVaR (10-day 99%)							
5.	Maximum value	103.1	446.8	166.3	86.9	40.9		439.2
6.	Average value	23.7	324.4	64.7	48.2	16.4		187.7
7.	Minimum value	8.8	116.4	13.2	16.8	2.3		76.7
8.	Period end	15.8	365.5	156.9	46.3	7.3	(152.6)	439.2
	VaR (1-day 99%)							
	Maximum value	67.8	198.1	68.5	51.0	11.5		146.1
	Average value	7.3	90.2	18.3	20.8	5.4		95.8
	Minimum value	3.0	60.2	0.3	4.5	1.0		54.6
	Period end	4.5	100.6	7.1	20.3	1.1	(49.4)	84.2

* *The IMA values for traded market risk are for FRBSA, which excludes the bank's foreign branches. These are reported on under the standardised approach for market risk.*

** *The 1-day VaR per asset class measure was excluded from 2023 and will not be reported going forward.*

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 stress 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 stressed 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 return and risk appetite framework is an assessment of potential earnings volatility that may arise from underlying exposures. 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 to highlight unused capacity within the group's risk appetite. Market risk earnings volatility is calculated and assessed on a quarterly basis as part of C&I's overall earnings volatility.

Regulatory backtesting

Backtesting is performed to verify the predictive ability of the VaR model and ensure ongoing appropriateness. The backtesting 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 results produced by the model, i.e. if 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).

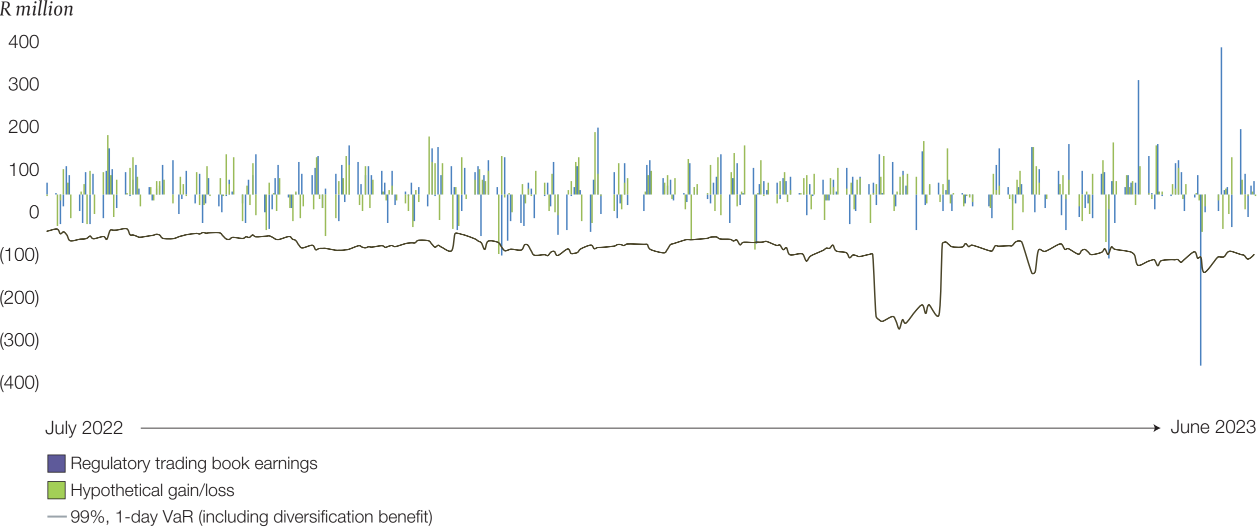
The regulatory standard for backtesting is to measure daily actual and hypothetical changes in portfolio value against VaR at the 99th percentile (one-day holding period equivalent). The number of breaches over a period of 250 trading days is calculated, and should the number exceed that which is considered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

Backtesting: daily regulatory trading book earnings versus 1-day, 99% VaR

The group monitors 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.

MR4: Comparison of VaR estimates with gains/losses for FRBSA

R million



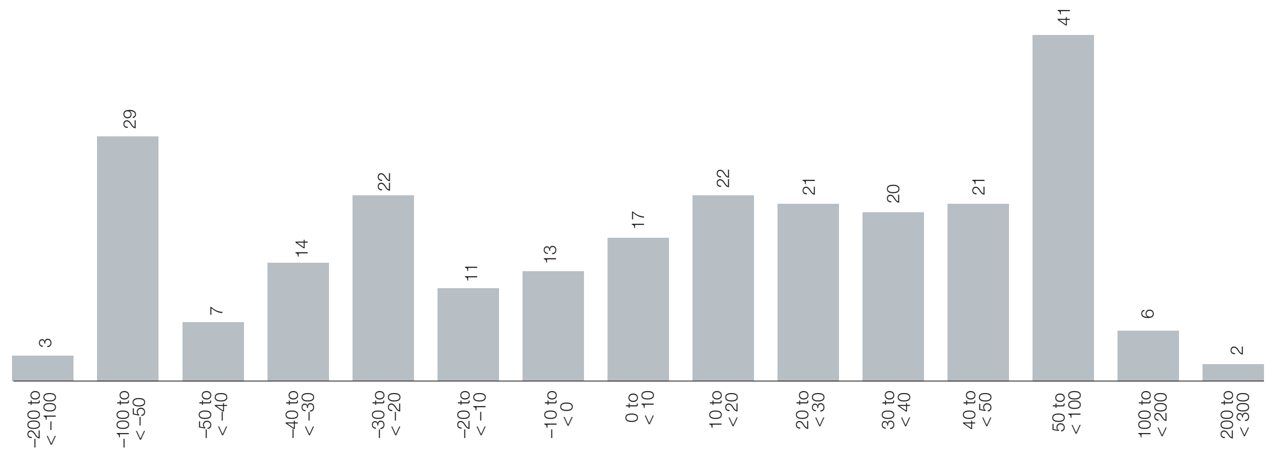
The short-term increase in the 99%, 1-day VaR was mainly driven by the punitive stresses applied to traded credit positions over the time period. The bank's backtesting model returned four actual and two hypothetical exceptions which were largely market event driven (and technical in nature). Despite the number of exceptions, the group's internal model continues to adequately capture and quantify market risk and there was no breach of internal capital limits.

Distribution of daily trading earnings from trading units

The following diagram shows a histogram of daily observations per revenue bracket for the group's domestic trading units for the year ended 30 June 2023. Despite the periodic losses observed, the overall results are skewed towards profitability.

FRBSA distribution of daily earnings – frequency

Days in a period – number of observations per revenue (R million) bracket



Standardised approach: general and specific risk

The bank's London branch and the group's subsidiaries in broader Africa also have market risk exposure. The London branch is measured and managed on the same basis as the domestic portfolios for internal market risk measurement, with regulatory capital based on the regulatory standardised approach. The subsidiaries in broader Africa are also 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 using the Basel III standardised duration and the building block methodology. 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 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 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.

FRBSA's balance sheet is exposed to both interest rate and equity-specific risk. The bank's London branch and broader Africa subsidiaries are exposed to interest rate and foreign exchange (general) risk. Aldermore is exposed to foreign exchange (general) risk.

MR1: MARKET RISK UNDER THE STANDARDISED APPROACH

		RWA			
		FIRSTRAND		FRB*	
		As at 30 June			
	R million	**2023**	2022	**2023**	2022
	Outright products				
1.	Interest rate risk	**10 006**	7 904	**6 022**	4 370
	– Specific risk	**8 277**	5 327	**6 022**	4 370
	– General risk	**1 729**	2 577	**–**	–
2.	Equity risk	**476**	344	**358**	326
	– Specific risk	**464**	344	**358**	326
	– General risk	**12**	–	**–**	–
3.	Foreign exchange risk	**2 642**	1 220	**229**	547
	– Traded market risk	**1 235**	800	**–**	127
	– Non-traded market risk	**1 407**	420	**229**	420
4.	Commodity risk	**–**	–	**–**	–
9.	**Total**	**13 124**	9 468	**6 609**	5 243

* *FRB includes foreign branches.*

Market risk was contained within acceptable stress loss limits and effectively managed across the subsidiaries during the year.

Options are excluded from using IMA (rows 5 – 7 of the MR1 template are therefore excluded), (refer to *MR3: IMA values for traded market risk* template). Securitisation (row 8 of the MR1 template are therefore excluded) are capitalised under the securitisation framework (refer to the *Securitisation* section of this report).

The increase in interest rate-specific risk in the bank's portfolio was driven by increased positioning and revaluations of positions in the traded credit and flow trading business lines. The group's non-traded foreign exchange market risk increased off a low base and was largely driven by investment in short-dated securities.

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, RMB, WesBank and the Centre	• 12-month earnings sensitivity. • Economic sensitivity of open risk position.	Group Treasury	• FCC Risk Management • Group ALCCO
Subsidiaries in broader Africa and the bank's foreign branches	• 12-month earnings sensitivity. • Economic sensitivity of open risk position.	In-country management	• Group Treasury • FCC Risk Management • In-country ALCCOs • Broader Africa and foreign branch ALCCOs
Structural foreign exchange			
Group including Aldermore	• Total capital in a functional currency other than rand. • Impact of translation back to rand reflected in group's income statement. • Foreign currency translation reserve value.	Group Treasury	• Group ALCCO • FCC Risk Management

interest rate risk
in the banking book

Introduction and objectives

Interest rate risk in the banking book relates to the sensitivity of a bank's balance sheet 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, is the primary driver of IRRBB and results in the group's earnings being vulnerable to interest rate cuts, or conversely benefiting from interest rate hikes.

IRRBB is an inevitable risk associated with banking and can be an important source of profitability and shareholder value. FirstRand continues to manage IRRBB with the aim of protecting and enhancing the group's earnings and economic value through the cycle within approved risk limits and appetite levels.

Asset-liability management (ALM) strategies are in place to protect the group's net interest margin and endowment portfolio. These strategies are actively monitored along with macroeconomic factors affecting interest rates in the countries where the group operates.

Effect of interbank offered rate reform

LIBOR has been the reference interest underpinning trillions of dollars of loan and derivative contracts worldwide. The reform of these reference rates and their replacement with alternative risk-free rates (ARRs) has been a priority for global regulators. LIBOR cessation occurred on 31 December 2021 for pound, euro, yen and Swiss franc for all tenors, and for dollars for one-week and two-month tenors. Cessation for all other dollar LIBOR tenors occurred on 30 June 2023. The following ARRs replaced the following LIBORs which the group is exposed to:

- Dollar – Secured Overnight Financing Rate (SOFR)
- Pound – Sterling Overnight Index Average (SONIA)
- Euro – Euro short-term rate
- Yen – Tokyo overnight average rate
- Swiss franc – Swiss average rate overnight

The group has a steering committee consisting of key finance, risk, IT, treasury, legal and compliance personnel, as well as external advisors, which oversees the group's interbank offered rate reform transition. The committee developed a transition process for affected contracts and potential future contracts with the aim of minimising the potential disruption to business, mitigating operational and conduct risks, and possible financial losses.

Although there is currently no indication as to when the Johannesburg Interbank Average Rate (JIBAR) will be replaced, several proposed ARRs and calculation methodologies have been released by the SARB. The SARB has now identified a potential successor to JIBAR in the South African Rand Overnight Index Average Rate (ZARONIA). The new ZARONIA rate began publication for observation in August 2022, but no JIBAR cessation date has yet been announced. The group currently has a number of contracts, including derivatives, which reference JIBAR. The group's IBOR steering committee will apply the same transitioning policies to affected JIBAR contracts.

YEAR UNDER REVIEW AND FOCUS AREAS

Year under review	Risk management focus areas
• The South African repo rate increased by 350 bps between 1 July 2022 and 30 June 2023. • The group has made the necessary arrangements to cater for interbank offered rate reform.	• The BCBS, through the task force for IRRBB, has published more robust regulations for IRRBB. The regulations are effective from 1 January 2023 and the group has started reporting numbers to the PA on the basis of the new regulations. • In line with the group's house view and given current uncertainty about the level and direction of future interest rates, the group continues to actively manage endowment risk.

Organisational structure and governance

INTEREST RATE RISK IN THE BANKING BOOK GOVERNANCE STRUCTURE

Board-level oversight

RCCC

Provides oversight of the group's non-traded market risk profile.

Group ALCCO

- Provides oversight of asset and liability management functions and ALCCOs across the group. Monitors implementation of the ALM framework.
- The ALM framework (a subframework of the group risk management framework) prescribes standards, principles and policies for the effective management of the group's interest rate and foreign exchange rate risks in the banking book.

Broader Africa ALCCO

Oversight of IRRBB for subsidiaries in broader Africa and the bank's foreign branches.

Aldermore ALCCO

Oversight of IRRBB for Aldermore.

Executive management oversight

FRM executive committee

Strategic oversight of the group's ALM strategies and risk appetite.

Management structures

FCC risk management

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

Group Treasury

- Responsible for IRRBB on behalf of the group.
- Manages structural foreign exchange risk as a result of investment in foreign subsidiaries and branches.
- Provides oversight and reporting of group utilisation of foreign currency macroprudential and regulatory limits.
- IRRBB and structural foreign exchange risk are managed in line with the group's macroeconomic outlook as part of its ALM strategies.

Group Internal Audit

- Assesses the adequacy and effectiveness of interest rate risk in the banking book management controls.
- Identifies risk control shortcomings and recommends corrective actions.

Assessment and management

ALM risk appetite principles

The group's ALM principle is to protect and enhance the earnings of the group without adding to the natural risk position. Strategies should be countercyclical and add resilience to the group's balance sheet and risk profile, with an ALM-matching philosophy providing the best outcome over the life on a risk-adjusted basis. The intention is to match asset and liability profiles as much as possible to reduce the capital underpin required to manage volatility. Actions are taken with deep analysis and consideration of:

- economic value of savings – supply and demand of savings, rewarding savers appropriately;
- ALM modelling processes – detailed internal modelling of underlying deposit behaviour and the resultant risk-adjusted ALM profile; and
- investment process – a rigorous investment process, macro forum and investment committee, and executive management challenge.

The measurement techniques used to monitor IRRBB in FRBSA include net interest income (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 at gap intervals based on repricing characteristics.

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 treatment is applied 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.

Management of IRRBB in the subsidiaries in broader 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, NAV sensitivity 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 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 and the long-term economic value of the bank. 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.

During the year the group implemented the updated IRRBB methodology in line with the revised regulations, per *Directive 2 of 2023*, effective 1 January 2023. This methodology ensures that:

- client behaviour is considered in the management of IRRBB. Relevant behavioural adjustments that capture modelled customer behaviour (where they have legal discretion to repay or withdraw funds) are therefore incorporated into the calculation. This allows for a more effective assessment of IRRBB and aligns with how the group manages this risk;
- there is a more effective and transparent measure of the risk associated with specific currency exposures which are exposed to different interest rates, and different possible shocks; and
- there is a more explicit consideration of basis risk and credit-spread risk.

Sensitivity numbers reported as at 30 June 2023 have been calculated in accordance with revised regulations.

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 based on regulatory guidelines. 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 400 bps (2022: 200 bps) downward and upward shocks to interest rates.

Most of the group's NII sensitivity relates to the endowment book mismatch. The group's average endowment book was R354 billion for the year ended 30 June 2023. Total sensitivity is measured to rand interest rate moves in South Africa, and to local currency interest rate moves in the subsidiaries in broader Africa and the UK.

PROJECTED NII SENSITIVITY TO INTEREST RATE MOVEMENTS

	As at 30 June 2023*		
	Change in projected 12-month NII		
R million	**FRBSA**	**Subsidiaries in broader Africa and the bank's foreign branches**	**Group****
Downward 400 bps	**(2 196)**	**(1 056)**	**(3 252)**
Upward 400 bps	**1 933**	**822**	**2 755**
Downward 200 bps	**(1 279)**	**(537)**	**(1 816)**
Upward 200 bps	**1 160**	**411**	**1 571**

	As at 30 June 2022		
	Change in projected 12-month NII		
R million	FRBSA	Subsidiaries in broader Africa and the bank's foreign branches	Group**
Downward 200 bps	(277)	(754)	(1 031)
Upward 200 bps	102	561	663

* *2023 figures have been updated in accordance with revised regulations per Directive 2 of 2023 to reflect sensitivity to a 400 bps downward or upward shock to interest rates. The 200 bps NII sensitivity measures for 2023 are also included for comparative purposes. It should, however, be noted that direct comparison between years is not possible due to methodology changes in accordance with revised regulations.*

** *Excludes Aldermore.*

Assuming no change in the balance sheet and no management action in response to interest rate movements, an instantaneous, sustained parallel 400 bps decrease in interest rates would result in a reduction of R3 252 million projected in 12-month NII. A similar increase in interest rates would result in an increase of R2 755 million in projected 12-month NII.

Economic value of equity

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

The EVE shocks applied are based on regulatory guidelines. The table below shows the EVE sensitivity for the two most material shocks out of the six regulatory scenarios, i.e. instantaneous parallel 400 bps downward and upward shocks to interest rates.

The following table:

- highlights the sensitivity of banking book NAV as a percentage of Tier 1 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 TIER 1 CAPITAL

	FRBSA	**FirstRand#**
%	**As at 30 June 2023***	
Downward 400 bps	**16.01**	**9.74**
Upward 400 bps	**(13.31)**	**(8.22)**
Downward 200 bps	**8.01**	**4.87**
Upward 200 bps	**(6.65)**	**(4.11)**

	FRBSA	FirstRand#
%	As at 30 June 2022**	
Downward 200 bps	5.35	3.49
Upward 200 bps	(4.77)	(3.11)

* *2023 figures have been updated in accordance with revised regulations per Directive 2 of 2023 to reflect sensitivity to a 400 bps downward or upward shock to interest rates. The 200 bps NII sensitivity measures for 2023 are also included for comparative purposes. It should, however, be noted that direct comparison between years is not possible due to methodology changes in accordance with revised regulations.*

** *Ratio's calculated using total capital.*

\# *Excludes Aldermore.*

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 as a result of on-balance sheet transactions in a currency other than 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 the foreign entities with a functional currency other than rand is an unavoidable consequence of having offshore operations. It can be a source of both investor value through diversified earnings and 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 exposures and funding of the group's foreign entities. • Monitored the net open foreign currency position 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 on the group's foreign exchange exposure, and the management of that exposure resulting from banking book activities relative to the macroprudential limit utilisation, is performed by Group Treasury as the clearer of all group currency positions. Group Treasury is also responsible for the oversight of structural foreign exchange risk and reports to group ALCCO. Refer to the governance structure in the *Interest rate risk in the banking boo*k section of this report.

Assessment and management

The ability to transact on-balance sheet in a currency other than the home currency (rand) is governed by in-country macroprudential 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 sheet position is managed as part of market risk reporting (see the *Traded market risk* section of this report). 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 the *Liquidity risk and funding* section of this report). 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 feasible, given market constraints and within risk appetite levels. Where possible, hedge accounting is applied. Capital against any remaining open positions is held as part of the market risk in the trading book capital.

Net structural foreign exchange exposures and sensitivity

The following table provides an overview of the group's exposure to entities with functional currencies other than the 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 year under review.

NET STRUCTURAL FOREIGN EXCHANGE EXPOSURES

	As at 30 June 2023		As at 30 June 2022	
Functional currency	**Exposure R million**	**Impact on equity from 15% currency translation shock**	Exposure R million	Impact on equity from 15% currency translation shock
Botswana pula	**5 812**	**872**	4 951	743
US dollar	**13 429**	**2 014**	10 592	1 589
British pound sterling	**44 678**	**6 702**	34 186	5 128
Nigerian naira	**1 777**	**267**	2 433	365
Zambian kwacha	**2 251**	**338**	1 324	199
Mozambican metical	**1 067**	**160**	670	101
Indian rupee	**1 045**	**157**	838	126
Ghanaian cedi	**397**	**60**	1 126	169
Tanzanian shilling	**51**	**8**	(139)	(21)
Common Monetary Area (CMA) countries*	**7 346**	**1 102**	7 539	1 131
Total	**77 853**	**11 680**	63 520	9 530

* *Namibia, Eswatini and Lesotho are currently part of the CMA. Unless these countries exit the CMA, rand volatility will not impact their 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 or fund, or listed, unlisted or bespoke financial instrument.

Equity investment risk in the group arises primarily from equity exposures from private equity and investment banking activities in RMB, e.g. exposures arising from principal investments and structured lending including portfolio investments, as well as from principal investment exposures in FNB.

Other sources of equity investment risk in the banking book include operational investments held by WesBank, FNB, Aldermore and the Centre. 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 emanates from long-term and 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 business strategy, if the business case meets the group's internal return hurdle requirements, and the liquidity and fund structure 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 investments 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 in the fund.

YEAR UNDER REVIEW AND FOCUS AREAS

Year under review	Risk management focus areas
• The year was characterised by continued investment in the private equity portfolio. The quality of the investment portfolio remains acceptable and within risk appetite. • The private equity portfolio realised its investment in Studio 88. • The private equity portfolio held up well despite the challenging macroeconomic environment which has seen consumers come under pressure given rising inflation and interest rates. • The unrealised value of RMB private equity's portfolio as at 30 June 2023 was R5.7 billion (2022: R5.9 billion).	• Continue to engage more frequently with portfolio companies to navigate the challenging operating environment.

Organisational structure and governance

EQUITY INVESTMENT RISK GOVERNANCE STRUCTURE

Board-level oversight

RCCC

Provides governance and oversight of the group's equity investment risk portfolio and profile.

Large exposures committee

Approves senior debt instruments in investment structures as appropriate.

Market and investment risk committee

- Oversees risk management of equity investment risk exposures and profile across the group.
- Approves and monitors implementation of the investment risk frameworks.
- Approves and monitors investment risk appetite and limits.

Executive management oversight

C&I FRM executive committee

Approves and monitors risk appetite and risk limits for C&I investment activities.

RMB prudential investment committee

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

Management structures

Segment equity investment risk functions and committees

R&C management committees

Monitor and manage respective investments through the financial reporting process.

Investment risk oversight committee

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

Investment management governance forum

Monitors fund and seed investment activities approved by C&I FRM executive committee.

C&I RCCC

- Independent oversight of investment activities.
- Supported by CROs and deployed risk managers.

FirstRand Investment Management Holdings audit, risk and compliance committees

- Monitors Ashburton fund seeding activity.
- Reviews reports on investment positions.
- Reviews financial and risk profiles.

ERM

- Provides independent view of the investment risk profile.
- Oversees investment risk management practices and external reporting.
- Monitors implementation of the group's investment risk frameworks.
- Implements equity risk regulatory changes.

Group Internal Audit

- Assesses the adequacy and effectiveness of equity risk management controls.
- Identifies risk control shortcomings and recommends corrective actions.

Assessment and management

Equity investment risk appetite

The group aims to manage its private equity investment activities:

- with a suitably diversified private equity portfolio to achieve a sufficient level of predictable annuity earnings arising from equity accounted earnings and a sustainable level of through-the-cycle realisation income; and
- it also manages event risks from concentrated single-name investments or industry concentrations, as well as market dislocations or regulatory event risks across invested assets, such that the group does not become a negative earnings outlier relative to its peer group.

Quantitative investment risk limits are set annually in line with the group's risk appetite. This is supported by qualitative aspects, 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 equity exposure (carrying value) as a percentage of Tier 1 capital.

A key element of monitoring equity investment risk is the 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.

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 other investors. 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, biannual reviews are performed for each investment. Crucial aspects of these reviews, e.g. valuation estimates, are reviewed by internal peers.

Recording of exposures – accounting policies

All equity investments in scope of IFRS 9 are measured at fair value, with value changes recognised in profit or loss, except for those equity investments for which the entity has elected to present value changes in "other comprehensive income". There is no "cost measurement" exemption for unlisted equities.

If an equity investment is not held for trading, an entity can make an irrevocable election at initial recognition to measure it at fair value through other comprehensive income, with only dividend income recognised in profit or loss. Despite the fair value requirement for all equity investments, IFRS 9 contains guidance on when cost may be the best estimate of fair value and also when it might not be representative of fair value.

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

Equity investments in associates and joint ventures are included in the consolidated financial statements using the equity-accounting method. Associates are entities where the group holds an equity interest of between 20% and 50%, over which it has the ability to exercise significant influence, but 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. Series of standardised stress tests are used to assess potential losses under current market conditions, adverse market conditions, and severe stress/event risk conditions. 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 (300% for listed equities or 400% for unlisted equities) is applied with the scaling factor (where appropriate) for the quantification of regulatory capital. Under the Regulations, the risk weight applied to investments in financial, banking and insurance entities 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.

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.

For the quantification of regulatory capital, equity investments in funds are risk weighted using the LTA, MBA or FBA, depending on the criteria met by the fund. For LTA, the underlying exposures in the funds are risk weighted as if those exposures were directly held by the group. For MBA, funds are risk weighted according to the fund's mandate or information obtained from other relevant disclosures of the fund. Where the fund mandate further permits the use of leverage and/or derivatives, RWA is adjusted to take these into account. The FBA approach applies a 1 250% risk weighting, which is the maximum risk weighting permissible under either of the approaches.

Equity investment risk valuations

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

GROUP INVESTMENT RISK EXPOSURE, SENSITIVITY OF INVESTMENT RISK EXPOSURE AND EQUITY INVESTMENTS IN FUNDS

	As at June 2023			As at June 2022		
R million	**Publicly quoted investments**	**Privately held investments**	**Total**	Publicly quoted investments	Privately held investments	Total
Carrying value of investments	**17**	**11 671**	**11 688**	4	10 882	10 886
Per risk bucket						
250% – Basel III investments in financial entities	**–**	**5 679**	**5 679**	–	5 503	5 503
300% – Listed investments	**17**	**–**	**17**	4	–	4
400% – Unlisted investments	**–**	**5 992**	**5 992**	–	5 379	5 379
Equity investments in funds	**–**	**5 471**	**5 471**	–	2 011	2 011
Look-though approach	**–**	**89**	**89**	–	77	77
Mandate-based approach*	**–**	**5 320**	**5 320**		1 912	1 912
Fall-back approach	**–**	**62**	**62**	–	22	22
Latent revaluation gains not recognised on the balance sheet**	**–**	**1 974**	**1 974**	–	1 885	1 885
Fair value	**17**	**19 116**	**19 133**	4	14 778	14 782
Listed investment risk exposure included in the equity investment risk ETL process	**17**	**–**	**17**	4	–	4
Estimated sensitivity to 10% movement in market value on investment fair value of remaining investment balances			**369**			215
Cumulative gains realised from sale of positions during the year			**2 161**			173
Capital requirement#	**7**	**8 359**	**8 366**	2	5 921	5 923

* *The increase in exposure value and RWA compared to 2022 mostly relates to the consolidation of the FirstRand Empowerment Fund.*

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

The capital requirement was calculated at 13.3% (2022: 13%) of RWA. The minimum requirement excludes the confidential individual capital requirement (Pillar 2B). The difference to the BCBS base minimum (8%) relates to the buffer add-ons for Pillar 2A, CCyB, capital conservation and the D-SIB as prescribed in the Regulations.

FRBSA INVESTMENT RISK EXPOSURE, SENSITIVITY OF INVESTMENT RISK EXPOSURE AND EQUITY INVESTMENTS IN FUNDS

	As at June 2023			As at June 2022		
R million	**Publicly quoted investments**	**Privately held investments**	**Total**	Publicly quoted investments	Privately held investments	Total
Carrying value of investments	**16**	**575**	**591**	4	529	533
Per risk bucket						
250% – Basel III investments in financial entities	**–**	**150**	**150**	–	143	143
300% – Listed investments	**16**	**–**	**16**	4	–	4
400% – Unlisted investments	**–**	**425**	**425**	–	386	386
Equity investments in funds		**34**	**34**	–	47	47
Look-though approach	**–**	**–**	**–**	–	–	–
Mandate-based approach	**–**	**24**	**24**	–	25	25
Fall-back approach	**–**	**10**	**10**	–	22	22
Latent revaluation gains not recognised in the balance sheet*	**–**	**–**	**–**	–	–	–
Fair value	**16**	**609**	**625**	4	576	580
Listed investment risk exposure included in the equity investment risk ETL process	**17**	**–**	**17**	4	–	4
Estimated sensitivity to 10% movement in market value on investment fair value of remaining investment balances			**61**			58
Cumulative gains realised from sale of positions during the year			**16**			9
Capital requirement**	**7**	**312**	**319**	2	308	310

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

** *The capital requirement was calculated at 13%. (2022: 13%) of RWA and includes capital on investments in financial entities. The minimum requirement excludes the Pillar 2B capital requirement. The difference to the BCBS base minimum (8%) relates to the buffer add-ons for Pillar 2A, CCyB, capital conservation and the D-SIB as prescribed in the Regulations.*

CR10: GROUP EQUITY EXPOSURES USING SIMPLE RISK WEIGHT METHOD AND EQUITY INVESTMENTS IN FUNDS

	As at 30 June 2023				
R million	**On-balance sheet amount**	**Off-balance sheet amount**	**Risk weight**	**Exposure amount**	**RWA**
Categories					
Exchange-traded equity exposures*	**17**	**–**	**300%**	**17**	**54**
Private equity exposures*	**5 992**	**–**	**400%**	**5 992**	**25 405**
Subtotal	**6 009**	**–**		**6 009**	**25 459**
Equity investment in funds	**5 471**	**–**		**5 471**	**23 344**
Look-through approach	**89**	**–**	**346%**	**89**	**309**
Mandate-based approach**	**5 320**	**–**	**418%**	**5 320**	**22 254**
Fall-back approach	**62**	**–**	**1 250%**	**62**	**781**
Financial and insurance entities	**5 679**	**–**	**250%**	**5 679**	**14 196**
Total	**17 159**	**–**		**17 159**	**62 999**

	As at 30 June 2022				
R million	On-balance sheet amount	Off-balance sheet amount	Risk weight	Exposure amount	RWA
Categories					
Exchange-traded equity exposures*	4	–	300%	4	14
Private equity exposures*	5 379	–	400%	5 379	22 806
Subtotal	5 383	–		5 383	22 820
Equity investment in funds	2 011	–		2 011	8 980
Look-though approach	77	–	344%	77	266
Mandate-based approach	1 912	–	442%	1 912	8 444
Fall-back approach	22	–	1 250%	22	270
Financial and insurance entities	5 503	–	250%	5 503	13 759
Total	12 897	–		12 897	45 559

* *RWA includes 6% scaling factor.*

** *The increase in exposure value and RWA compared to 2022 mostly relates to the consolidation of the FirstRand Empowerment Fund.*

CR10: FRBSA* EQUITY EXPOSURES USING SIMPLE RISK WEIGHT METHOD AND EQUITY INVESTMENTS IN FUNDS

	As at 30 June 2023				
R million	**On-balance sheet amount**	**Off-balance sheet amount**	**Risk weight**	**Exposure amount**	**RWA**
Categories					
Exchange-traded equity exposures**	**16**	**–**	**300%**	**16**	**52**
Private equity exposures**	**425**		**400%**	**425**	**1 800**
Subtotal	**441**	**–**		**441**	**1 852**
Equity investment in funds	**34**	**–**		**34**	**226**
Look-though approach	**–**	**–**		**–**	**–**
Mandate-based appoach	**24**	**–**	**424%**	**24**	**102**
Fall-back approach	**10**	**–**	**1 250%**	**10**	**124**
Financial and insurance entities	**150**	**–**	**250%**	**150**	**376**
Total	**625**	**–**		**625**	**2 454**

	As at 30 June 2022				
R million	On-balance sheet amount	Off-balance sheet amount	Risk weight	Exposure amount	RWA
Categories					
Exchange-traded equity exposures**	4	—	300%	4	13
Private equity exposures**	386	—	400%	386	1 639
Subtotal	390	—		390	1 652
Equity investment in funds	47	—		47	374
Look-though approach	—	—		—	—
Mandate-based appoach	25	—	424%	25	104
Fall-back approach	22	—	1 250%	22	270
Financial and insurance entities	143	—	250%	143	357
Total	580	—		580	2 383

* *Excludes foreign branches.*
** *RWA includes 6% scaling factor.*

climate *risk*

Introduction and objectives

Climate risk, a subset of environmental risk, is defined as risk resulting from climate change, which causes an increase in physical risks (stemming from increased incidences of natural disasters and extreme weather events), transition risks (resulting from changes in laws, regulations, customer preferences or manufacturing processes) and third-party liability risks (due to non-compliance with climate regulations).

Climate risk is intrinsically linked to and amplifies other primary risk types. As such, climate considerations have been integrated with other key risks faced by the group. Climate change presents a complex set of interconnected outcomes, with financial and operational risks emanating from two primary channels:

- **Physical risk:** Over the long term, climate change will result in both acute events (e.g. increased severity and frequency of extreme weather phenomena) and chronic environmental changes (e.g. sustained higher temperatures), which may lead to operational and credit risks.
- **Transitional risk:** In the short term, changes in client behaviour, regulatory interventions, and investor preferences for less carbon-intensive assets and products may result in elevated market, reputational or legal risks for the group. Over the long term, transitioning to a less carbon-intensive economy will likely entail significant legal, technological and policy changes, which may be disruptive to established business models.

The group seeks to support clients in their mitigation and adaptation efforts to align with global and national net-zero commitments.

YEAR UNDER REVIEW AND FOCUS AREAS

Year under review	Risk management focus areas
• The group continued to advance its climate risk management and measurement capabilities in line with its five-year climate roadmap introduced in 2020. • Financed emissions are used as an important input to track alignment with the group's net-zero commitments. The coverage and quality of the attributed financed emission calculation has materially improved. Domestic and cross-border lending book exposures are now included in the calculation, with enriched quality of input data due to a higher proportion of client-disclosed emissions, and an improved Partnership for Carbon Accounting Financials (PCAF) emission estimate. • Refined the group's climate stress testing approach with more sophisticated, longer-term economic forecasts and more granular quantification of risk drivers and impacts. • Refined metrics used to track the group's alignment to pathways consistent with achieving net zero financed emissions by 2050, including activity intensity metrics per sector. • Conducted internal training on advanced aspects of climate risk management to enable targeted client engagement. • Improved the granularity of climate balance sheet exposures. • Obtained independent verification for scope 1, 2 and 3 carbon emissions for South African operations.	• Initiate the process to implement BCBS 239 requirements for climate risk. • Develop reporting in line with the ISSB's IFRS Sustainability Disclosure Standards. • Include broader Africa carbon emissions in independent review. • Develop more detailed interim targets and enhance the overall climate alignment pathway by 2050. • Create risk capital models and further enhance loan pricing to reflect the climate risk inherent in the loan. • Establish baseline metrics for historical periods to enable trend analysis and refine forward-looking metrics. • Digitise climate risk reporting and data consolidation processes.

Organisational structure and governance

The climate risk management framework delineates the roles and responsibilities of key stakeholders in business, support and control functions across the group. Ultimate oversight of climate-related risk rests with the board, which has delegated responsibility for various climate risk topics to appropriate board subcommittees and management committees across the group. The primary board committees overseeing climate risk matters are the RCCC and the FirstRand Setcom. RCCC is responsible for overseeing all climate risk related matters and Setcom oversees the execution of the group's climate strategy.

CLIMATE RISK GOVERNANCE STRUCTURE

Board-level oversight

Setcom

Oversees the group's climate strategy and impact on environmental and social stakeholders, and approves policies on climate change.

RCCC

Provides oversight of the group's climate risk profile, approves the climate risk framework and appetite.

Risk subcommittees

Support RCCC in its oversight of climate impact on credit, operational, market, investment, model, liquidity and other risks, as well as the impact on assets, liabilities and capital position.

Executive management oversight

Sustainability and governance executive committee

- Defines and approves climate change strategy and policies and oversees the strategic response to climate change.
- Approves the group's external climate reporting.

FRM executive committee

Manages resource allocation, pricing, funding, performance of assets and liabilities, and asset categorisation principles for climate-related risks and opportunities.

Management structures

Environmental risk committee

Approves ESRA policies and monitors the ESRA due diligence process, sensitivity industry policies and exclusions, nature and biodiversity risk, and water and waste management.

Climate risk committee

- Monitors the embedding of the climate risk framework and the consolidated climate risk profile against risk appetite.
- Tracks progress against the climate roadmap.

ERM and segment risk management

- Segment RCCCs
- Advanced analytics technical committee
- Segment sustainability executive committees
- Climate technical and data committee

Group Internal Audit

- Assesses the adequacy and effectiveness of climate risk processes and governance.
- Identifies risk control shortcomings and recommends corrective actions.

The board has put the necessary policies, systems and processes in place to enable delivery of the group's climate roadmap and ensure that the corresponding performance and progress are reflected in the group's external reporting. Responsibility for the group's consolidated climate risk profile resides with the climate risk committee. ERM cascades key climate risk measures and targets across the group, and tracks progress on climate risk commitments and appetite. As climate risk is a material cross-cutting risk, various subcommittees support the RCCC in its oversight of the impact of climate on credit, operational, market, equity investment, model and reputational risks.

Delivery against climate risk and opportunity management objectives has been incorporated into the performance scorecards for executive directors and prescribed officers, key environmental and social risk teams and teams focused on sustainable finance. A detailed analysis of climate rating calibration included in performance scorecards is included in the group's remuneration report at https://www.firstrand.co.za/investors/integrated-reporting-hub/governance/.

Refer to FirstRand's corporate governance report, which will be published in October 2023 on the group's website at https://www.firstrand.co.za/investors/integrated-reporting-hub/governance/, for further details relating to the group's climate governance and management committees, meeting frequency, and the responsibilities and focus areas of the various stakeholders.

Assessment and management

Materiality of climate risks and opportunities

FirstRand considers both its impact on the climate and climate impact on the group when assessing climate risks and opportunities. The group considers financial materiality (based on the impact of climate change on the group) and impact materiality (its impact on climate change). This double materiality approach is consistent with the JSE's Sustainability Disclosure Guidance. Climate risks and opportunities that have a material impact on broader society are likely to also impact FirstRand.

The group considers both quantitative and qualitative factors when assessing climate change materiality. The process for determination of materiality includes assessment by appropriately skilled and experienced financiers, environmental specialists and executives. In addition, it is informed by regular engagement with the board, investors, clients and industry associations.

KEY CONSIDERATIONS IN DETERMINATION OF MATERIALITY

Financial materiality		Impact materiality	
Climate risk impact on:	**Climate opportunities for:**	**Climate risk impacts are:**	**Climate opportunities offered by:**
• risk appetite relative to FirstRand's overall earnings volatility limits as well as risk type earnings volatility limits, prudential limits and internal triggers; • FirstRand's reputation; • capital adequacy and solvency outcomes in business-as-usual and stress scenarios; • access to and cost of funding; • business origination and retention; and • regulatory sanction.	• balance sheet and income growth; • business origination and retention; • access to new client markets and customer types; • mitigation of climate-related credit, market or operational risks; and • access to alternative funding pools.	• adverse impacts on people – quality of life and livelihoods; • contribution to greenhouse gas (GHG) emissions; • adverse impacts on the environment, including nature and biodiversity; and • negative implications for economic stability and sustainability.	• decarbonisation; • technology adoption; • adaptation initiatives; • climate change awareness; and • transparency and policy.

Climate risk appetite statement

FirstRand aims to manage its impact on the climate in a manner that is aligned with the Intergovernmental Panel on Climate Change (IPCC) aspirations of limiting global warming to at most 1.5°C above pre-industrial levels. This requires the group to commit to a reduction of its own emissions (scope 1 and 2) as well as the reduction of attributable emissions of the activities that it finances (scope 3). The group also aims to manage its balance sheet evolution and underlying portfolio construction in a way that it does not incur outsized physical, transition, legal or reputational risks on a single exposure or groupings of exposures.

ADHERENCE TO THE RISK APPETITE STATEMENT IS ENABLED BY:

1	Setting net-zero commitments and a roadmap of actions to support these ambitions for both the group's own as well as financed emissions in a way that is Paris aligned and takes account of just transition considerations.
2	Targeting net zero by 2030 for own emissions.
3	Providing suitable financial products and advice to support clients to transition and/or adapt to climate change in a just manner.
4	Actively managing exposure to transition and physical risk climate-sensitive sectors to levels where the group will not be an outlier relative to peers or be exposed to outsized physical, transition or legal risks.
5	Managing reputational risk which may arise from involvement with activities which are perceived to be harmful to the environment, through: • comprehensive due diligence for sensitive transactions; • articulation of clear policies outlining the group's approach to sensitive sectors and transactions; and • active stakeholder engagement.
6	Managing the mix of loans and advances relative to a targeted climate balance sheet.

The group's progress and exposures against its appetite statement for the year ending 30 June 2023 are outlined below.

FIRSTRAND'S CLIMATE APPETITE TRACKING

Own emissions	Financed emissions
Net zero by 2030 for South African operations ✓ 6% increase from 2022 emissions (SA) due to use of diesel generators as a result of increased loadshedding and refined data capturing. The group has accelerated its operational strategy and is on track to meet the 2030 target.	**Net zero by 2050** ✓ Initial overall pathway for FirstRand established ✓ Enhanced lending book baseline portfolio emissions

New thermal coal lending	Existing thermal coal lending	Oil and gas lending
No financing for new coal-fired power stations **No direct project finance provided to new coal mines from 2026** ✓ Within limit	**2% of group advances limited to 1.5% in 2026 and 1% in 2030** ✓ Within limit	**2.5% of group advances limit on upstream oil and gas** ✓ Within limit

Customer engagement	Sustainable and transition finance*
3 million retail clients in 2024 ✓ Top 200 corporate clients in 2023 ✓ Top 100 corporate clients in 2022	**R140 billion FY24 – FY26** ✓ R35 billion in 2023 ✓ R25 billion in 2022

** Transaction underwriting, arranging, lending and advisory.*

Processes for identifying and assessing climate-related risks

FirstRand's processes for identifying and assessing climate-related risks, and their potential size and scope, rely on both quantitative and qualitative tools. The group uses the following sources to identity areas of elevated physical and/or transition risk impact:

- expert input;
- academic literature;
- industry, national and global working groups; and
- reports from intergovernmental organisations, e.g. the International Energy Agency (IEA) and IPCC.

As outlined in the following table, the group also considers emerging legislation to assess possible impacts on its operations and clients' operations.

EMERGING LEGISLATION DEVELOPMENTS DURING THE YEAR

Climate Change Bill	The Climate Change Bill focuses on a low-carbon trajectory and aims to enforce the reduction of GHG emissions by businesses and individuals. The bill will have implications across the group's credit portfolios as well as on group operations.
Just energy transition investment plan (JET-IP)	The JET-IP outlines the South African government's comprehensive priority investment and the planned financing interventions required to achieve the country's decarbonisation commitments. The plan aims to streamline investments and efforts to finance a just transition. The final recommendations call for governance and oversight mechanisms for all transition funding and climate finance to track international commitments. It includes an impact response investment plan through the development of an adaptation and resilience investment plan focusing on issues such as water and food security, agriculture and tourism, amongst others. This will potentially lead to the full-scale adoption of the South African green taxonomy by South African banks, which may lead to future regulatory disclosure requirements in this regard.
PA guidance	Climate metrics – the PA released a first set of climate risk metrics for public consultation following the proposed regulatory guidance announced in 2022. This regulatory guidance will be aligned with international best practice, including TCFD recommendations, ISSB standards and the South African green taxonomy. The PA issued proposed guidance notes in August 2023 for public consultation on integrating climate-related risks into banks' governance, risk management frameworks and capital processes, as well as the expectation for climate-related disclosures for banks.
Carbon Tax Act, 2019	In the 2023 budget review, the Minister of Finance committed to achieving South Africa's Nationally Determined Contribution (NDC) to reduce GHG emissions. Effective 1 January 2023, the carbon tax rate increased from R144 to R159 per tonne of carbon dioxide equivalent. To ensure transparency and provide certainty, future adjustments to the tax rate are provided in the Carbon Tax Act, 2019, as outlined in the 2022 Taxation Laws Amendments Act. The first phase of the carbon tax, with substantial allowances and electricity price neutrality, will be extended to 31 December 2025. However, in line with South Africa's commitments at COP26, the carbon tax rate will be progressively increased every year to reach $26 per tonne. In the second phase, from 2026 onwards, annual increases in the carbon tax rate will be stepped up to reach at least $30 by 2030, and $100 by 2050. National Treasury is further considering stakeholder inputs on the possibility of a domestic market to trade tax credits created through carbon tax. The consultation will focus on the building blocks needed to ensure seamless trading, including the legal nature of carbon credits as a financial asset, trading and post-trade market architecture, licences for private carbon credit funds and carbon credit certification.
ISSB standard	Two ISSB standards were published in June 2023: • general sustainability disclosures, which apply the TCFD approach to other non-climate-related sustainability issues that are outside the climate scope; and • climate disclosures which apply the TCFD approach to climate-related considerations like physical and transition risks, climate resilience and GHG emissions. Whilst the new standards are available for voluntary application, regulators around the world are to integrate these standards into their own mandatory reporting programmes for annual reporting periods beginning on or after 1 January 2024.
FSB	In July 2022 the FSB published an interim report on supervisory and regulatory approaches to climate-related risks. It recommends that: • financial institutions should be required to report qualitative and quantitative climate risk information to supervisors; and • authorities should move to higher reporting standards and/or mandatory reporting requirements as the availability and quality of data and measurement methodologies improve.

FirstRand is working to incrementally improve its climate risk data to enable better measurement and management of this risk.

The group tracks its overall exposure to areas of elevated climate change risk by measuring the size of vulnerable sectors and portfolios in its lending book, and monitoring its operational footprint relative to physical risks.

Additional tools such as stress testing, scenario analysis, geo-mapping and operational risk models are used to quantify the possible impact of identified climate change risks. The process to identify, assess, measure and manage climate-related risks is implemented at three levels to ensure appropriate strategic and transactional coverage.

CLIMATE RISK IDENTIFICATION AND MANAGEMENT

	Processes for identifying and assessing climate-related risks	Processes for managing climate-related risks
Portfolio level	Across the entire portfolio (and for specific portfolios with a high level of vulnerability to climate risk, such as agriculture) stress testing and sensitivity and scenario analyses are used to assess the size, scope and impact of both physical and transition climate risks. Several pathways and assumptions are utilised to provide a range of possible outcomes, spanning from high physical risk scenarios (corresponding to a "hothouse" world) to high transition risk scenarios (corresponding to disorderly outcomes). Additional detail on stress testing and scenario analysis is provided on page 131.	Climate change risks are managed in line with the climate risk appetite framework, which provides thresholds for balance sheet exposures to climate risks and opportunities, outlines key performance indicators to track progress against the group's commitments, and includes specific limits on sensitive portfolios which negatively impact climate through high levels of emissions. The overall group climate change risk appetite is cascaded into the main operating businesses and segments.
Transaction level	The group utilises its environmental and social risk analysis (ESRA) transactional due diligence process to screen transactions for elevated environmental and climate risks. Refer to https://www.firstrand.co.za/investors/esg-resource-hub/policies-and-practices/ for more detail on the group's ESRA processes.	Internal ESRA specialists measure and monitor compliance with any environmental or social conditions included as part of the approval process for financing. This includes completing climate and biodiversity risk assessment questionnaires to establish client climate baseline and transition journeys, and formulating and agreeing on remediation plans in the event of non-compliance.
Own operations	Climate risk is included in operational risk scenarios, such as: • damage to physical assets, where physical risk is identified and considered; • clients, products and business practices; and • where transition risk is identified and considered. Further detail is provided on page 141.	Climate risk and carbon emissions are managed as part of business resilience planning and incorporated into the real estate management strategy. The overall aim is to reduce emissions, build climate resilience and increase the efficient use of resources. Additional detail on the group's operational emissions* is provided on page 141.

* *The analysis of the potential physical risks was performed in 2022 and there have been no material changes to the group's operations since then.*

Management of climate-related risks

As a material cross-cutting risk, the management and mitigation of environmental and climate-related risks are fully integrated into ERM. The management of climate-related risks is governed by the group risk management framework. This explicitly takes climate risk into account and supports climate-related frameworks and policies such as the environmental, social and climate risk management framework, FirstRand's climate policy, and its energy and fossil fuel financing policy. In addition, climate risk considerations are incorporated into risk-type-specific group frameworks and policies, such as the credit risk management framework, the investment risk framework and the business resilience management policy. FirstRand categorises its climate-related risks in the context of their impact on traditional banking industry risk categories, as depicted in the following table.

INTEGRATION OF CLIMATE RISK ACROSS KEY RISK TYPES

Risk type	Physical risk impact	Transition risk impact	Risk management activities
Credit and equity investment risk	Disruption of client operations and supply chains impacting clients' cash flows and ability to service debt, as well as physical property or infrastructure damage leading to decreased asset collateral values. This in turn would result in higher PDs and LGDs for affected assets. Physical risks are expected to be more material in certain portfolios, such as residential mortgages and SME agricultural lending.	Lower client cash flows due to higher transition costs and shifting customer demand, as well as the potential for stranded assets leading to higher PDs and LGDs for affected assets. Transition risks are expected to be more material in the group's corporate portfolios, particularly in energy-intensive sectors.	All material credit and equity exposures are screened at a transaction level as part of the ESRA process. This enables concentration assessment against the climate balance sheet. In addition, the credit management framework supports origination geared towards climate opportunities in line with the group's climate strategy. All credit scenarios are being enhanced to cater for climate-specific transition and physical risk impacts/events.
Sovereign risk	Transmitted through general macroeconomic policies and mechanisms, where sovereigns need to provide additional support to address acute or chronic events.	Changes in trade flows, international demand for exports or the pricing of imports may negatively impact sovereign credit ratings.	Sovereign risk is managed through credit exposure limits and included in climate risk concentration management processes. In addition, measures are in place to ensure climate risk transition impacts are accounted for in liquidity-adjusted risk metrics.
Market risk	Transmitted through general macroeconomic mechanisms or sector-specific impacts.	Differentiated asset and instrument pricing based on climate characteristics of the underlying security or issuer. This may lead to market dislocations, loss of trading liquidity or sudden pricing shifts.	Market risk limits and stress losses capture price risk related to transition risk impacts. This is managed in line with existing specific risk and general risk limits outlined in the market risk management framework.
Counterparty credit risk	Reduced ability by counterparties to honour obligations due to disruption of their operations or supply chains.	Reduced ability of counterparties to honour obligations due to the impacts of market dislocations due to transition risk shocks on their portfolios, collateral values and, ultimately, their credit quality.	Counterparty credit risk limits and exposures capture counterparties' price risk and credit quality deterioration related to climate transition risk impacts. These are managed in line with the counterparty credit risk management framework.

Risk type	Physical risk impact	Transition risk impact	Risk management activities
Operational risk	Disruption of own operations through damage to physical assets, supply chain interruptions or occupational health and safety events.	• Higher costs and possible operational disruptions due to the transition of own operations to lower-carbon infrastructure. • Legal risk due to changing regulations. • Third-party and outsourced risks should these parties' practices not meet set industry standards.	Integrate climate change risk considerations into various operational risk categories, e.g. resilience and premises. Monitor loss impacts from extreme weather events (own operations), and electricity, water and energy availability. These should be incorporated into business continuity processes and planning. Track progress on and facilitate the group's net-zero ambition for its own operations.
Funding and liquidity risk	Transmitted through general macroeconomic mechanisms or sector-specific impacts.	Higher funding rates and selective availability of liquidity based on the climate characteristics of assets funded.	The group's climate ambitions have been incorporated in to its FRM practices. The group's funds transfer pricing methodology facilitates intentional tilts towards opportunity sets and incorporates pricing for relevant risks. Stress testing and scenario analysis have been enhanced to consider climate risk scenarios.
Other risks	Business risks transmitted through general macroeconomic mechanisms.	Reputational and business risks due to changes in sentiment or legal challenges.	The group has implemented minimum requirements and controls to manage reputational risk related to client relationships/transactions. These are implemented through various screening and pricing mechanisms to support climate opportunities and account for relevant risks. In addition, the climate strategy is being embedded across the group to ensure appropriate business behaviour with respect to climate-related concerns.

Portfolio-level climate-related risk assessment – stress testing

FirstRand has adopted a multi-step stress testing process based on the BCBS's articulation of climate-related risk drivers and their transmission channels. This methodology allows for the assessment of both the general macroeconomic impact of climate change on exposures as well as portfolio-specific sector or regional impacts.

The group uses a set of long-term macro climate scenarios to assess the impact of climate change on its portfolios. These scenarios are analogous to those developed by the Network for Greening the Financial System (NGFS), but utilise the additional granularity available from the Oxford Economics integrated assessment model.

Scenarios are used to generate macroeconomic outputs with distinct underlying assumptions (a key consideration is whether 2050 global emissions targets will be met, the process undertaken to meet this aspiration, and the impact on transition and physical risk). The following scenarios have been generated for the group's South African portfolio.

LONG-TERM MACRO CLIMATE SCENARIOS AND MACROECONOMIC FACTOR TRANSMISSIONS

	Climate catastrophe	Divergent net zero	Delayed transition	Net zero by 2050
Scenario description	Governments fail to meet their policy pledges and the concentration of greenhouse gases in the atmosphere intensifies. Global temperatures warm to 2.1ºC by 2050, which slows productivity growth, particularly in relatively warm countries.	Governments accelerate climate action and implement stringent policies. The 2050 net-zero CO_2 emissions targets are met and warming is limited to 1.5ºC. The implementation of policies is not uniform across all sectors with even more stringent policies implemented in the transportation and services industries.	Climate policies to limit global warming are implemented relatively late. Efforts to reach ambitious climate goals therefore require stronger policy action. Difficulties in shifting towards renewables and aggressive/uncertain carbon taxes create substantial inflationary pressure and encourage greater energy efficiency.	Net-zero carbon emissions are achieved in 2050 through early policy action, technological advances, and global coordination. Global warming is limited to around 1.5ºC. The impact on the economy is modest, with higher investment helping to offset carbon taxes.
Real GDP growth	Strained geopolitical relations increase the focus on energy security. This intensifies protectionist and regionalist pressures, resulting in weak mitigation policies. Expanding fossil fuel demand and government failure to meet stated NDC commitments lead to higher emissions than in the baseline. Based on the linear relationship between cumulative carbon dioxide emissions and temperature, global warming rises to 2.1ºC by 2050. Additionally, tariff hikes are increased in key strategic sectors, increasing costs and reducing productive efficiency. Higher global warming causes convex physical damages that accelerate as the scenario progresses. As the world warms beyond baseline levels, physical damage accumulates and worsens the economic outlook over time. The economic impact is most pronounced in the southern hemisphere, where average temperatures are higher.	Policymakers induce a transition to low-carbon energy by increasing the price of carbon, and reducing energy intensity. Over time, electricity generation itself becomes cleaner as renewable and nuclear technologies develop. GDP continues to deteriorate as inflationary pressures build up to 2050, due to higher taxes and inelastic commodity price demand. Higher inflation eats into real incomes and profits. In the long run, the benefits of lower global temperatures have a positive global impact thanks to diminished environmental damages.	Governments do not ramp up efforts to limit global warming until 2030. Therefore, more stringent policy is required to achieve similar climate outcomes by 2050, resulting in greater economic impacts. Real GDP initially falls away from baseline levels as inflation eats into real incomes. In the delayed transition scenario, peak-to-trough is significantly larger than in the net zero by 2050 scenario due to sharper and more stringent carbon pricing.	Real GDP initially falls away from baseline levels as inflation eats into real incomes. In the latter half of the scenario – once a significant portion of the required transition has occurred and the price channel starts to fade – the productivity benefits of higher investment and lower temperatures materialise.

<table>
<tr><th></th><th>Climate catastrophe</th><th>Divergent net zero</th><th>Delayed transition</th><th>Net zero by 2050</th></tr>
<tr><td>Inflation</td><td>Rising input prices cause an increase in global inflation versus baseline levels.</td><td>Economies experience higher inflation as energy demand continues to rely on taxed fossil fuel capacity and the implementation of divergent policies results in a high burden to consumers.</td><td>Aggressive and uncertain carbon taxation policies cause substantial inflationary pressures, stranded assets and financial instability. Higher taxes, initially inelastic demand for fossil products and the associated sharp rise in electricity prices lead to significant inflationary pressures, which slowly fade as economies transition away from taxed products.</td><td>Inflation lifts at the start, but beyond 2050, carbon taxes will stop increasing in real terms and carbon emissions will be net zero, meaning inflation will return to baseline.</td></tr>
<tr><td>Policy rate</td><td>Central banks hike policy rates, but modestly. This helps to manage inflation expectations and bring inflation back to equilibrium over the horizon.</td><td colspan="3">Since inflation results from intentional and explicit policy measures, central banks look through the shock, managing inflation expectations through communication rather than direct rate hikes.</td></tr>
</table>

Macroeconomic outputs are then applied to the group's portfolios to determine the possible impact of climate change on profitability and capital adequacy over time. For climate-sensitive sectors the table below provides an indication of the possible severity of the impact to 2050, considering each scenario, and incorporating expert opinion. The rationale for the sensitivity assigned to each sector is provided on the next page in the *Transition risk – high and elevated risk sectors* table.

IMPACT OF CLIMATE CHANGE ON PROFITABILITY AND CAPITAL ADEQUACY

Sector	Climate catastrophe	Divergent net zero	Delayed transition	Net zero by 2050
Coal	Notable impact	Severe impact	Severe impact	Very severe impact
Electricity utilities	Notable impact	Material impact	Very severe impact	Material impact
Oil	Notable impact	Material impact	Very severe impact	Very severe impact
Synthetic fuels, steel and cement	Moderate impact	Notable impact	Severe impact	Notable impact
Transport, aviation and vehicle finance	Limited impact	Limited impact	Notable impact	Moderate impact
Real estate (vulnerable to transition risk)	Moderate impact	Moderate impact	Material impact	Moderate impact
Natural gas	Limited impact	Limited impact	Material impact	Notable impact

- Limited impact
- Moderate impact
- Notable impact
- Material impact
- Severe impact
- Very severe impact

For the sectors considered in table above, the most material adverse impact is likely to be observed if a delayed transition takes place. The delayed transition scenario forecasts abrupt and aggressive policy action which may result in stranded assets and financial instability within industries with high emissions intensity profiles. As a result, the ability of clients within those sectors to meet their financial obligations is expected to be compromised, and collateral values are projected to fall. This impact on customer cashflows and credit quality is likely to result in higher credit losses for the group, lower profitability and an increase in RWA density. It is worth noting that under the delayed transition scenario, by definition, the disused impacts are only likely to materialise between 2040 and 2050.

The PA plans to undertake an inaugural standalone climate risk stress test (CRST) in 2024, which builds on the lessons learned from the 2021 CSST climate add-on. The aim of the CRST is to provide the PA with an assessment of the vulnerabilities within the South African banking system, as well as to evaluate the capacity of SIFIs to absorb climate-related shocks. Consequently, the PA has published a climate risk discussion paper and required SIFIs to review and provide feedback on the design of the exercise. The PA envisages assessing the impact of both transition and physical risk (quantitative assessment on credit and market risk) by means of three long-term climate scenarios based on NGFS scenarios supported by a qualitative questionnaire on operational and liquidity risk.

Climate-sensitive sectors

The baseline decarbonisation pathway of the group's scope 3 financed emissions largely depends on South Africa's ability to transition electricity generation away from fossil fuels. The group defines climate-sensitive sectors as those that either contribute disproportionally towards climate change and are therefore subject to high transition risk, or sectors where climate change is expected to have a severe impact on the portfolio through physical risk events. The group is particularly focused on measuring and managing its exposure to these sectors. The group references three time horizons to better assess climate risks and opportunities:

CLIMATE-RISK TIME HORIZONS

Long-term horizon (LT)	Period to 2050, in line with the Paris Agreement timeframes.
Medium-term horizon (MT)	Period to 2030, in line with South Africa's planned carbon trajectory, contained in the country's low-emissions development strategy.
Short-term horizon (ST)	One to five years, in line with the group's average behavioural book length and financial planning horizon.

Climate risk drivers have several distinct features, including unprecedented frequencies, speeds and intensities and the non-linear form that these risks are expected to take. Together, these factors give rise to a material level of uncertainty as to how climate risk drivers and their impacts will evolve from perceived physical and transition risk. The following table provides an outline of the rationale for classification of sectors as high and/or elevated risk for transition and physical risk.

TRANSITION RISK – HIGH AND ELEVATED RISK SECTORS

Rationale for high transition risk sectors		**Horizon**
Coal	Due to its very high emissions intensity, reduced demand and investor appetite are already apparent. Policy shifts are likely to accelerate this trend.	ST
Electrical utilities	The shift in generation capacity from fossil fuels to renewable energy will require significant capital expenditure.	MT
Oil	Policy pressure to reduce emissions, exposure to carbon taxes and declining demand for fossil fuels will negatively impact the sector.	MT
Synthetic fuels, steel and cement	These sectors have a high emissions intensity due to their underlying industrial processes, which will require technological advances to abate.	MT – LT
Rationale for elevated transition risk sectors		**Horizon**
Transport, aviation and vehicle finance	High levels of capital expenditure will be required to transition away from fossil fuel powered transport in response to more stringent emissions regulations.	MT – LT
Real estate (vulnerable to transition risk)	Real estate valuations in regions dependent on high transition risk industries, such as coal, are likely to decline. Default rates are also likely to increase.	MT – LT
Natural gas	In the short to medium term, natural gas is likely to play a role as a transition fuel, however, in the long term demand will fall due to its emissions profile.	LT

PHYSICAL RISK – HIGH AND ELEVATED RISK SECTORS

Rationale for high and elevated physical risk sectors		**Horizon**
Agriculture	Changes to rainfall patterns (causing increased flooding or water shortages), as well as rising temperatures, will affect crop yields.	MT – LT
Real estate* (vulnerable to physical risk)	An increase in the frequency of natural disasters, in particular wildfires and flooding, will negatively impact real estate valuations in vulnerable areas.	MT – LT

* *Vulnerable areas have been defined using Council for Scientific and Industrial Research (CSIR) research which combines topographic data, catchment characteristics and rainfall data to determine the risk of flooding, wildfires and drought.*

Metrics and targets

Transition risk

The table below provides an analysis of FirstRand's exposure to sectors that face high and elevated levels of transition risk.

GROUP EXPOSURE TO HIGH AND ELEVATED LEVELS OF TRANSITION RISK

	As at 30 June 2023				As at 30 June 2022			
Sector	**Drawn exposure (R million)**	**% of total group advances**	**Average rating***	**Average maturity (years)**	Drawn exposure (R million)	% of total group advances	Average rating	Average maturity (years)
High transition risk								
Upstream oil and gas**	**7 756**	**0.5%**	**B+(upper)**	**3.8**	2 902	0.2%	BB-	2.7
Thermal coal mines#	**1 269**	**0.1%**	**BB-(upper)**	**2.1**	1 527	0.1%	B+(upper)	2.1
Thermal coal power†	**3 389**	**0.2%**	**B+**	**2.2**	5 752	0.4%	B+	2.9
Chemicals and synthetic fuels	**2 125**	**0.1%**	**BB–**	**1.6**	1 695	0.1%	BB-(upper)	1.0
Steel – primary manufacturers	**619**	**0.0%**	**B(upper)**	**1.1**	–	–	–	–
Cement	**1 952**	**0.1%**	**CCC**	**0.7**	2 363	0.2%	B	1.5
Total high transition risk	**17 110**	**1.0%**			14 239	1.0%		
Elevated transition risk								
Downstream oil and gas‡	**10 528**	**0.7%**	**BB-**	**1.0**	13 961	1.0%	BB	0.9
Midstream oil and gas	**551**	**0.0%**	**BB(upper)**	**0.8**	769	0.1%	B (upper)	1.0
Electricity utilities^	**3 159**	**0.2%**	**CCC**	**3.4**	3 003	0.2%	B-	3.7
Natural gas	**2 251**	**0.1%**	**BB-(upper)**	**4.7**	1 557	0.1%	BB(upper)	7.6
Transport and aviation	**6 752**	**0.4%**	**B**	**2.1**	4 967	0.4%	B+	2.4
Vehicle finance	**162 991**	**10.8%**	**–**	**–**	144 482	10.5%	–	–
Vulnerable residential real estate◊	**8 132**	**0.5%**	**–**	**–**	7 881	0.5%	–	–
Total elevated transition risk	**194 364**	**12.7%**			176 620	12.8%		

* *Internally determined, relates to average credit rating of portfolio of assets. Average credit ratings are not determined for individuals.*

** *New exposures to existing clients.*

Defined as companies where the consolidated revenue derived from thermal coal mining exceeds 30% of total revenues.

† *Change in exposure reflects the partial settlement of existing facilities.*

‡ *Changes in exposure are driven by the partial settlement of existing facilities. (Upstream oil and gas production is defined as the extraction or production of raw materials. Downstream oil and gas refer to companies closer to the end-user or consumer value chain.)*

^ *Electricity utilities is the aggregation of gas-fired electricity and fuel-powered generation.*

◊ *Vulnerable residential estate refers to property located in areas that are economically reliant on fossil fuel sectors. Calculated based on portfolio sample.*

Physical risk

The table below provides an analysis of the group's exposure to sectors that face high and elevated levels of physical risk in South Africa.

GROUP'S SA EXPOSURE TO SECTORS THAT FACE HIGH AND ELEVATED PHYSICAL RISK

	As at 30 June 2023		As at 30 June 2022	
Sector	**Drawn exposure (R million)**	**% of total group advances**	Drawn exposure (R million)	% of total group advances
High physical risk				
Corporate agriculture	**6 219**	**0.4%**	4 440	0.3%
Commercial agriculture	**41 584**	**2.8%**	38 611	2.8%
High flood risk real estate*,**	**2 104**	**0.1%**	2 167	0.2%
High fire risk real estate**	**52**	**0.0%**	60	0.0%
Total high physical risk	**49 959**	**3.3%**	45 278	3.3%
Elevated physical risk				
Elevated flood risk residential real estate **	**22 109**	**1.5%**	19 382	1.4%
Elevated fire risk residential real estate**	**482**	**0.0%**	380	0.0%
Total elevated physical risk#	**22 591**	**1.5%**	19 762	1.4%

* *Based on the flood risk hazard index developed by the Council for Scientific and Industrial Research (CSIR) that combines topographic data, catchment characteristics and rainfall data to determine the risk of flooding.*

** *Calculated based on portfolio sample.*

Prior period numbers have been updated to reflect improvements and enhancements in risk aggregation data.

Financed emissions

Methodology

As part of its efforts to manage climate-related risks and impacts, FirstRand has committed to assessing financed carbon emissions in its portfolio. The group uses the total absolute financed emissions metric to track whether its emissions are aligned with its intended role of contributing to the achievement of NDCs in the jurisdictions in which it operates.

The group also uses financed emissions intensity metrics to assess whether, on average over a long-term horizon, financed emissions are trending in line with FirstRand's net-zero commitment. The financed emissions intensity metric is useful because it corrects for loan growth in the portfolio over time. In addition, for certain sensitive sectors, such as oil and gas, activity emissions intensity is utilised internally to monitor emissions relative to benchmarks.

The methodologies used to quantify financed emissions are continually refined to incorporate more granular data. During the 2023 financial year, as part of RMB's engagement with large corporate clients, the financed emissions approach was refined through directly sourcing client emissions as opposed to estimating them using sectoral economic-based emissions factors.

The revised approach includes the creation of key financed emissions accounting principles, which take into consideration the GHG emission data per client from their most recent publicly available information, rather than using proxy data such as PCAF emission factors. In addition to clients' disclosed emissions, PCAF emissions factors were used to calculate absolute financed emissions as at 30 June 2023.

Overview of PCAF methodology

PCAF is a global partnership of financial institutions working together to develop a standardised approach to assess and disclose the GHG emissions associated with loans and investments. The PCAF methodology aligns to the *Greenhouse Gas Protocol Corporate Value Chain (Scope 3) Accounting and Reporting Standard* by looking at scope 3 category 15 (investments) for financial institutions.

When calculating financed emissions, the group uses client-level activity data, where available, to determine emissions, and economic-based emissions intensity factors where data is not available. Over time, the group aims to increase the proportion of client/asset-level emissions data in its calculations to improve accuracy and clearly reflect decarbonisation efforts. The group used a combination of these two approaches for its 2023 emissions calculation, i.e. applying PCAF economy-based emissions intensity factors, where client-specific information is unknown or unobtainable, and using client emissions data based on energy, GHG emissions and production measurement as a basis where this data could be obtained.

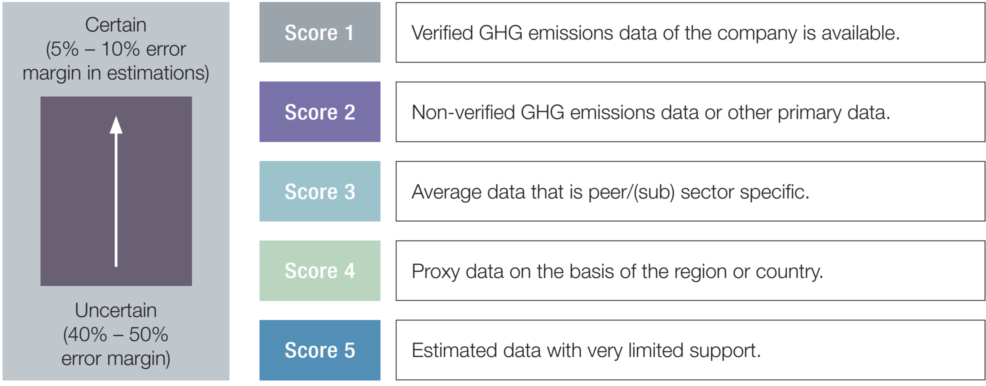
When comparing 2022 and 2023 figures, a decline in financed emissions is observed due to the refinement of the calculation methodology and greater availability of client-level data. This is not an indication of transition or a reduction in emissions.

Financed emissions methodologies and calculations are continually being refined. The group is working towards improving data quality, specifically:

- the quality and granularity of loan book data used in calculations; and
- refining activity data and emissions factors.

Key regional challenges experienced to date relate to the unavailability of South African emissions intensities and factors for certain asset classes. As such, estimates and assumptions have been used in calculations. As data quality, granularity and accuracy advance, combined with methodology improvements, the accuracy and quality of the group's calculations will increase. The PCAF data quality score provides the user with a confidence level of emissions accuracy.

PCAF DATA QUALITY SCORE



PCAF(2022). The Global GHG Accounting and Reporting Standard Part A: Financed Emissions. Second Edition.

The group discloses financed emissions in tonnes of carbon dioxide equivalent (tCO_2e) for main asset classes in its portfolio. FirstRand also discloses financed emissions intensity for each portfolio in tonnes of carbon dioxide per million rand financed (tCO_2e/Rm). The table below provides a view of financed emissions (i.e. underlying scope 1 and 2 emissions of financed entities) attributable to the group's South African advances portfolio, based on the proportional amount of funding provided by the group relative to the total asset or company value. Financed emissions have been determined for core lending advances excluding UK operations and broader Africa.

FINANCED EMISSIONS

	As at 30 June 2023			
	Advances		Financed emissions	
	30 June 2023 (R million)	% of total SA core advances	Financed emissions tCO_2e	Emissions intensity (tcO_2e/Rm)
SA retail	**463 041**	**44.7%**	**6 166 214**	**13.3**
Residential mortgages	**259 635**	**25.1%**	**5 022 442**	**19.3**
Wesbank VAF	**108 779**	**10.5%**	**1 143 772**	**10.5**
Retail unsecured	**94 627**	**9.1%**	**–**	
FNB commercial	**116 448**	**11.2%**	**3 980 154**	**34.2**
Agriculture	**41 584**	**4.0%**	**2 534 823**	**61.0**
Commercial property finance	**33 016**	**3.2%**	**1 253 456**	**38.0**
Other commercial exposures	**41 848**	**4.0%**	**191 875**	**4.6**
WesBank corporate*	**54 212**	**5.3%**	**565 074**	**10.4**
SA retail and commercial	**633 701**	**61.2%**	**10 711 442**	**16.9**
Corporate and investment banking**				
Upstream oil and gas#	**7 756**	**0.7%**	**247 598**	**31.9**
Thermal coal – coal mining and thermal coal power	**4 658**	**0.4%**	**938 945**	**201.6**
Coal mining	**1 269**	**0.1%**	**62 329**	**49.1**
Thermal coal power	**3 389**	**0.3%**	**876 616**	**258.7**
Other high and elevated transition risk sectors	**27 937**	**2.7%**	**733 613**	**26.3**
Real estate investment banking	**82 445**	**8.0%**	**62 802**	**0.8**
Other corporates	**279 712**	**27.0%**	**1 819 168**	**6.5**
Corporate and investment banking	**402 508**	**38.8%**	**3 802 126**	**9.4**
Total core lending advances (excluding UK operations and broader Africa)	**1 036 209**	**100%**	**14 513 568**	**14.0**
Undrawn committed facilities – upstream oil and gas and thermal coal (coal mining and thermal coal power)	6 709		429 830	

* *WesBank corporate includes asset-based finance (ABF) and fleet management leasing (FML).*

** *Includes South African and cross border corporate, Group Treasury and HQLA advances but excludes advances originated in broader Africa subsidiaries.*

New exposures to existing clients.

FINANCED EMISSIONS continued

	As at 30 June 2022			
	Advances		Financed emissions	
	30 June 2023 (R million)	% of total SA core advances	Financed emissions tCO_2e	Emissions intensity (tCO_2e/Rm)
SA retail	429 462	46.8%	4 628 049	10.8
Residential mortgages	242 757	26.5%	3 446 548	14.2
Wesbank VAF	99 354	10.8%	1 181 501	11.9
Retail unsecured	87 351	9.5%	–	
FNB commercial	107 823	11.7%	2 191 092	20.3
Agriculture	38 612	4.2%	524 065	13.6
Commercial property finance	30 241	3.3%	1 401 672	46.4
Other commercial exposures	38 970	4.2%	265 355	6.8
WesBank corporate*	45 128	4.9%	390 412	8.7
SA retail and commercial	582 413	63.4%	7 209 553	12.4
Corporate and investment banking**				
Upstream oil and gas#	2 902	0.3%	220 919	76.1
Thermal coal – coal mining and thermal coal power	7 173	0.8%	1 661 819	231.7
Coal mining	1 422	0.2%	58 506	41.2
Thermal coal power	5 751	0.6%	1 603 313	278.8
Other high and elevated transition risk sectors	28 421	3.1%	1 459 010	51.3
Real estate investment banking	70 070	7.6%	59 140	0.8
Other corporates	227 280	24.8%	2 640 766	11.6
Corporate and investment banking	335 846	36.6%	6 041 654	18.0
Total core lending advances (excluding UK operations and broader Africa)	918 259	100%	13 251 207	14.4
Undrawn committed facilities – upstream oil and gas and thermal coal (coal mining and thermal coal power)	2 655		37 828	

* *WesBank corporate includes ABF and FML.*

** *Includes South African and cross border corporate, Group Treasury and HQLA advances but excludes advances originated in broader Africa subsidiaries*

\# *New exposures to existing clients.*

Year-on-year movements

- The increase in residential mortgages financed emissions and emissions intensity was driven by the increase in data coverage from 65%, as reported in the group's 2022 TCFD report, to 100%.
- The increase in agriculture financed emissions and emissions intensity is driven by the improved data quality and delineation of scope 1, 2 and 3 emissions.
- The increase in upstream oil and gas financed emissions was driven by increased exposures and the reduction in emissions intensity was driven by refinements to data and methodology applied, as well as a change in the underlying portfolio mix.
- The increase in coal mining financed emissions and emissions intensity was driven by refinements to the methodology.
- The reductions in thermal coal power financed emissions and emissions intensity were largely driven by the improvement of data, refinements to the methodology and reduction in exposures.
- The reduction in other high and elevated transition risk sectors financed emissions and emissions intensity were largely driven by the increase in the direct sourcing of data from clients instead of estimates and refinements to the methodology.
- The increase in real estate investment banking financed emissions was driven by increased exposures. The emissions intensity has remained flat.
- The reduction in other corporates' financed emissions and emissions intensity were largely driven by the improvement of data and refinements to the methodology.

Portfolio insights

A detailed comparative analysis of calculated emissions across the portfolio is provided below. The following financed emissions tables indicate which methodology is applied, including calculation enhancements and assumptions, and provides commentary on the financed emissions output, data coverage and data quality. The calculation methodology and data sources differ for each portfolio and are summarised in the tables.

RESIDENTIAL MORTGAGES

	30 June 2023	30 June 2022	**Commentary**
Advances (R million)	**259 635**	242 757	The increase in financed emissions and emissions intensity was driven by the increase in data coverage from 65% to 100%. On a like-for-like basis, with the expanded scope, the 30 June 2022 financed emissions would have been 5 215 293 tCO_2e. The resultant comparative reduction in financed emissions was due to a reduction in the Eskom emissions factor applied, and refinements to the methodology.
Financed emissions (tCO_2e)	**5 022 442**	3 446 548	
Emissions intensity (tCO_2e/Rm)	**19.3**	14.2	
Calculation enhancements	The main enhancement is the increase in data coverage from 65% to 100%.		
Data coverage*	**100%**	65%	Financed emissions for the SA retail residential mortgage portfolio were calculated using loan book data and information from the valuation roll. Data coverage has been increased from 65% to 100% by supplementing gaps in valuation roll data through the use of extrapolation techniques.
Data quality score,# (PCAF score)**	**4**	4	To calculate financed emissions, the energy consumption of buildings was estimated using information on renewable energy assets such as solar panels, the age of the property, and building sizes. This use of estimates results in a PCAF data quality score of 4 (option 2b). Going forward, the group will continue sourcing and refining energy intensity data to enhance the accuracy of the calculation.

* *Data coverage outlines the percentage of the book that financed emissions is quantified for.*

** *For property finance a score of 4 (Option 2b) is allocated when building energy consumption is estimated per floor area based on building type, location-specific statistical data, and the floor area.*

\# *The PCAF estimation option reflects the methodology used to estimate financed emissions. The options vary per asset class.*

WESBANK VAF

	30 June 2023	30 June 2022	**Commentary**
Advances (R million)	**108 779**	99 354	Financed emissions for the WesBank VAF portfolio has remained relatively constant year-on-year. This reflects stability in the number of vehicles financed. The change in emissions intensity was mainly driven by inflationary growth in the cost of vehicles.
Financed emissions (tCO_2e)	**1 143 772**	1 181 501	
Emissions intensity (tCO_2e/Rm)	**10.5**	11.9	
Calculation enhancements	No specific enhancements were made.		
Data coverage	**100%**	100%	WesBank VAF loan portfolio.
Data quality score (PCAF score)*	**5**	5	Vehicle emissions were calculated using vehicle efficiency, fuel type and estimated distance travelled data derived from the PCAF emissions database. This use of regional estimates resulted in a PCAF data quality score of 5 (option 3b). Going forward, deeper analysis will be conducted into specific emissions factors for individual vehicle makes and models, where available.

* *For vehicle finance a score of 5 (option 3b) was allocated when emissions were calculated using vehicle efficiency, fuel type and estimated distance travelled data derived from regional statistics.*

AGRICULTURE

	30 June 2023	30 June 2022	**Commentary**
Advances (R million)	**41 584**	38 612	The 30 June 2023 financed emissions have captured improved data quality and delineation of scope 1,2 and 3 emissions to comprehensively reflect the emissions profile. As a result, financed emissions and emissions intensity has increased.
Financed emissions (tCO_2e)	**2 534 823**	524 065	
Emissions intensity (tCO_2e/Rm)	**61.0**	13.6	
Calculation enhancements	No specific enhancements were made.		
Data coverage	**90%**	90%	Only primary agricultural activities were included in the analysis. Going forward this will be expanded to include secondary agricultural activities (which mainly relate to processing and production activities and services).
Data quality score*	**4**	4	Details on clients' specific farming practices and the associated emissions are not available. Financed emissions were therefore modelled at commodity-type level using specific South African asset-based emissions intensity factors for each commodity, obtained from PCAF's emissions database. This use of asset-based factors resulted in a PCAF data quality score of 4.

* *For production/revenue data, a score of 4 is allocated based on the use of externally published data or use of revenue data to estimate production, for example using the PCAF emissions database.*

COMMERCIAL PROPERTY FINANCE

	30 June 2023	30 June 2022	**Commentary**
Advances (R million)	**33 016**	30 241	The reduction in emissions intensity was attributable to a reduction in the Eskom emissions factor applied as well as refinements to the methodology.
Financed emissions (tCO_2e)	**1 253 456**	1 401 672	
Emissions intensity (tCO_2e/Rm)	**38.0**	46.4	
Calculation enhancements	No specific enhancements were made.		
Data coverage	100%	100%	FNB South African commercial loan book.
Data quality score*	**4**	4	Data from the MSCI South Africa Green Annual Property Index was used to estimate average energy consumption per square metre for different property types. This data was supplemented by other publicly available emissions intensity data for South African commercial building types. This use of estimates resulted in a PCAF data quality score of 4 (option 2b).

* *For property finance a score of 4 (option 2b) was allocated where building energy consumption was estimated per floor area based on building type, location-specific statistical data and floor area.*

OTHER COMMERCIAL EXPOSURES

	30 June 2023	30 June 2022	**Commentary**
Advances (R million)	**41 848**	38 970	The reduction in financed emissions and emissions intensity was driven by exchange rate fluctuations.
Financed emissions (tCO_2e)	**191 875**	265 355	
Emissions intensity (tCO_2e/Rm)	**4.6**	6.8	
Calculation enhancements	No specific enhancements were made.		
Data coverage	100%	100%	FNB commercial loan book excluding commercial property finance and agriculture.
Data quality score (PCAF score)*	**5**	5	PCAF emissions factors relative to a company's assets were used to estimate emissions. These factors were sector and country specific, differentiating between high-intensity sectors, like energy generation from thermal coal, and lower-intensity sectors. This use of sector-based emissions factors resulted in a PCAF data quality score of 5 (option 3b).

* *For commercial finance a score of 5 (option 3b) was allocated when emissions are calculated using sector-specific factors per unit of asset.*

WESBANK CORPORATE

	30 June 2023	30 June 2022	**Commentary**
Advances (R million)	**54 212**	45 128	The increase in financed emissions and emissions intensity was driven by the increase in exposures.
Financed emissions (tCO_2e)	**565 074**	390 412	
Emissions intensity (tCO_2e/Rm)	**10.4**	8.7	
Calculation enhancements	No specific enhancements were made.		
Data coverage	100%	100%	100% South Africa fleet and asset-based finance.
Data quality score*	**5**	5	Vehicle emissions were calculated using vehicle efficiency, fuel type and estimated distance travelled data. This use of regional estimates resulted in a PCAF data quality score of 5 (option 3b). Going forward, deeper analysis will be conducted into specific emissions factors for individual vehicle makes and models where available.

* *For vehicle finance a score of 5 (Option 3b) was allocated when emissions were calculated using vehicle efficiency, fuel type and estimated distance travelled data derived from regional statistics.*

RMB CORPORATE AND INVESTMENT BANKING

During the year under review, RMB's carbon accounting specialists performed an analysis of the financed emissions calculation methodology, resulting in a refinement of the input data used to calculate financed emissions. The GHG emissions data sourcing hierarchy was refined to include emissions based on client physical activity data, and expanded to incorporate a greater proportion of client reported emissions. As a result, 68% of the portfolio's financed emissions reference individually sourced GHG emissions. The development of this methodology is aligned with the group's commitment to improve data quality for financed emissions.

The table below outlines financed emissions attributable to RMB's core advances. No financed emissions were calculated for exposures to banks and national governments.

Methodology	Financed emissions (tCO_2e)	%
Client sourced*	**2 604 302**	**68%**
External databases	**14 469**	**0%**
PCAF	**1 183 356**	**32%**
Total	**3 802 127**	**100%**

* *As noted in the group's 2022 TCFD report, approximately 40% of RMB exposures were financed emissions directly sourced from clients in 2022.*

The financed emissions output for RMB, taking into consideration the refined inputs, is summarised in the table below.

	30 June 2023	30 June 2022	Commentary
Advances (R million)	**402 508**	335 846	The reduction in financed emissions and emissions intensity was driven by RMB's exposure mix and changes in methodology. Of the 37% reduction in financed emissions, approximately 61% of the change is attributable to exposure mix change and 39% to the refinement in methodology.
Financed emissions (tCO_2e)	**3 802 127**	6 041 654	
Emissions intensity (tCO_2e/Rm)	**9.4**	18.0	
Calculation enhancements	The GHG emissions data sourcing hierarchy has been refined to include emissions based on client physical activity data and expanded to incorporate a greater proportion of client reported emissions.		
Data coverage	100%	100%	
Data quality score (PCAF score)	**Score 1 – 0%** **Score 2 – 68%** **Score 3 – 4%** **Score 4 – 0%** **Score 5 – 28%**	Score 1 – 0% Score 2 – 71% Score 3 – 0% Score 4 – 0% Score 5 – 29%	**Score 1** – Outstanding amount, total assets and emissions known and verified. **Score 2** – Outstanding amount and total assets known and unverified emissions calculated. **Score 3** – Outstanding amount and total assets known. Emissions calculated using primary physical activity data. **Score 4** – Outstanding amount and total assets known. Emissions calculated using industry emissions factors per unit of revenue. **Score 5** – Outstanding amount and total assets known. Emissions calculated using industry emissions factors per unit of asset.

The group recognises that there has been an increase in counters who have subjected their emissions to verification by third parties. The group, however, has elected to remain conservative and has allocated these counters a data quality score of 2 as the group is in the process of finalising the policy to be applied to determine the level of assurance required to allocate a data quality score of 1 to a counter.

The group is conducting work to understand scope 3 emissions for the upstream oil and gas and thermal coal (coal mining and thermal power) portfolio. There are, however, definitional and measurement complexities due to inconsistent disclosures by the private and public sector. The methodologies applied by industry to estimate scope 3 emissions are continually evolving to account for product value chains and lifecycle assessments. Indicative industry scope 3 emissions are estimated to be more than 100 times for thermal coal and more than 10 times for upstream oil and gas compared to scope 1 and 2 emissions.

The group is also conducting work on refining underlying activity emissions intensities for the thermal coal and upstream oil and gas portfolios. Indicative industry ranges are estimated to be 0.014 – 0.022 tCO2e/tonne run of mine coal for thermal coal and 20 to 40 tCO_2e/kilo barrels of oil for upstream oil and gas.

Group operations and own emissions

FirstRand manages the climate change risks (physical and transition risks) in its own operations. This includes the impact of the group's operations on the environment and on climate change. FirstRand measures its operational GHG emissions and is taking steps to reduce emissions, build climate resilience and increase resource efficiency. Approximately 80% of group operations are in South Africa. The South African operational carbon footprint has been measured, reported and externally assured for several years. Operational emissions data for the broader Africa subsidiaries are collated and reported internally, and will in time be reported externally as the quality of data collection and reporting improves.

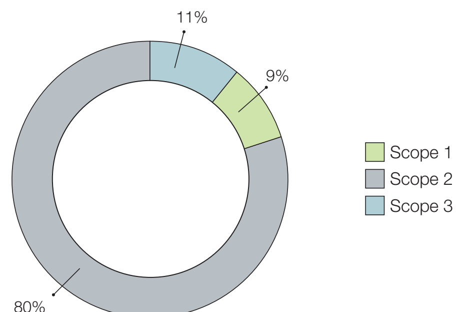
The GHG emissions data for own emissions is calculated according to the *Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (revised edition),* using an operational control boundary, for the group's South African operations. Emissions conversion factors used in the calculation are sourced locally, where possible (for example electricity consumed and electricity transmission and distribution losses are converted using emissions factors sourced annually from Eskom's integrated report). The remaining emissions factors are sourced from the UK Department for Business, Energy and Industrial Strategy (BEIS), previously Defra, which are annually updated.

The table below provides a summary of the group's potential physical risk related to its campus buildings.

POTENTIAL PHYSICAL RISK

Physical risk	**Proportion of campus buildings**
Flood risk	
High flood hazard	2%
Elevated flood hazard	12%
Fire risk	
High fire risk to 2030	–
Elevated fire risk to 2023	1%
Drought risk	
Significantly decreased rainfall to 2023	–
Decreased rainfall to 2030	4%

Composition of South African operational emissions



Scope 1 Carbon Emissions-Direct GHG emissions (tCO2e) from sources that are owned or controlled by FirstRand. Scope 1 can include emissions from fossil fuels burned on site, emissions from entity-owned or entity-leased vehicles, and other direct sources. Included in Scope 1 are the diesel, refrigerant gas and fleet travel categories multiply by the Department of Environment, Food and Rural Affairs (DEFRA) emission factors.

Scope 2 Carbon Emissions-Indirect GHG emissions (tCO2e) resulting from the generation of electricity, heating and cooling and steam generated off site but purchased by FirstRand = Total electricity consumption multiply by the Eskom/ local power utility emission factor for the reporting year.

Scope 3 Carbon Emissions-Indirect GHG emissions (tCO2e) from sources not owned or directly controlled by FirstRand but related to the activities of FirstRand. Included in Scope 3 are paper, travel reimbursements, air travel, vehicle rental and car allowances categories. Scope 3 consumption multiply by the DEFRA emission factors for the reporting year.

OWN EMISSIONS

	As at 30 June				
	South Africa			Namibia	Botswana
tCO_2e	**2023**	2022	% change	**2023**	**2023**
Scope 1 emissions					
Fuel use in generators*	**10 345**	1 683	515%	**–**	**35**
Business fleet travel	**4 531**	4 517	0%	**88**	**68**
Refrigerants**	**1 582**	1 103	43%	**–**	**81**
Scope 1 total#	**16 458**	7 303	125%	**88**	**184**
Scope 2 emissions					
Electricity – buildings	**130 560**	137 572	(5%)	**5 002**	**5 317**
Electricity – ATMs	**7 335**	7 681	(5%)	**617**	**778**
Scope 2 total#	**137 895**	145 253	(5%)	**5 619**	**6 095**
Scope 3 emissions					
Paper use	**997**	759	31%	**106**	**1**
Business road travel	**3 360**	2 642	27%	**355**	**10**
Business air travel†	**10 989**	3 241	239%	**96**	**254**
Fuel well to tank emissions†	**3 569**	1 521	135%	**22**	**26**
Electricity transmission losses‡	**–**	2 690	(100%)	**–**	**–**
Scope 3 total#	**18 915**	10 853	74%	**579**	**291**
Total carbon emissions South African operations**	**173 268**	163 409	6%	**6 286**	**6 570**
Total CO_2e emissions per full-time employee	**4**	5	(13%)	**3**	**4**

* *The increase was driven by use of diesel generators due to increased loadshedding, and refined data capturing and reporting processes for South Africa. There was no diesel consumption for Namibia for the period under review.*

** *Change was driven by refined data capturing and reporting processes for South Africa.*

External limited assurance provided over 2022 and 2023 scope 1, 2 and 3 carbon emissions for South African operations. Refer to page 173 for the independent assurance practitioner's report.

† *Increase was driven by easing of road and air travel restrictions as Covid-19 continued to evolve from the pandemic to endemic stage.*

‡ *Zero transmission and distribution losses as Eskom's emissions factor for total energy sold (1.04) and total energy generated (1.04) were the same.*

An overall 6% increase in emissions from 2022 to 2023 was recorded for the group's South African operations, from 163 409 tCO_2e to 173 268 tCO_2e. Emissions from the use of electricity in buildings and ATMs comprise 80% of the South African operational carbon footprint. These emissions reduced 5% from the previous financial year due to ongoing energy efficiency and renewable energy initiatives, a reduction in the Eskom grid emissions factor, and a reduction in the group's real estate management portfolio.

A significant increase in diesel consumption and resulting emissions was recorded in the 2023 financial year, due to higher levels of power cuts, which required increased use of generators, as well as additional diesel backup storage in data centres for business continuity. An increase in emissions was also recorded from business travel, mostly due to a return to normal operations post the Covid-19 lockdowns.

Reduction pathway for own emissions

The group aspires to be net zero by 2030 in its South African operations for all scope 1, 2 and 3 operational emissions and is assessing innovative and effective solutions to reach this goal. The group's own operations approach considers the national decarbonisation plan, which has been adjusted to accommodate national energy challenges, load management and maintenance requirements. Major drivers for the group include cost reduction and greater grid independence to ensure business continuity and achieve net zero by 2030.

The approach includes five high-priority steps to drive reduction of electricity usage and deployment of renewable energy sources, whilst ensuring a balance of critical business requirements with the overall reduction of emissions to net zero.

The five steps are outlined below.

- Application of new technologies to enhance energy efficiency measures, including photovoltaic (PV) analysis and maximisation, and battery storage assessment.
- Upgrading and replacement of heating, ventilation and air-conditioning for improved energy efficiency.
- Wheeling where space or physical constraints prevent the effective use of solar and/or wind-generated energy.
- Campus building rationalisation to reduce spend on emissions reduction and resilience, as well as to contribute to emissions reduction.
- Migration to hybrid/electric fleet vehicles aligned to the availability of renewable energy sources at main campuses over the longer term.

In parallel, a more conservative reduction trajectory across scope 3 emissions types will be implemented to ensure the group's operations have more time to transform without impacting business deliverables.

To align with the net-zero targets, the group's absolute emission reduction targets for scope 1 and scope 2 emissions will need to be reset. To be science-based (in line with the level of decarbonisation required to keep the global temperature increase well below 2°C) and credible, the recommended target is 90% absolute emissions reduction for scope 1 and 2 emissions for South African operations by the year 2030, against a 2015 baseline.

The technologies and initiatives identified in the five steps outlined above, and additional carbon reduction projects, will be incorporated into a revised and more relevant decarbonisation trajectory against which progress can be tracked.

The overall allocation of carbon offsetting of 10% (30 000 tonnes) is being planned and allocated at approximately 33% (10 000 tonnes) to scope 1 and scope 3 emission types and 66% (20 000 tonnes) to scope 2 emission types, with approximately 13% of the 2015 scope 2 emissions total being wheeled. After 2030, the group will continue to reduce emissions using fewer carbon offsets as technology and other influencing factors are made available or become the norm.

Reduction target and carbon price

In addition to emissions reduction targets, the group has also set an internal shadow carbon price that will be used to consider carbon costs during the evaluation of new projects and infrastructure for group operations. This will prioritise low-carbon projects and support emissions reductions.

A shadow carbon price accounts for the external social, environmental and economic costs of carbon emissions and climate change. This price incorporates the value of carbon (GHG emissions) into investment or project decisions (research and development), as well as infrastructure and financial assets to cost for climate change impacts and drive emissions reductions.

The group shadow carbon price is used internally only and was determined in line with international best practice and the requirements to drive emissions reductions to meet the Paris Agreement target of preventing a 2˚C temperature change. In addition to the internal shadow carbon price and depending on the use case, the group uses the market-related carbon price as specified in the Carbon Tax Act (2019) as reference for matters that relate to carbon trading and the carbon credit market. The internal shadow carbon price for FirstRand was set at $24/tCO_2$ in 2019, rising to $38/tCO_2$ by 2035, in line with recommended international carbon pricing pathways. The market-related carbon price is R159 per tonne of CO_2e for the 2023 calendar year (as used for carbon tax and carbon trading).

environmental
and social risk

Introduction and objectives

Environmental risk is defined as the impact of the natural environment on the group, as well as the impact and dependencies of the group on the environment and on natural capital. A financial institution may be negatively impacted because of its failure to comply with the relevant environmental practices, laws, regulations, rules, related self-regulatory organisational standards and codes of conduct applicable to its activities.

These impacts can manifest in:

- legal or regulatory contraventions;
- material financial losses;
- operational costs;
- physical damage;
- credit risk; or
- loss of reputation.

Nature-related risk encompasses biodiversity loss and ecosystem degradation. Nature-related risk and climate risk are distinct but interdependent. Nature-related risks can lead to potential threats to a company linked to its and others' dependencies and impacts on nature. There has been a rapid decline in natural resources and processes (natural capital) which are critical to the planet's stability. The main drivers for the decline in natural capital include:

- climate change;
- resource exploitation (e.g. deforestation and unsustainable agricultural practices);
- land and sea use change; and
- loss of biodiversity (i.e. variability among living organisms at genetic, species and ecosystem level) due to:
  - pollution; and
  - invasive alien species.

As natural capital declines, nature's capacity to provide ecosystem services may be reduced, resulting in nature-related financial risks. Ecosystem services are benefits that people obtain from natural capital, such as air and water purification services, crop pollination and the breaking down of waste. Biodiversity underpins the flow of benefits.

A full analysis of natural capital impacts and dependencies may present opportunities, such as the potential financial benefits resulting from positive effects on nature, or the strengthening of nature.

Environmental risks can be grouped into two categories for the group, as outlined in the table below.

Direct environmental risk	Indirect environmental risk
Risk or impact on the environment, directly associated with the group's physical operations or actions. These risks may be governed by group operational processes, procedures or policies. Poor performance may result in the risk of legal or regulatory sanction, physical damage, material financial loss or reputational damage to the group due to a failure to comply with applicable laws, voluntary agreements, regulations and supervisory requirements associated with these risks.	Risk or impact on the environment not directly associated with the physical activities of the group or its operations, but which nonetheless may be associated with the group because of activities conducted by its clients, investee companies, stakeholders, vendors or supply chain. The group could potentially be negatively affected by the actions of another party such as a government department or a borrower, or through a lending activity or investment. The group may suffer in any of these cases because of its client's or stakeholder's failure to comply with applicable laws, voluntary agreements, regulations and/or supervisory requirements, and the resulting penalties.

Similar to climate risk, nature risks present through three risk types, namely physical, transition and systemic risk.

- **Nature-related physical risks** arise when natural systems are compromised, due to the impact of climatic events (e.g. extreme weather conditions, e.g.drought), geological events (e.g. an earthquake) or changes in ecosystem equilibria (e.g. soil quality or marine ecology), which affect the ecosystem services companies depend on. Nature-related physical risks are usually location-specific and often associated with climate-related physical risks.
- **Nature-related transition risks** result from a misalignment between a company's or investor's strategy and the changing regulatory, policy or societal landscape in which it operates. Developments aimed at halting or reversing damage to nature, such as government measures, technological breakthroughs, market changes, litigation and changing consumer preferences, can all create transition risks.
- **Nature-related systemic risks** arise from the breakdown of the entire system, preventing ecosystems from recovering after a shock event.

Climate and biodiversity risks interact with each other and must be considered together. The compound effects of climate change and biodiversity loss amplify systemic risks in social and economic systems.

Climate-nature nexus

Loss of nature-related assets can reverse progress made through prior economic development and exacerbate climate change and its impacts. The climate-nature nexus underscores the need for holistic approaches that integrate climate action and nature conservation into policies, planning and decision-making at all levels.

The group's lending and investment activities include an assessment of:

- sustainable land use practices;
- promoting renewable energy sources that do not negatively affect biodiversity;
- the adoption of nature-based solutions; and
- the integration of climate and biodiversity considerations for sectors such as agriculture, forestry, construction and urban planning.

Social risk

Social risk relates to social impacts associated with activities of group customers, investee companies or stakeholders resulting in financial, lending/financing, investment or equity exposure that may lead to the risk of legal or regulatory sanction, material financial loss or reputational damage. The group may suffer in any of these aspects because of its clients' or stakeholders' failure to comply with applicable laws, voluntary agreements, regulations and/or supervisory requirements. Social risks include issues relating to product responsibility, inclusion, labour, occupational health and safety, community involvement, security, human resettlement, indigenous people's rights (particularly in relation to the application of the Equator Principles) and human rights.

Organisational structure and governance

Ultimate oversight of environmental (including nature and biodiversity) and social risk rests with the board. It has delegated responsibility to appropriate board subcommittees and management committees. The primary board committees overseeing environmental risk matters are RCCC and the Setcom. RCCC is responsible for overseeing all risk-related matters and Setcom provides approval for sensitive industry exposures and environmental matters. Refer to the governance structure in the *Climate risk* section of this report.

There are various topic-specific management committees and working groups across the group that focus on:

- the development and implementation of policies and processes; and
- the management of environmental risk and performance.

Assessment and management

The group's environmental and nature risk management programme covers the following thematic focus areas.

1	**Water and ocean management** Access to water, water quality, pollution prevention	Enhanced due diligence on all credit transactions through the environmental and social risk analysis (ESRA) process to ensure that clients have preventative programmes and reactive clean-up procedures in place, and that hazardous/chemical waste is managed in line with legal requirements to prevent the occurrence of any pollutants above approved acceptable thresholds (where applicable) in natural water environments. The due diligence process includes accounting for dependencies on water sources for production and processing.
2	**Biodiversity and ecosystem management** Protection of species, prevention of deforestation, and sustainable agricultural practices	The group continues to refine its current environmental and social risk analysis tools to better identify, manage and report on the group's impacts and dependencies on nature. The group has also participated in various working groups to contribute to the thinking and tools to better integrate biodiversity considerations into banking portfolios. FirstRand is a member of the standing working group which developed the TNFD framework, which will be launched in September 2023.
3	**Pollution prevention**	Enhanced due diligence on all credit transactions to ensure that clients have preventative programmes and reactive clean-up procedures in place, and that hazardous/chemical waste is managed in accordance with legal requirements.
4	**Circular economy** Resource efficiency and waste management	Resource efficiency is the efficient use of limited, non-renewable natural resources (which cannot be regenerated after exploitation) and renewable natural resources (which can return to their previous stock levels by natural processes of growth or replenishment) in the process of exploiting nature for production and consumption purposes. The group promotes resource efficiency through its ESRA programme and awareness initiatives.
		Waste management includes the control, monitoring and regulation of the production, collection, transport, treatment and disposal of waste, and the prevention of waste production through in-process modifications, reuse and recycling during a project life cycle. The group has implemented comprehensive waste management programmes for its own operations. The ESRA process addresses client compliance with regard to waste management plans, hazardous waste disposal certificates, and waste site permits where applicable.

Environmental risk, including climate, nature, biodiversity and social risk, is typically a cross-cutting risk and therefore cannot be managed by a single risk management function. The group's environmental risk-related management frameworks consist of an outline of the various programmes and initiatives designed to manage and mitigate environment-related risk.

ESRA

The group's ESRA transactional due diligence process is integrated into the credit risk management and governance processes. It identifies and assesses environmental, social, regulatory or reputational risks, to the group or its clients, with the potential to cause severe societal and environmental degradation as well as to negatively impact the ability of clients to meet their credit commitments.

Over the past two years, the ESRA process has been enhanced by adding biodiversity and nature risk related assessments, the review of climate-sensitive industries, in particular fossil fuels, and qualitative rating adjustments for elevated climate risk. The group uses externally developed tools to help with the identification and management of nature-related risk in credit transactions and investment decisions. Examples include Exploring Natural Capital Opportunities, Risks and Exposure (ENCORE), the Integrated Biodiversity Assessment Tool (IBAT) and the Partnership for Biodiversity Accounting Financials (PBAF) Standard.

A detailed analysis of the group's ESRA process and a summary of transactions screened during the year under review are included in the ESRA disclosure on the group's environmental, social and governance (ESG) hub at https://www.firstrand.co.za/investors/esg-resource-hub/policies-and-practices/.

Biodiversity assessment

The group is developing a biodiversity assessment methodology to determine targets for restoration, protection and regeneration in financed activities. This methodology will be science-based and account for the complexity of biodiversity measurement. The methodology will inform a biodiversity footprint which quantifies the biodiversity impact of a portfolio, asset class or project measured as a result of production and consumption of particular goods and services.

Emerging legislation

TNFD framework	FirstRand is a member of the TNFD, a market-led initiative to develop a risk management and disclosure framework for organisations to report and act on evolving nature-negative risks, with the aim to support a shift in global financial flows away from nature-negative outcomes and toward nature-positive outcomes. The TNFD recommendations are expected to be launched in September 2023. FirstRand plans on using the TNFD guidance to develop an internal nature and biodiversity management programme and associated disclosure.
White paper on the conservation and sustainable use of South Africa's biodiversity	This white paper was developed to promote the conservation of the rich biodiversity and ecological infrastructure that supports ecosystem functioning for livelihoods and the well-being of people and nature. The white paper contains four goals: • **enhanced biodiversity conservation** – all biological diversity and its components conserved; • **sustainable use** – the sustainable use of biodiversity enhances thriving living land- and seascapes and ecosystems, livelihoods and human well-being, while a duty of care avoids, minimises, or remedies adverse impacts on biodiversity; • **equitable access and benefit sharing** – benefits are derived and shared from the use and development of South Africa's genetic and biological resources, without compromising the national interests; and • **transformed biodiversity conservation and sustainable use** – effect is given to the environmental rights as contained in Section 24 of the Constitution, which facilitates redress and promotes transformation.
PBAF	The PBAF Standard provides financial institutions with practical guidance on biodiversity impact and dependency assessments of their loans and investments. FirstRand is a PBAF partner and participates in various working groups.

insurance *risk*

Introduction and objectives

Insurance risk arises from the inherent uncertainties of liabilities payable under an insurance contract. These uncertainties can result from 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 and claims management.

Insurance risk arises from the group's long-term insurance operations, underwritten through its subsidiary FirstRand Life Assurance Limited (FirstRand Life), and short-term insurance operations, underwritten through its subsidiary FirstRand Short Term Insurance Limited (FirstRand STI). FNB originates long-term products on the group's life licence (FNB Life) and short-term products on the group's short-term licence through FNB Short Term Insurance.

FNB Life offers funeral policies, accidental death plans, risk policies, credit life policies (against group credit products), health cash plans and guaranteed annuities on the group's life licence. FNB Life also writes linked-investment policies and guaranteed endowments. There is, however, no insurance risk associated with these policies as these are not guaranteed.

Most life policies pay benefits upon the death of the policyholder and, therefore, expose the group to mortality risk. The underwritten risk policies, credit life policies and policies sold to companies to cover their employees 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 for each day that a policyholder is hospitalised. Guaranteed annuities pay benefits on continued survival of the policyholder and expose the group to longevity risk, interest rate risk and inflation risk.

FNB Short Term Insurance and MotoVantage offer legal plans, warranty policies, scratch and dent products, business cash flow cover policies, comprehensive insurance cover (including building, home contents and portable possessions cover), motor insurance and money protect and commercial guarantee products on the group's short-term insurance licence.

Legal plans provide legal assistance or pay for legal fees on the occurrence of events specified in these policies. Building, home contents and motor cover indemnifies policyholders against damage to their property. Business cash flow cover provides cover in the form of daily cash amounts to compensate for interruption of commercial customers' business operations due to insured events. The money protect product provides protection against phishing and theft of funds for retail and the commercial customers, although it is not marketed directly to customers because the cover is for the bank.

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. These risks 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 the group are sold through FNB's distribution channels. Some of these channels introduce the possibility of anti-selection, which also affects insurance risk.

YEAR UNDER REVIEW AND FOCUS AREAS

Year under review	Risk management focus areas
• Analysed post-Covid 19 experience. • Embedded risk management processes and tools for the comprehensive short-term insurance business.	• Improve risk insights and analysis.

Organisational structure and governance

FirstRand Life and FirstRand STI are wholly owned subsidiaries of FirstRand Insurance Holdings and are licensed insurers under the Insurance Act 18 of 2017. FirstRand Insurance Holdings, FirstRand Life, FirstRand STI and FRISCOL have been designated as insurance groups and FirstRand Insurance Holdings is licensed as a controlling company under the Insurance Act.

FirstRand Insurance Holding's board committees include an audit and risk committee, an asset, liability and capital committee, and a 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, approval and oversight of inputs, models and results of pricing and valuations.

To ensure consistency within the group, FirstRand Life, FirstRand STI and FirstRand Insurance Holdings have the same board and common members on group governance committees. Relevant group and R&C segment committees have oversight of and receive feedback from the appropriate group insurance committees.

Control functions, namely compliance, risk management, actuarial and internal audit, are key to the management of insurance risk.

The following diagram illustrates the insurance risk governance structures.

INSURANCE RISK GOVERNANCE STRUCTURE

Board-level oversight

FirstRand Insurance Holdings audit and risk committee

- Provides oversight of the group's insurance operations and ensures accountability and transparency to stakeholders.
- As an independent committee, ensures the integrity of financial controls, financial risk management and reporting to shareholders and other stakeholders.

FirstRand Insurance Holdings asset, liability and capital committee

Provides oversight of product development, financial resource management, actuarial matters and required capital.

Executive management oversight

Actuarial and product development forum

Oversees the insurance product development lifecycle, and reviews and approve the outputs of corporate actuarial functions.

FRISCOL management forum

Considers risk management (excluding balance sheet management risks), financial, compliance, internal audit and external audit reports which are tabled at the audit and risk committee.

Management structures

Insurance balance sheet management committee

Risk management committee

Finance committee

Information technology committee

Ethics committee

Market conduct committee

Compliance

Risk management

Actuarial

Group Internal Audit

- Assesses the adequacy and effectiveness of equity risk management controls.
- Identifies risk control shortcomings and recommends corrective actions.

Assessment and management

The group manages insurance risk within its stated risk appetite. This translated into risk limits for various metrics that can be monitored and managed. The assessment and management of risk focus on two main areas, namely:

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

Ensuring that insurance risk is priced correctly and well understood are an important components of managing insurance risk. This is achieved through the following measures.

- 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 product design, relevance, target market, market competitiveness and ensuring good customer outcomes and that customers are treated 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 customers 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.
- Pricing for comprehensive products (which include motor, buildings, home contents and portable possessions) is risk-based and considers various underwriting factors that differentiate the level of risk across policyholders, which enables appropriate risk management. There are also various underwriting limits in place to mitigate undesirable risk exposures.
- 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 utilise the following methodologies, including advisory and mandatory actuarial methodologies:

- insurance risk is managed through monitoring and reporting the frequency and severity of claims by considering incidence rates, claims ratios and business mix;
- for the life business, 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 portfolio risks;
- short-term insurance liabilities comprise an outstanding claims reserve, an unearned premium reserve and an incurred but not reported reserve. 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 feeds back into pricing;
- there are also 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; and
- stress and scenario analyses are performed to provide insights into 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 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 (including its subsidiaries) faces or might face, and to determine the own funds necessary to ensure that overall solvency needs are met at all times and are sufficient to achieve business strategy. An ORSA report is produced annually.

Refer to the *Capital management* section of this report for information on capital for insurance activities.

Introduction and objectives

The use of models results in model risk, which is the potential for adverse consequences from decisions based on incorrect or misused model outputs or 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, for example, 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:

- the information input component, which delivers assumptions and data to the model;
- the processing component, which transforms inputs into estimates; and
- the reporting component, which translates the estimates into useful management 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
• Established a model inventory for financial crime models, Group Treasury models and advanced analytics solutions on the model risk management platform. • Completed business-unit-level roadmaps based on model risk maturity assessments. • Strengthened governance structures for advanced analytics solutions. • Established independent validation capability within ERM for non-traditional models.	• Enhance model inventory completeness and improve quality enhancement for financial crime models, Group Treasury models and advanced analytics solutions. • Continue with activities related to business-unit-level roadmaps to improve maturity. • Further extend the scope of model risk reporting to include new model categories on the model risk management platform. • Enhance model risk tolerance statement. • Establish suitable model governance committees for climate risk models. • Strengthen segment-level model risk management functions and mandates. • Enhance maturity of AI model governance across the group to align to group's policy on the ethical use of AI.

Organisational structure and governance

MODEL RISK GOVERNANCE STRUCTURE

Board-level oversight

RCCC

Provides oversight of the group's model risk profile.

Model risk and validation committee

- Reviews and approves the group's model risk management and reporting framework.
- Sets reporting requirements related to model risk.
- Receives and reviews reports on the adequacy and effectiveness of model risk management, and monitors implementation of corrective actions.
- Considers and approves material aspects of model validation relating to credit risk, market risk, operational risk, economic capital and other material models.

Executive management oversight

Various specialist technical committees

Review and challenge the technical aspects of model development and approve models where mandated by the MRVC, in accordance with charters and risk type-specific model risk management frameworks.

Platform executive committee

Responsible for defining, managing, enhancing and leading the group to a platform-based operating model.

Management structures

Management – model owners

- Develop models.
- Ensure implementation of approved models.
- Monitors ongoing model performance.
- Ensure model framework requirements are implemented.

ERM

- Independent validation of models.
- Provides independent view of the model risk profile.
- Monitors implementation of the group's model risk management frameworks.

Data and analytics executive committee

- Drives the implementation of the group's data and analytics capabilities, while ensuring appropriate oversight of the associated information risks.

Group Internal Audit

- Assesses the adequacy and effectiveness of model risk processes and governance.
- Identifies risk control shortcomings and recommends corrective actions.

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, features and data products. • Maintain master list of field data. • Implement appropriate system controls. • Assess data quality.	• Document model design, theory and logic which are supported by published research and industry practice. • Ensure expert challenge of methods and assumptions. • Ensure appropriate conservatism.	• Provide independent validation from second line of defence. • Review documentation, empirical evidence, model construction assumptions and data. • Assess model performance. • Perform sensitivity analysis. • Perform stress testing. • Obtain independent assurance from GIA.	• Perform regular stress testing and sensitivity analysis. • Perform quantitative outcome analysis. • Perform backtesting and establish early warning metrics. • Assess model limitations. • Set and test error thresholds. • Test model validity.	• Approve model risk management framework. • Ensure effective management of model risk. • Ensure approval committees with adequate skills. • 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 requirements. 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.

tax *risk*

Introduction and objectives

Any event, action or inaction in an entity's strategy, operations, financial reporting or compliance that either adversely affects its tax or business position, or results in unanticipated penalties, assessments, additional taxes, tax-related harm to reputation, lost opportunities or financial statement exposure is regarded as tax risk.

The group's tax strategy is aligned to the group's strategic objectives. Various local and international taxes arise in the normal course of business, including corporate income taxes, employees' taxes, value-added taxes, securities transfer taxes, stamp duties, customs duties and withholding taxes.

FirstRand Group Tax is mandated by the FirstRand tax risk committee to manage the group's tax risks. The group is committed to:

- complying with all taxation laws;
- influencing tax policy, legislation and practice;
- developing and implementing value-adding initiatives in a responsible manner; and
- maintaining effective relationships with all stakeholders.

The group's commits to being responsible and accountable in managing tax risk. It considers the economic and social impacts of its approach to tax, including the sustainable economic development of the jurisdictions in which it operates. FirstRand aims to have highest levels of tax governance, with a zero-tolerance risk appetite to non-compliance with respect to any and all legislative and tax filing obligations in the various jurisdictions within which the group operates. FirstRand does not promote tax avoidance structures. It also does not provide tax advice to clients or facilitate tax crimes or the circumvention of tax reporting. The group remains circumspect in all areas of tax structuring.

Organisational structure and governance

The head of FirstRand Group Tax takes ultimate responsibility for tax risk management for all taxes on a group-wide basis. The responsibility at a business/entity level lies with the relevant business/entity CEO and CFO. They are responsible for maintaining tax-related risks at an acceptable level. To enable the various businesses/entities to fulfil their tax risk management responsibilities, teams of tax specialists have been deployed to fulfil an advisory role regarding tax issues arising within the various businesses/entities.

Tax risks are reported periodically to the RCCC, which is responsible for the management and monitoring of tax risks, and to the board, which is responsible for the group's business tax outcomes.

TAX RISK GOVERNANCE STRUCTURE

Board-level oversight

RCCC

Provides oversight of the group's tax risk profile.

Tax risk committee

- Monitors implementation of the tax risk management framework.
- Provides oversight of the management of tax risk across the group.
- The tax risk management framework prescribes the authorities, governance and monitoring structures, duties and responsibilities, methodologies, policies and standards which have to be implemented and adhered to in managing tax risk.

Executive management oversight

Tax strategic committee

Ensures that policies and procedures which support the tax risk management framework are in place, monitored and applied consistently in all operations, and that the group's tax team has the skills and experience to implement these appropriately. In this regard, external tax risks arising from legislative and regulatory changes are actively managed, as are internal tax risks, comprising compliance and operational risks. Management oversight also includes the implementation of controls over compliance processes and the ongoing monitoring of control effectiveness.

Management structures

Operating business finance functions

Operating business finance functions, with the assistance and guidance from FirstRand Group Tax, are responsible for managing tax risks in their respective areas and keeping these risks at an acceptable level.

FirstRand Group Tax

- Provides technical tax support to ensure the entities are familiar with the various tax requirements.
- Maintains the tax risk management framework and supporting policies, methodologies, processes and standards.
- Ensures the appropriate management of tax risk across the group.

Group Internal Audit

- Assesses the adequacy and effectiveness of tax risk processes and governance.
- Identifies risk control shortcomings and recommends corrective actions.

Assessment and management

Tax risk management is the systematic approach to proactively identify, evaluate, manage and report on tax risks and data quality risks (as far as the relevant tax data is under the control of the group) within agreed and acceptable parameters to facilitate the group's tax strategy.

The group engages in efficient tax planning that supports client business and reflects commercial and economic activity. The tax laws in all the jurisdictions in which the group operates are fully complied with and the risk of uncertainty or disputes is minimised. Transactions between group entities are conducted on an arm's length basis and in accordance with Organisation for Economic Cooperation and Development (OECD) principles. Where tax incentives or exemptions exist, the group seeks to apply them responsibly in the manner intended by governments and fiscal authorities. The group establishes entities in jurisdictions suitable to hold its offshore operations, taking business activities and the prevailing regulatory environments in those jurisdictions into account.

The group seeks to build sustainable working relationships with governments and fiscal authorities, based on mutual respect. Where possible, the group works in conjunction with fiscal authorities to resolve disputes and engages with governments on the development of tax laws. FirstRand is committed to the principles of openness and transparency to build trust between the group and fiscal authorities and to align the group with the various systems of tax collection. Tax risk management forms part of the group's overall internal control processes. Responsibility and accountability for the group's tax affairs are clearly defined in the tax risk management framework.

The group is responsible for ensuring that policies and procedures which support the tax risk management framework are in place, monitored and applied consistently in all operations, and that the group's tax team has the skills and experience to implement these appropriately. In this regard, external tax risks arising from legislative and regulatory changes are actively managed, as are internal tax risks, comprising compliance and operational risks. Management oversight also includes the implementation of controls over compliance processes and the ongoing monitoring of control effectiveness.

Regulatory environment

The regulatory bodies, industry associations and frameworks the group subscribes to from a tax perspective and complies with are listed below.

BASA and the South African Revenue Service (SARS)	FirstRand is a member of BASA, which has a tax committee that promotes discussions on tax issues relating to the various South African revenue acts, advocates for tax reforms and ensures that the regulatory and supervisory framework addresses relevant issues. BASA has entered into an accord with SARS, which sets out the respective parties' expectations to ensure tax compliance. The group complies with this accord.
UK Code of Practice on Taxation for Banks	The group subscribes to this code to ensure compliance of the bank's London branch and Aldermore with all UK tax laws.
Base erosion and profit shifting (BEPS) recommendations	The group files country-by-country reports in accordance with the BEPS recommendations issued by the OECD to address weaknesses in the international tax system.
Foreign Account Tax Compliance Act (FATCA) and Common Reporting Standard (CRS)	FATCA and CRS submissions are made to aid in the exchange of information amongst revenue authorities globally to combat offshore tax evasion. Group entities submit the returns to their local revenue authorities on an annual basis as prescribed under tax administration laws, in compliance with FATCA and CRS. In instances where local laws have not yet incorporated FATCA and CRS, reports are submitted directly to the United States Internal Revenue Service.
Mandatory disclosure rules	BEPS Action 12 contains recommendations regarding the design of mandatory disclosure rules by financial institutions for aggressive tax planning schemes and the circumvention of tax reporting regimes, as well as the promoters and users of such schemes. Where applicable and where required, group entities submit returns to their local revenue authorities as prescribed under tax administration laws.
UK Criminal Finances Act 2017	The group has appropriate systems and controls to prevent the facilitation of tax evasion/fraud and the circumvention of tax reporting, by any person (employee, third party or associated person) acting on behalf of group entities. Where applicable and where required, group entities submit returns to their local revenue authorities as prescribed under tax administration laws or anti-money laundering laws.

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 continually evaluates and enhances its existing operational risk management frameworks, processes and systems to ensure that its practices are adequate and effective, and aligned to business needs, regulatory developments and best practice.

OPERATIONAL RISK OBJECTIVES AND PROGRAMME

KEY OBJECTIVES
The objective is to build an effective and forward-looking operational (including information technology and cyber risk) risk management programme to support the group in the execution of its strategy to ensure risks are managed within an acceptable level of appetite

Improve dynamic risk management by:
- Automating and simplifying operational risk processes for greater efficiency, simplicity and business value.
- Prioritising risk management efforts in key areas through enhanced operational risk analysis.
- Enhancing forward-looking and dynamic operational risk management information for use in decision-making.

Focus on emerging risks by:
- Maturing vendor risk management discipline.
- Enhancing the approach to operational resilience with a focus on interdependencies and vendor management.
- Improving cyber risk management.

Mature risk approach by:
- Maturing the operational and IT risk governance structures and reporting.
- Enhancing risk appetite setting and measurement.
- Assessing the impact of operational risk-related regulatory developments and ensure compliance.
- Proactively driving combined assurance efforts with the assurance community.

OPERATIONAL RISK MANAGEMENT PROGRAMME COMPONENTS
- Establishing, reviewing and implementing the operational risk management framework and policies (including cyber risk and business delivery life cycle frameworks).
- Establishing and monitoring specific risk type appetites.
- Development and maintenance of operational risk management tools and processes (including risk identification, assessment and quantification).
- Operational risk analytics and capital calculations.
- Operational risk management systems and management information.
- Operational risk projects/initiatives.
- Operational risk governance and reporting.
- Operational risk management advisory and support services to business.

Year under review and focus areas

During the year under review South Africa experienced a worsening energy crisis, with secondary impacts on water disruptions. The group's operational resilience response to these challenges was mature and crisis response plans were well embedded. The group's strategic approach to energy resilience, considering both the long-term impact on the group's climate targets and the immediate need for operational resilience, has gained traction. A risk-adjusted response was followed for all resilience events incorporating health and safety impact analyses, supply chain management and business continuity management. The safety and well-being of group employees is always prioritised.

The group's risk exposure through its association with and usage of third parties, in particular vendors, remains an area of focus. Cyberattacks on and negative media coverage of third parties/vendors used by the group persisted during the year under review. While instances of poor vendor service was experienced and subsequently remediated, these did not have a material impact on service to group stakeholders. Ongoing monitoring and management of key vendors remains a priority.

The maintenance of a robust control environment and change management discipline in the context of the group's platform journey remained a key focus. Risk management is consulted when changes are required to controls, processes and systems to enable processes/activities to transition to platform.

The group met its business-as-usual commitments and continued with control improvement initiatives. The progress of these initiatives and impact on the operational risk profile are tracked and reported on regularly at business and group level through management and combined assurance and risk governance processes. This is also considered in setting operational risk appetite and risk scenarios. Risk management programmes are continually reviewed and enhanced to focus on identified key and emerging risks based on changes in the internal and external environment.

The principal operational risks currently facing the group are:

- **business resilience risk** due to susceptibility to external factors, e.g. floods, civil unrest and power supply constraints as well as system downtime incidents;
- **cyber risk** (including information security), given growing sophistication of cyberattacks both locally and globally;
- **technology risk** due to the pace of technology change and increasing digitisation;
- **vendor risk** due to lack of direct control over external service providers, the potential impact of external events on the group's supply chain and reliance on critical service providers who may present single points of failure;
- **people risk** due to social and economic pressures on employees and the shortage of skilled staff, particularly in the IT and data fields of expertise; and
- **execution, delivery and process management risk** (risk of process weaknesses and control deficiencies), with particular focus on payment risk due to the manual nature of certain payment processes, as well as ongoing regulatory and industry payment-related initiatives, and change risk due to the scale of change required to successfully execute on the group's platform strategy.

Year under review	Risk management focus areas
• Matured cyber risk management through embedding the cybersecurity risk management framework and formulation of a cyber risk appetite statement. • Continued compliance with BCBS 239 and increased maturity through updated metrics monitoring. • Enhanced the operational risk system functionality for improved risk information and greater process automation, reporting and analysis. • Improved the formal payment programme through internal enhancements and implementation of industry-wide initiatives. • Matured the enhanced operational and information technology risk governance structures through improved oversight and reporting. • Enhanced risk rating methodology in the context of appetite. • Improved vendor risk reporting via automated vendor risk-rating dashboards. • Continued process (business and operational risk) automation to reduce manual processes and improve controls. • Drove continued improvement in data quality, metadata and records management practices. • Continued operational risk general awareness training. • Made significant progress on the implementation of the Basel principles for operational resilience. • Increased maturity of change risk management including prioritisation, assessment, monitoring and reporting. • Rolled out the updated risk taxonomy that takes cognizance of emerging and evolving risks as a combined assurance initiative. • Enhanced emerging risk analysis,assessment and ongoing monitoring including, but not limited to, the use of generative artificial intelligence tools and cloud based applications.	• Ongoing enhancement of cyber risk management, including the articulation of a cyber risk strategy and testing scenario-based cyber-incident response plans via simulation exercises. • Implement third-party risk management programme in addition to further embedding the risk assessment and management of vendors across the vendor life cycle. • Leverage the group's data and digital capabilities optimally for efficient and effective operational risk identification, assessment, management and reporting. • Rollout of enhanced risk assessments incorporating a common control library in collaboration with Group Compliance. • Mature appetite setting supported by detailed metrics to enable improved monitoring and oversight. • Maintain BCBS 239 compliance. • Enhance change risk management on prioritised initiatives and actively assess and monitor associated risks. • Prioritise operational risk management activities to support execution of strategy and strengthen key controls. • Focus on completion of operational resilience programme, whilst initiating the operational resilience in the resolution programme. • Focus on skills development within the legal community to keep up with emerging legal risk, including but not limited to risk associated with the platform strategy and technology law.

Organisational structure and governance

OPERATIONAL RISK GOVERNANCE STRUCTURE

Board-level oversight

RCCC

Provides oversight of the group's operational risk profile.

Operational and IT risk committee

- Oversees operational risk (including IT and cyber risk) across the group.
- Monitors the implementation of the operational risk management framework.

Executive management oversight

Platform executive committee

Responsible for defining, managing, enhancing and leading the group's platform-based operating model journey.

Segment/operating business executive committees

- Responsible for effective operational and IT risk management.
- Implement operational risk management framework.

Management structures

Operating business deployed risk management

Deployed operational risk manager reports to operating business/ segment CROs, who in turn support business executives in the execution of their risk management responsibilities.

Segment RCCCs

Support segment CROs in the execution of their risk management responsibilities.

ERM and segment operational risk functions

- Own and maintain the operational risk management framework and supporting policies, methodologies, processes, systems and standards.
- Embed operational risk governance structure and processes across the group.

Specialised risk type management forums

- Group protective security
- Group crime
- Data and analytics

- Operational risk
- Vendor risk
- Business resilience
- Legal
- Climate risk

Provide oversight and are integrated in broader operational risk management and governance processes.

Group Internal Audit

- Assesses the adequacy and effectiveness of operational risk controls.
- Identifies risk control shortcomings and recommends corrective actions.

Measurement of operational risk

Basel approaches

FirstRand applies **AMA** for its domestic operations. Offshore subsidiaries and operations use **TSA** and all previously unregulated entities (prior to 2010) in FirstRand Investment Holdings Limited use **BIA**. FRIMHL and Aldermore also apply **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 with this approach. Operational risk scenarios and internal loss data are used as direct inputs into this model, while risk and control assessments, key risk indicators and external data inform the operational risk scenario analysis process.

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, risk 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.

Analytical loss data and scenario models are combined during simulation 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 (management entity) 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 evolve continually 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 and processes;
- emerging risks and the associated actual or potential impact on the operational risk profile;
- material effects of expansion into new markets and new or substantially changed products, systems or activities, as well as the closure of existing operations;
- changes in the control environment – the group targets a continued improvement in the control environment, but deterioration in effectiveness is also possible due to, for example, unforeseen increases in transaction volumes or 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. geopolitical factors, unrest and protest actions, electricity and water supply shortages, increasing unemployment, etc.).

Assessment and management

Operational risk appetite is set at group and business level, with a specific sub-appetite set for various subrisk types, including cyber risk, IT risk, internal and external fraud, business resilience and execution, delivery and process management. Appetite statements include qualitative and quantitative statements. Risk appetites are set as the total annual 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 risk profile against appetite;
- loss thresholds and measuring actual loss experience against these thresholds; and
- other quantitative and qualitative measures.

Risk appetite levels are based on management's appetite for operational risk and consider 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 management action.

Operational risk appetite

The group aims to minimise financial, opportunity and litigation impacts, disruptions and financial detriment to clients and negative regulatory actions. It does so by ensuring robust operational (non-financial) risk management by inculcating a sound risk culture, acting with a fiduciary mindset and driving effective compliance and operational excellence with a robust control environment.

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 defence model, which is integrated in operational risk management. In this model, business units own the operational risk profile as the first line of defence. In the second line of defence, ERM is responsible for consolidated operational risk reporting, policy ownership and facilitation, and coordination of operational risk management, measurement and governance processes. GIA, as the third line of defence, 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 approach to the implementation of these tools is reviewed on an ongoing basis to ensure that business value is delivered. The most relevant of these are outlined in the following chart.

OPERATIONAL RISK ASSESSMENT AND MANAGEMENT TOOLS

Process-based risk and control identification and assessment	**Key risk indicators**
• The risk and control assessment per business unit/product/service based on key business processes. • Integrated in day-to-day business and risk management processes. • Used by business and risk managers to identify and monitor key risks and assess effectiveness of existing controls.	• Used across the group in all businesses as an early warning risk measure. • Highlight changing trends in exposures to specific key operational risks. • Inform operational risk profiles which are reported periodically to the appropriate management and risk committees, and are monitored continually.
Internal/external loss data	**Risk scenarios**
• Capturing internal loss data is a well-entrenched discipline within the group. • Internal loss data reporting and analyses occur at all levels with specific focus on root causes, process analysis and corrective action. • External loss databases are used to learn from the loss experience of other organisations and are also an input into the risk scenario process.	• Risk scenarios are widely used to identify and quantify low-frequency, extreme-loss events. • Senior management actively participates in the risk scenario thematic deep-dives and the overall scenario reviews. • Results are tabled to the appropriate risk committees and are used as input into the capital modelling process.

The group 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 tools.

Operational risk events

As operational risk cannot be avoided or mitigated entirely, frequent events resulting in small losses are expected (e.g. external card fraud) and are budgeted for appropriately. Business units minimise these losses through improving relevant business and control practices and processes. Operational risk events resulting in substantial losses occur less frequently. The group strives to minimise these and limit their frequency and severity 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. Where appropriate, focused reviews are conducted to establish root causes of operational events. Appropriate action plans are put in place to prevent or reduce the risk of reoccurrence, to the extent that is possible.

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 (INCLUDING CYBER)
Management	• Operations should be resilient enough to withstand 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 potential and actual disputes and/or litigation. • Protection and enforcement of property rights (including intellectual property). • Accounting 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. • Ensuring confidentiality, availability and integrity of systems that maintain, process, store and disseminate this information. • Systems are continually assessed for vulnerabilities and control deficiencies which are reported to relevant risk and business stakeholders.
Committees and frameworks	• Business resilience governance committee (a management forum reporting to operational and IT risk committee). • Practices are documented in the business resilience policy and standards.	• Compliance with legislation managed by Group Compliance. • Legal risk committee (a management forum reporting to operational and IT risk committee) • Legal risk management framework and subframeworks and policies.	• Operational and IT risk committee. • IT governance framework, IT policies and information security policy, cybersecurity risk framework, IT and cyber risk appetite frameworks.

	VENDOR RISK GOVERNANCE	CRIME AND SECURITY	RISK INSURANCE
Management	• Vendor risk management oversight. • Implementation of risk-based approach to vendor risk management with focus on key vendors across the group. • Ensuring compliance to applicable regulatory and legislative requirements as they relate to vendors. • Regular and *ad hoc* risk assessments of key vendors.	• Internal and external – organised/ financial crime and physical security. • Contain criminal losses with enhanced controls and real-time detection models leveraging machine learning. • Mitigate the evolving and emerging financial, organised, cybercrime and cybersecurity threat using an integrated approach across multiple disciplines with a focus on cyber resilience.	• Structured risk insurance 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 and assets, among others.
Committees and frameworks	• Vendor risk management forum (a management forum reporting to operational and IT risk committee. • Vendor risk management framework. • Cloud governance committee (subcommittee of the vendor risk management forum) and cloud policy.	• Integrated crime management framework and protective security framework.	• Cover through FRISCOL, the group's wholly owned first-party insurance company.

Risk insurance

The group has, over many years, developed a structured risk insurance financing programme to protect itself 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 risk insurance programme is continually refined through ongoing assessment of changing risk profiles, organisational strategy and growth, and international insurance markets. The levels and extent of insurance cover are 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 (re)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 broader Africa and the UK, where legislation allows. The group does not consider insurance as a mitigant in the calculation of capital for operational risk purposes.

compliance and *conduct risk*

Introduction and objectives

The group aims to follow both the spirit and the letter of applicable legislation and regulations. The group therefore seeks to prevent its platforms from being abused for the purposes of financial crime. It will not accept wilful or deliberate non-compliance. In cases of legal uncertainty, a proper assessment of the facts, compliance obligations and related risks is performed. Where appropriate, external legal and/or regulatory opinions are obtained. Where unintended failures result in non-compliance, the focus is on implementing remedial action.

Compliance focuses on two types of risk, as noted below:

Compliance risk refers to the risk of not adhering to compliance obligations. For this purpose, although not exhaustive, compliance obligations refer to all applicable compliance obligations, including the group's adherence to applicable laws, regulations, regulatory requirements/expectations, directives, guidelines and other applicable specifications, such as codes of conduct relevant to specific businesses.

Conduct risk includes risks associated with delivery of fair customer outcomes and the integrity and efficiency of financial markets. It relates to how juristic persons, including financial institutions, conduct their business affairs. From a compliance perspective, conduct risk also refers to the risk of non-compliance with conduct standards and related regulatory requirements, as may be prescribed by regulatory and other related authorities.

Financial institutions operate on the basis of trust. Ethical conduct in the financial system is critical. Increasingly, governments and regulators are implementing multiple policies and regulatory requirements to enforce standards and hold businesses accountable for their actions. The group expects ethical behaviour from its people. This contributes to its overall objective of prudent regulatory compliance and risk management, which is achieved through providing financial products and services in a responsible manner, and treating customers fairly. The group embraces standards of integrity and ethical conduct.

The group's compliance function is tasked with overseeing first line's management of compliance obligations, including compliance and conduct requirements. Group Compliance assists management and business in discharging their responsibilities to comply with applicable regulatory requirements and to resolve identified non-compliance matters effectively and timeously.

COMPLIANCE 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 compliance and conduct risks are identified and proactively managed.	• Maintain an effective and efficient compliance and conduct risk management framework. Ensure that there is sufficient operational capacity to assess financial products and services against fair market conduct principles. 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 platforms for unlawful purposes. • Promote training, learning and development to ensure a high level of understanding and awareness of legal and compliance frameworks applicable to the group's business activities. • Coordinate compliance interaction with various regulators across multiple jurisdictions.

Compliance with laws and related regulatory requirements is critical. Non-compliance may result in serious consequences and lead to both civil and criminal liability, including penalties, claims for losses and damages, and restrictions imposed by regulatory authorities.

Applicable laws and related requirements are outlined below:

- Banks Act, 1990
- Collective Investment Schemes Control Act, 2002
- Companies Act, 2008
- Competition Act, 1998
- Consumer Protection Act, 2008
- Currency and Exchanges Act, 1933
- Cybercrimes Act 19, 2020
- Exchange Control Regulations, 1961
- Financial Advisory and Intermediary Services Act (FAIS), 2002
- Financial Institutions (Protection of Funds) Act, 2001
- Financial Intelligence Centre Act (FICA), 2001
- Financial Markets Act, 2012
- Financial Sector and Deposit Insurance Levies Act, 2022
- Financial Sector and Deposit Insurance Levies (Administration) and Deposit Insurance Premiums Act, 2022
- Financial Sector Laws Amendment Act (FSLAA), 2021
- Financial Sector Regulation Act, 2017
- Foreign Account Tax Compliance Act, 2010
- Insurance Act, 2017
- Long-term Insurance Act, 1998
- National Credit Act, 2005
- National Payment System Act, 1998 Pension Funds Act, 1956
- Prevention and Combating of Corrupt Activities Act, 2004
- Prevention and Combating of Trafficking in Persons Act, 2013
- Protected Disclosures Act, 2000
- Protection of Constitutional Democracy Against Terrorism and Related Activities Act, 2004
- Protection of Personal Information Act (POPIA), 2013
- Promotion of Access to Information Act, 2000
- Regulation of Interception of Communications Act, 2002
- Short-term Insurance Act, 1998
- King Code of Governance Principles for South Africa, 2016 (King IV)
- Legislation and listing requirements related to listed instruments on various exchanges
- Statutory codes of conduct, and regulatory instruments issued by, among others, the Financial Sector Conduct Authority (FSCA) and the PA
- Other applicable regulatory requirements and applicable laws in the countries in which the group operates

Year under review and focus areas

SOUTH AFRICAN OPERATIONS

Year under review	Focus areas
• Completed the group's annual financial crime risk assessments. • Enhanced the group's policy framework to reinforce an anti-corruption culture and align to leading international practices. • Enhanced the market conduct framework with fair customer treatment and market integrity requirements. • Significant focus was placed on enhancing and maturing the privacy control environment, particularly privacy by design. • Focused on Competition Commission requests, Competition Tribunal matters, key payment modernisation projects, and key currency and exchange enhancements required by SARB and SARS.	• Continue to work closely with supervisory and regulatory authorities to ensure that requirements emanating from the government action plans, as well as requests for information are responded to adequately and timeously, to enable the government's Inter-Departmental Committee to respond to the FATF. • Continue to focus on enhancing the risk-based approach to financial crime risk management. • Continue to support initiatives aimed at combating corruption. • Align the FirstRand bribery and corruption risk assessment methodology to the group's financial crime risk-based methodology and implement the anti-bribery and corruption programme across the group. • Review incentives and fee structures, and enhance communication surveillance controls related to FAIS requirements. • Cooperation and collaboration with government, regulatory authorities and relevant industry bodies to finalise financial sector laws, regulations, and related regulatory instruments. • Mature the competition law programme. • Refine the third-party framework and implement a third-party risk management programme in collaboration with ERM. • Assess the impact of emerging legislation and modernisation on compliance aspects of the group's payment environment. • Strengthen the group's data privacy control environment.

BROADER AFRICA

Year under review	Focus areas
• Enhanced the compliance control landscape with the implementation of various regulatory requirements. • Completed financial crime assessments in all broader Africa subsidiaries. • Implemented a capital flow management framework in FNB Namibia. • Implemented express balance of payment reporting in FNB Zambia. • Implemented the low-value CMA payments solution in FNB Eswatini.	• Monitor emerging data privacy legislation in relevant jurisdictions and mature internal capabilities to strengthen the data privacy control environment. • Continue to elevate market conduct board-level metrics following the issuance of newly promulgated market conduct related legislation. • Participate in industry and regulatory engagements pertaining to platform localisation and other regulatory requirements.

Organisational structure and governance

COMPLIANCE AND CONDUCT RISK GOVERNANCE STRUCTURE

Board-level oversight

RCCC

Provides oversight of the group's compliance and conduct risk management profile.

Compliance risk committee

- Approves compliance risk management frameworks including anti-money laundering and combating the financing of terrorism (AML/CTF) frameworks, coverage plans, related risk management policies and standards, and governance arrangements.
- Monitors the effectiveness of compliance risk management across the group and recommends corrective action, where required.
- Assists the board in relation to compliance-related matters.

Setcom

- Provides oversight of the group's conduct risk programmes (employee, market and business conduct).
- Approves the group ethics and conduct policies and frameworks and ensures oversight of the group's compliance with the Companies Act, King IV and related corporate governance requirements.

Executive management oversight

Segment/operating business conduct risk committees and Setcoms

Consider culture and conduct issues. Drive business ownership of conduct programmes.

Sustainability and governance executive committee

Establishes and drives conduct and compliance programmes and ensures alignment to group sustainability practices and shared value principles.

Management structures

Segment/operating business compliance officers

Implement and monitor conduct and compliance policies and procedures related to the relevant segment/ operating business.

Group Compliance

- Coordinates management of group compliance and conduct risk. Monitors, assesses and reports on compliance to senior management and the board.
- Fulfils duties and responsibilities in line with requirements prescribed in the regulations and regulatory standards.
- The chief compliance officer provides independent reporting to RCCC, the audit committee and relevant executive and board oversight committees, including Setcom.

Group Internal Audit

Provides independent assurance of compliance programmes and processes.

Group Compliance's mandate is to facilitate the management of compliance with statutes, regulations and relevant regulatory instruments and requirements. To achieve this, appropriate governance arrangements are implemented and maintained. These include structures, policies, processes and procedures to identify and facilitate the management of compliance obligations and the mitigation of related risks. Reports on these matters are made to the relevant governance structures, which include board committees and regulators. Regular engagements are held with the chairs of the board and audit committee and the group CEO. Minimum requirements for the management of compliance as a function are prescribed in terms of section 60A of the Banks Act and regulation 49 of the Regulations relating to Banks. They include:

- risk identification through determining which laws, regulations, regulatory instruments and supervisory requirements are applicable to the group;
- risk measurement and mitigation through training, and the development and execution of risk management plans and related actions;
- risk monitoring and review of remedial actions through the monitoring centre of excellence;
- risk reporting; and
- providing advice on compliance matters.

Although independent of other functions, Group Compliance works closely with business units, GIA, ERM, external auditors, internal and external legal advisors, regulators, industry bodies, human capital, industrial relations and the company secretary's office to ensure effective functioning of compliance processes.

Board subcommittees oversee compliance outcomes and periodically consider the adequacy and effectiveness of governance arrangements relating to the group's compliance functions, the objective of which is to monitor the adequacy and effectiveness of the relevant functions. The board receives independent assurance on the effectiveness of compliance from, among others, GIA. It also receives feedback from regulatory authorities.

Assessment and management

Regulatory developments during the year

Financial Sector Regulation Act and banking legislation	• The Financial Sector and Deposit Insurance Levies Act No. 11 of 2022 and the Financial Sector and Deposit Insurance Levies (Administration) and Deposit Insurance Premiums Act No. 12 of 2022 came into effect on 1 April 2023. In terms of these Acts, levies are payable in respect of the financial sector regulators, the Tribunal, the Ombud Council, Statutory Ombud Schemes and Deposit Insurance. • Regulations are expected to be amended in accordance with revised international frameworks issued by the BCBS, relating to Basel III reforms. • Ongoing developments associated with the Twin Peaks system of financial regulation continue to further strengthen the regulation and supervision of financial institutions.
Protection of Personal information	• In South Africa, the banking industry POPIA Code of Conduct was approved by the Information Regulator and adopted.
Financial crime	• During the FATF Plenary held during February 2023, it was determined that South Africa had not sufficiently addressed the Mutual Evaluation Report findings and the country was greylisted. South Africa has submitted an action plan with the view to exit the greylisting by no later than February 2025. Some steps already taken are the signing into law of the General Laws (Anti-Money Laundering and Combating Terrorism Financing) Amendment Act, 2022 and the Protection of Constitutional Democracy Against Terrorism and Related Activities Amendment Act, 2022. The group's internal programme initiated during 2021 to support the government action plan was completed.
Market conduct	• The draft Conduct of Financial Institutions Bill (CoFI) is expected to be introduced to Parliament during 2023. • The FSCA published its regulation plan which covers the period from 1 April 2023 to 31 March 2026.
Broader Africa	• Increased regulatory focus has been noted across the jurisdictions in which the group operates, mainly relating to the localisation of core banking systems, storage, and processing of data, as well as outsourcing arrangements. Various regulations and draft papers were issued. • Mozambique and Nigeria were also greylisted. The respective governments have implemented a strategy to address their deficiencies, by signing into law various regulatory instruments.

Compliance and conduct risk appetite

The group aims to prevent its platforms from being abused for purposes of financial crime or non-compliance and to achieve full compliance with the letter and purpose of applicable legislation and regulation. Non-compliance may have serious consequences, which could lead to both civil and criminal liability, including loss or restriction of licences, penalties, claims for loss or damages, restrictions imposed by regulators, and reputational damage.

There may, however, be instances of unintended failures which result in non-compliance. Remedial action will be taken on a prioritised basis to address those instances which fall outside of approved tolerances.

The group seeks to manage the compliance risk resulting from potential or actual instances of non-compliance with all applicable legislation and manage regulatory supervisory expectations.

The group will:

- ensure that conditions are met to retain its various licences;
- limit significant financial losses, civil liability and the risk of imprisonment of directors, key persons and employees;
- endeavour to treat its customers and third parties fairly in all respects;
- minimise reputational damage to the group caused by compliance risk; and
- limit abuse of platforms for financial crime or non-compliance.

Compliance risk management

The group continually monitors the regulatory environment and responds appropriately to changes and developments. Appropriate risk management processes and programmes are employed in response to regulatory developments and requirements as follows:

- Promote risk-informed and efficient utilisation of resources, including investments made in people, systems and processes, to effectively manage risks emanating from the increasing number of new and/or amended local and international regulatory requirements.
- Drive a customer-centric, business-led approach to treating customers fairly.
- 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, as well as emerging financial crime threats and vulnerabilities.
- Review market conduct maturity and associated platform developments, including implementation of conduct standards for banks and oversight of employee activity in financial markets via the group's personal account trading programme.
- Strengthen anti-bribery and corruption risk management across the group.
- Enhance the anti-money laundering and combating the financing of terrorism control environment.
- Refine frameworks, policies and standards.
- Drive automation and scale the use of technology and advanced analytics for purposes of identifying regulatory and conduct risks and the creation of bespoke interventions.
- Review risk appetite statements and key risk indicators.
- Enhance financial crime risk management through client desirability assessments including sanctions, politically exposed persons and adverse media screening.

Conduct risk management

The market conduct programme is overseen by various group committees, the compliance risk committee, Setcom (supported by the group sustainability and governance executive committee) and RCCC.

This programme aligns to relevant legislative developments and international best practice and focuses on retail and wholesale market conduct.

Key focus areas include adherence to legislative requirements such as FAIS and conduct standards, UK Consumer Duty, Lesotho Financial Consumer Protection Act, and assessment of the impact of pending legislative instruments such as the CoFI bill and the omni conduct of business return issued by the FSCA. Other focus areas include maturing the conduct programme and governance (e.g. enhancing product governance, developing policies, tracking key risk indicators and utilising insights to improve customer outcomes). Regulatory engagement is well entrenched and managed.

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 market conduct programmes include retail market conduct, corporate market conduct, ethical trading in financial markets, credit and consumer protection practices and responsible competitive practices. The collaboration between Group Compliance and business ensures the appropriate focus to advise on and embed legislative best-practice market conduct requirements across the group.

business
risk

Introduction and objectives

Business risk is defined as 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 stems from:

- potential earnings volatility that is unrelated to other known and material risk types which capital is already held for;
- potential lower-than-expected earnings, higher-than-expected operating costs or both, due to the inability to generate sufficient volumes, margin or fees to maintain a positive net operating margin in a volatile business environment;
- the potential inability to execute on strategy according to the business plan in order for business to remain sustainable and well capitalised on a standalone basis over the forecast horizon; and
- the potential inability to timeously adjust strategy or business models in response to unexpected changes in the business or operating environment (legislation, laws, regulations, environment, etc.).

The group's objective is to develop and maintain a well-diversified portfolio that delivers sustainable earnings and minimises the probability 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	Relates to the group's ability to generate sufficient revenues 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-than-expected revenues or higher-than-expected costs.
Regulatory and other external changes	Related to external political, economic, customer, competition, market, technology, climate and regulatory changes in the operating environment.

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 the group's business risk assessment principles.

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 included in the annual ICAAP submission.

The group has established processes to identify, manage and measure business risk exposures, which ultimately enable the quantification of business risk economic capital.

As at 30 June 2023, business risk economic capital accounted for approximately 4% of the total group economic capital base (2022: 4%).

BUSINESS RISK MEASUREMENT AND MANAGEMENT PROCESS

Definition and identification

The first step involves tracking 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 analysis of its revenue volatility, pre-tax operating margin, cost-to-income ratio and fixed-to-total-cost ratio.

The risk inherent in expansion initiatives is managed through the execution of a robust business plan approval process. This includes in-depth review and challenge of business plans, due diligence (where relevant), understanding and documentation of risk drivers and risk factors, analysis of root causes that could lead to additional unexpected capital injection, and frequent monitoring and reporting of execution variance against the plan.

Ongoing monitoring of:	Changes to the external environment (e.g. environmental and climate-related changes), volume, margin, fee changes, and new business and expansion initiatives.

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 through other Pillar 1 and non-Pillar 1 risk 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.

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

Capitalisation and management action

The group uses a combination of top-down and bottom-up models to quantify tail-risk exposures for which capital is held. These include risk exposure quantification models and objective qualitative overlay scenarios. 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 group capitalises for absolute losses beyond risk appetite levels at a percentile to achieve a desired credit rating over a one-year time horizon.

Ongoing monitoring of:	Unexpected losses, earnings volatility, inflexible operating cost structures and unsustainable business practices.

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. The FRM executive committee annually assesses the extent to which the cost is allocated to businesses.

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

step-in
risk

Step-in risk is the risk that the bank has the provide financial support to an unconsolidated entity facing stress, in the absence of or exceeding contractual obligations to provide such support. Step-in risk may require deployment of the group's capital and liquidity resources to mitigate reputational risk.

In October 2017, the BCBS introduced guidelines for the identification and management of step-in risk. The guidelines seek to mitigate the potential spill-over effects from the shadow banking system to banks. This work was part of the G20 initiative to strengthen the oversight and regulation of the shadow banking system to mitigate systemic risks, in particular risks arising due to banks' interactions with shadow banking entities. The guidelines are intended to supplement the amendments already incorporated into the Basel regulations that sought to address implicit support and reputational risk.

Assessment and management

Whilst the Basel guidelines make step-in risk evaluation more explicit, the group's possible step-in risks have also been implicitly considered from several perspectives as part of its prudent risk management culture:

- shareholder view, i.e. FirstRand;
- prudential and fiduciary view from the bank's perspective; and
- rating agency views of the bank.

These risks are considered by the group's FRM executive committee with respect to all new or existing group entities (greenfield or acquisitions), any seed-funding provided, joint ventures and support relationships.

The bank has formulated a principles-based framework to address step-in risk, incorporating the above-mentioned approach and augmenting the internal approach with the guidelines issued by the BCBS, as outlined in the table below.

Framework component	Outline
Scope of evaluation	• Identify group entities to be evaluated considering their relationship with the bank. • Exclusion of entities deemed to be immaterial or subject to clearly enforceable laws or regulations which explicitly prohibit the provision of support (referred to as collective rebuttal).
Risk assessment, quantification and risk management	• Assess remaining entities against stipulated risk indicators. • Quantify potential impact on capital/liquidity resources. • Determine risk management actions.
Self-assessment reporting to the PA	

strategic
risk

Strategic risk represents the risk to current or prospective earnings arising from inappropriate business models or 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 strategy is the responsibility of the group's strategic executive committee and the segments, operating businesses and business units, 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 affiliations.

Executive management, as well as Group Treasury and ERM, periodically 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. Various risk and performance tracking tools are used to assess progress against the group's strategic objectives and targets, as well as ensuring that these are implemented within desired risk appetite levels. Reports on the results of these exercises are discussed at various business, risk and board committees and are ultimately considered in the setting of risk appetite and potential revisions to existing strategic plans.

reputational
risk

Reputational risk represents the risk of reputational damage due to events such as compliance failures, pending litigations, underperformance or negative media coverage.

The group's business is inherently built on trust and close relationships with customers and other stakeholders. Its reputation is, therefore, built on the way in which it conducts business. 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. High-impact transactions or emerging themes from the external or internal environment that may impact the group's reputational risk profile are discussed at group and operating business/segment risk committees as appropriate.

remuneration and
compensation

The group applies the following remuneration governance frameworks: the requirements of section 64C of the Banks Act, 1990 (Act No. 94 of 1990), the JSE Listing Requirements, the Financial Stability Board's *Principles for Sound Compensation Practices and its Implementation Standards*, BCBS Pillar 3 disclosure requirements standard (March 2017) and Directive 1/2018 issued by the section 30(4) of the Companies Act 71 of 2008 disclosure requirements and the recommended practices of King IV, where appropriate. The group's UK operations apply the UK Prudential Regulatory Authority requirements. In accordance with the TCFD recommendations, the group has incorporated climate considerations into its remuneration practices. Disclosure of the group's compensation policies, practices and performance can be found in the remuneration committee report, which is published on FirstRand's website at www.firstrand.co.za/investors/integrated-reporting-hub/governance/.

Independent Assurance Practitioner's Limited Assurance Report on Selected Key Performance Indicators

To the Directors of FirstRand Limited

Report on Selected Key Performance Indicators

We have undertaken a limited assurance engagement on selected key performance indicators (KPIs), as described below, and presented in FirstRand Limited's ("FirstRand") Pillar 3 disclosure 2023 for the year ended 30 June 2023 (the Report). This engagement was conducted by a multidisciplinary team including environmental and assurance specialists with relevant experience in sustainability reporting.

Subject Matter

We have been engaged to provide a limited assurance conclusion in our report on the following selected KPIs, marked with an "LA" on the relevant pages in the Report. The selected KPIs described below have been prepared in accordance with FirstRand's criteria for reporting ("reporting criteria"). The reporting criteria is disclosed on page 141 of the Report.

Environment Key Performance Indicators	Unit of measurement	Page in Report
Scope 1 Emissions	tCO2e	Page 142
Scope 2 Emissions	tCO2e	Page 142
Scope 3 Emissions	tCO2e	Page 142

Directors' Responsibilities

The Directors are responsible for the selection, preparation and presentation of the selected KPIs in accordance with FirstRand's reporting criteria. This responsibility includes the identification of stakeholders and stakeholder requirements, material issues, commitments with respect to sustainability performance and design, implementation and maintenance of internal control relevant to the preparation of the Report that is free from material misstatement, whether due to fraud or error. The Directors are also responsible for determining the appropriateness of the measurement and reporting criteria in view of the intended users of the selected KPIs and for ensuring that those criteria are publicly available to the Report users.

Inherent Limitations

The Greenhouse Gas (GHG) emission quantification is subject to inherent uncertainty because of incomplete scientific knowledge used to determine emissions factors and the values needed to combine emissions of different gases.

Our Independence and Quality Control

We have complied with the independence and other ethical requirements of the Code of Professional Conduct for Registered Auditors issued by the Independent Regulatory Board for Auditors (IRBA Code), which is founded on fundamental principles of integrity, objectivity, professional competence and due care, confidentiality and professional behaviour. The IRBA Code is consistent with the corresponding sections of the International Ethics Standards Board for Accountants' International Code of Ethics for Professional Accountants (including International Independence Standards).

Deloitte applies the International Standard on Quality Management 1, which requires the firm to design, implement and operate a system of quality management including policies or procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

Assurance Practitioner's Responsibility

Our responsibility is to express a limited assurance conclusion on the selected KPIs based on the procedures we have performed and the evidence we have obtained. We conducted our assurance engagement in accordance with the International Standard on Assurance Engagements (ISAE) 3000 (Revised), Assurance Engagements other than Audits or Reviews of Historical Financial Information and, in respect of greenhouse gas emissions, in accordance with the International Standard on Assurance Engagements (ISAE) 3410, Assurance Engagements on Greenhouse Gas Statements, issued by the International Auditing and Assurance Standards Board. These Standards requires that we plan and perform our engagement to obtain limited assurance about whether the selected KPIs are free from material misstatement.

A limited assurance engagement undertaken in accordance with ISAE 3000 (Revised) and ISAE 3410 involves assessing the suitability in the circumstances of FirstRand's use of its reporting criteria as the basis of preparation for the selected KPIs, assessing the risks of material misstatement of the selected KPIs whether due to fraud or error, responding to the assessed risks as necessary in the circumstances, and evaluating the overall presentation of the selected KPIs. A limited assurance engagement is substantially less in scope than a reasonable assurance engagement in relation to both risk assessment procedures, including an understanding of internal control, and the procedures performed in response to the assessed risks. The procedures we performed were based on our professional judgement and included inquiries, observation of processes followed, inspection of documents, analytical procedures, evaluating the appropriateness of quantification methods and reporting policies, and agreeing or reconciling with underlying records.

Given the circumstances of the engagement, in performing the procedures listed above we:

- Interviewed management and senior executives to obtain an understanding of the internal control environment, risk assessment process and information systems relevant to the sustainability reporting process;
- Inspected documentation to corroborate the statements of management and senior executives in our interviews;
- Tested the processes and systems to generate, collate, aggregate, monitor and report the selected KPIs;
- Inspected supporting documentation on a sample basis and performed analytical procedures to evaluate the data generation and reporting processes against the reporting criteria;
- Evaluated whether the selected KPIs presented in the Report are consistent with our overall knowledge and experience of sustainability management and performance at FirstRand.

The procedures performed in a limited assurance engagement vary in nature and timing, and are less in extent than for a reasonable assurance engagement. As a result, the level of assurance obtained in a limited assurance engagement is substantially lower than the assurance that would have been obtained had we performed a reasonable assurance engagement. Accordingly, we do not express a reasonable assurance opinion about whether FirstRand's 's selected KPIs have been prepared, in all material respects, in accordance with the accompanying FirstRand's reporting criteria.

Limited Assurance Conclusion

Based on the procedures we have performed and the evidence we have obtained, nothing has come to our attention that causes us to believe that the selected KPIs as set out in the Subject Matter paragraph above for the year ended 30 June 2023 are not prepared, in all material respects, in accordance with the reporting criteria.

Other Matters

The maintenance and integrity of FirstRand's website is the responsibility of FirstRand's management. Our procedures did not involve consideration of these matters and, accordingly, we accept no responsibility for any changes to either the information in the Report or our independent limited assurance report that may have occurred since the initial date of its presentation on FirstRand's website.

Restriction of Liability

Our work has been undertaken to enable us to express a limited assurance conclusion on the selected KPIs to the Directors of FirstRand in accordance with the terms of our engagement, and for no other purpose. We do not accept or assume liability to any party other than FirstRand, for our work, for this report, or for the conclusion we have reached.

Deloitte & Touche.

Deloitte & Touche
Registered Auditors

Per Jayne Mammatt
Chartered Accountant (SA)
Registered Auditor
Partner

14 September 2023

5 Magwa Crescent
Waterfall City, Waterfall
Private Bag x6, Gallo Manor, 2052
South Africa

Index of Pillar 3 disclosure
templates, regulation 43 and TCFD recommendations

The following table provides a list of the BCBS Pillar 3 standards, directives for standardised disclosures including Directives 1 of 2019, Prudential Standards under the Insurance Act (2017) and Regulation 43 disclosure requirements, as well as the respective page numbers where the information is provided in this disclosure. The table also provides coverage of the TCFD recommendations on risk management, governance and key metrics and targets that are included in this disclosure.

Section and table	Pillar 3 standard	Regulation/ recommendation/ directive	Page
Risk management overview and risk-weighted assets			
OVA bank risk management approach	✓		02
Link between financial statements and regulatory exposures			
Basis of consolidation		Regulation 43	29
LI1 Differences between accounting and regulatory scopes of consolidation and mapping of financial statement categories with regulatory risk categories	✓		30
LI2 Main sources of difference between regulatory exposure amounts and carrying values in financial statements	✓		31
LIA Explanation of differences between accounting and regulatory exposure amounts	✓		31
PV1 Prudent valuation adjustments	✓		34
Capital management			
Capital adequacy		Regulation 43	37
Liquidity risk and funding			
Funding management		Regulation 43	45
Liquidity risk management		Regulation 43	47
Credit risk			
CRA General qualitative information about credit risk	✓		50
Credit asset by type, segment and PA approach		Regulation 43	53
CR1 Credit quality of assets	✓		56
CR2 Changes in stock of defaulted advances, debt securities and off-balance sheet exposures	✓		57
CRB Additional disclosure related to credit quality of assets	✓		58
CRB Exposure by geographical, industry and residual maturity	✓		62
CRB Impaired exposures by geography and industry	✓		60
CRB Age analysis	✓		58
CRB Impaired and not impaired restructured exposures	✓		61
CRC Qualitative disclosure related to credit risk mitigation techniques	✓		22
CR3 Credit risk mitigation techniques	✓		63
CRD Qualitative disclosure on bank's use of external credit ratings under the standardised approach for credit risk	✓		67
CR4 Standardised approach – Credit risk exposure and credit risk mitigation effects	✓		64
CR5 Standardised approach – Exposure by asset classes and risk weights	✓		65
CRE AIRB approach qualitative disclosure	✓		66
CR6 Credit risk exposure by portfolio and PD range	✓		72
CR7 Effect on RWA of credit derivatives used as credit risk mitigation techniques	✓		74
CR8 RWA flow statement of credit risk exposures under AIRB	✓		74
CR9 Backtesting of PD per portfolio	✓		219
CR10 AIRB – specialised lending	✓		75
Risk analysis		Regulation 43	76

Section and table	Pillar 3 standard	Regulation/ recommendation/ directive	Page
Counterparty credit risk			
CCRA Qualitative disclosure related to CCR	✓		78
CCR1 Analysis of CCR exposures by approach	✓		82
CCR2 CVA capital charge	✓		83
CCR3 Standardised approach for counterparty credit risk exposures by regulatory portfolio and risk weights	✓		83
CCR4 IRB CCR exposure by portfolio and PD scale	✓		84
CCR5 Composition of collateral for CCR exposure	✓		85
CCR6 Credit derivative exposures	✓		86
CCR8 Exposure to central counterparties	✓		86
Securitisation			
SECA Qualitative disclosure requirements related to securitisation exposures	✓		87
SEC1 Securitisation exposures in the banking book per portfolio	✓		92
SEC3 Securitisation exposure in the banking book and associated regulatory capital requirements (bank acting as originator or sponsor)	✓		94
SEC4 Securitisation exposure in the banking book and associated capital requirements (bank acting as investor)	✓		96
Traded market risk			
Definition, governance, assessment, measurement		Regulation 43	98
MRA General qualitative disclosure requirements related to market risk	✓		98
MRB IMA qualitative disclosure	✓		101
MR2 RWA flow statement of market risk exposures under IMA	✓		102
VaR exposure per asset class		Regulation 43	102
MR3 IMA values for traded market risk	✓		103
MR4 Comparison of VaR estimates with gains/losses	✓		104
MR1 Market risk under the standardised approach	✓		106
Non-traded market risk			
Interest rate risk in the banking book		Regulation 43	
Projected net interest income sensitivity to interest rate movements			111
Banking book net asset value sensitivity to interest rate movements as a percentage to total capital		Regulation 43	112
Structural foreign exchange risk		Regulation 43	113
Net structural foreign exposures		Regulation 43	114
Equity investment risk			
Definition, governance, assessment, measurement		Regulation 43	115
Investment risk exposure, sensitivity and capital requirement		Regulation 43	118
CR10 Equity exposures using simple weight method and equity investment in funds	✓		120
Environmental and social risk			144
Insurance risk		SAM	148
Model risk		Regulation 43	151
Tax risk		Regulation 43	154
Operational risk	✓	Regulation 43	157
Compliance and conduct risk		Regulation 43	163
Business risk		Regulation 43	169
Step-in risk		Regulation 43	171
Strategic risk		Regulation 43	171
Reputational risk		Regulation 43	172
Remuneration and compensation	✓	Regulation 43	172

Section and table		**Pillar 3 standard**	**Regulation/ recommendation/ directive**	**Page**
Standardised disclosures			Directives 3 of 2015, 6 of 2014 and 11 of 2014	
KM1: Key metrics (at consolidated group and FirstRand Bank Limited)		✓		182
CC1 Composition of regulatory capital		✓		184, 192
CC2 Reconciliation of regulatory capital to balance sheet		✓		195
OV1 Overview of risk-weighted assets		✓		188
CCA Main features of regulatory capital instruments and of other TLAC – eligible instruments		✓		189
CCyB 1 Geographical distribution of credit exposures used in the calculation of the bank-specific countercyclical capital buffer requirement		✓		191
LR1 Summary comparison of accounting assets vs leverage ratio exposure measure		✓		197
LR2 Leverage ratio common disclosure template		✓		197
LIQ1 Liquidity coverage ratio (LCR)		✓		198
LIQ2 Net stable funding ratio (NSFR)		✓		199
CR6 Credit risk exposure by portfolio and PD range				201
CR9 Backtesting of PD per portfolio				219
CCR4 IRB CCR exposure by portfolio and PD scale				228
Climate risk				122
Governance	a) Board oversight of climate-related risks and opportunities.		TCFD	https://www.firstrand.co.za/investors/integrated-reporting-hub/governance/
	b) Management's role in assessing and managing climate-related risks and opportunities.		TCFD	129
Strategy	a) Identification of the climate-related risks and opportunities over the short, medium and long term.		TCFD	133
	b) Impact of climate-related risks and opportunities on strategy and business planning.		TCFD	https://www.firstrand.co.za/investors/integrated-reporting-hub/climate/
	c) Assessment of business resilience over varying climate scenarios, including a 2°C or lower scenario.		TCFD	131, 132
Risk management	a) Processes for identifying and assessing climate-related risks.		TCFD	124, 127, 129
	b) Processes for managing climate-related risks.		TCFD	124, 129
	c) Processes for identifying, assessing and managing climate-related risks are integrated into the organisation's overall risk management.		TCFD	129, 130
Metrics and targets	a) Disclosure of metrics used by the organisation to assess climate-related risks and opportunities in line with its strategy and risk management process.		TCFD	126, 134, 140
	b) Disclosure of Scope 1, Scope 2 and, if appropriate, Scope 3 greenhouse gas emissions, and the related risks.		TCFD	134-140
	c) Summary of the targets used to manage climate-related risks and opportunities and performance against targets.		TCFD	122-126

definitions

Additional Tier 1 (AT1) capital	AT1 capital instruments and qualifying capital instruments issued out of fully consolidated subsidiaries to third parties less specified regulatory deductions
Common Equity Tier 1 (CET1) capital	Share capital and premium, qualifying reserves and third-party capital less specified regulatory deductions
Credit loss ratio	Total impairment charge per the income statement expressed as a percentage of average advances (average between the opening and closing balance for the year)
Exposure at default (EAD)	Gross exposure of a facility upon default of a counterparty
FRBSA	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 cost of capital (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	CET1 capital plus AT1 capital
Tier 2 capital	Qualifying subordinated debt instruments, capital instruments issued out of fully consolidated subsidiaries to third parties and provisions less specified regulatory deductions
Total qualifying capital and reserves	Tier 1 capital plus Tier 2 capital

abbreviations

ABF	Asset-based finance
AI	Artificial intelligence
AIRB	Advanced internal ratings-based
ALCCO	Asset, liability and capital committee
ALM	Asset-liability management
AMA	Advanced measurement approach
AT1	Additional Tier 1
BASA	Banking Association of South Africa
BCBS	Basel Committee on Banking Supervision
BEPS	Base erosion and profit shifting
BIA	Basic indicator approach
C&I	Corporate and institutional
CCF	Credit conversion factors
CCP	Central clearing counterparties
CCyB	Countercyclical buffer
CET1	Common Equity Tier 1
CMA	Common Monetary Area
CoDI	Corporation for Deposit Insurance
CoFI Bill	Conduct of Financial Institutions Bill
CRM	Credit risk mitigation
CRO	Chief Risk Officer
CRS	Common Reporting Standard
CRST	Climate risk stress test
CSA	Credit support annexes
CSIR	Council for Scientific and Industrial Research
CSST	Common stress and scenario analysis
CVA	Credit valuation adjustment
DBRS	DBRS Ratings Limited
DEFRA	Department of Environment, Food and Rural Affairs
D-SIB	Domestic systemically important bank
EAD	Exposure at default
EC	Economic capital
ECAI	External credit assessment institution
ECL	Expected credit loss
EEPE	Effective expected positive exposure
EL	Expected loss
EMTN	European medium-term note
ENCORE	Exploring Natural Capital Opportunities, Risks and Exposure
ERM	Enterprise Risk Management
ESG	Environmental, social and governance
ESRA	Environmental and social risk analysis
ETL	Expected tail loss
ETP	Expected tail profit
EVE	Economic value of equity
FAIS	Financial Advisory and Intermediary Services Act
FATCA	Foreign Account Tax Compliance Act
FATF	Financial Action Task Force
FBA	Fall-back approach
FICA	Financial Intelligence Centre Act
FRB	FirstRand Bank Limited
FRBSA	FirstRand Bank Limited South Africa (excluding foreign branches)
FREMA	FirstRand EMA Holdings
FRI	FirstRand International Limited
FRIHL	FirstRand Investment Holdings (Pty) Ltd
FRIMHL	FirstRand Investment Management Holdings Limited
FRISCOL	FirstRand Insurance Services Company
FRM	Financial resource management
FRTB	Fundamental review of the trading book
FSB	Financial Stability Board
FSCA	Financial Sector Conduct Authority
FSLAA	Financial Sector Laws Amendment Act 23 of 2022
FSLAB	Financial Sector Laws Amendment Bill
GCR	Global Credit Ratings
GIA	Group Internal Audit
GHG	Greenhouse gas
HQLA	High-quality liquid assets
IAA	Internal assessment approach
IBAT	Integrated Biodiversity Assessment Tool
ICAAP	Internal capital adequacy assessment process
IFRS	International Financial Reporting Standards
IMA	Internal models approach
IPV	Independent price verification
IRB	Internal ratings-based

IRRBB	Interest rate risk in the banking book
ISDA	International Swaps and Derivatives Association
ISSB	International Sustainability Standards Board’s
JET-IP	Just energy transition investment plan
JIBAR	Johannesburg Interbank Average Rate
LCR	Liquidity coverage ratio
LECL	Lifetime expected credit losses
LGD	Loss given default
LIBOR	London Interbank Offered Rate
LTA	Look-through approach
MBA	Mandate-based approach
MIRC	Market and investment risk committee
MPIF	Monetary policy implementation framework
MRVC	Model risk and validation committee
MVNO	Mobile virtual network operator
NAV	Net asset value
NDC	Nationally Determined Contribution
NGFS	Network for Greening the Financial System
NIACC	Net income after cost of capital
NII	Net interest income
NIR	Non-interest revenue
NPLs	Non-performing loans
NSFR	Net stable funding ratio
OECD	Organisation for Economic Cooperation and Development
ORSA	Own risk and solvency assessment
OTC	Over-the-counter
PA	Prudential Authority
PBAF	Partnership for Biodiversity Accounting Financials
PCAF	Partnership for Carbon Accounting Financials
PD	Probability of default
POPIA	Protection of Personal Information Act
PVA	Prudent valuation adjustments
RCCC	Risk, capital management and compliance committee
RDARR	Risk data aggregation and risk reporting
ROE	Return on equity
RW	Risk-weighted
RWA	Risk-weighted assets
S&P	S&P Global Ratings
SA-CCR	Standardised approach for measuring counterparty credit risk
SARB	South African Reserve Bank
SARS	South African Revenue Service
SEC-IRBA	Securitisations internal rations-based approach
SEC-ERBA	Securitisation external rations-based approach
SEC-SA	Securitisation standardised approach
Setcom	Social, ethics and transformation committee
SFA	Supervisory formula approach
SFT	Securities financing transaction
SIFI	Systematically important financial institution
SME	Small and medium-sized enterprise
SOFR	Secured Overnight Financing Rate
SONIA	Sterling Overnight Index Average
SPV	Special purpose vehicle
SSFA	Simplified supervisory formula approach
STI	Short Term Insurance
sVaR	Stressed VaR
TCFD	Task Force on Climate-related Financial Disclosures
TFSSA	Toyota Financial Services SA
TLAC	Total loss-absorbing capacity
TNFD	Taskforce on Nature-related Financial Disclosures
TSA	The standardised approach for operational risk
VAF	Vehicle asset finance
VAPS	Value-added products and services
VaR	Value-at-Risk
VWFS	Volkswagen Financial Services
ZARONIA	South African Rand Overnight Index Average Rate

standardised *disclosures*

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introduction

In accordance with the Basel Pillar 3 framework and Regulation 43 of the amended Regulations relating to Banks (the Regulations), the group is required to publish standardised disclosure templates that provide users with key quantitative and qualitative information that is comparable and consistent.

KM1: Key metrics (at consolidated group)

The table below consists of key prudential metrics related to regulatory capital, leverage and liquidity for FirstRand Limited (the group).

	FirstRand Limited				
R million	**June 23**	March 23	December 22	September 22	June 22
AVAILABLE CAPITAL (AMOUNTS)*					
1 Common Equity Tier 1 (CET1)	**168 647**	154 606	152 342	150 453	137 189
1a Fully loaded ECL accounting model	**168 647**	154 606	152 342	150 453	137 189
2 Tier 1	**177 841**	163 871	161 458	157 546	144 229
2a Fully loaded ECL accounting model Tier 1	**177 841**	163 871	161 458	157 546	144 229
3 Total capital**	**201 274**	191 029	186 175	183 687	169 063
3a Fully loaded ECL accounting model total capital	**201 274**	191 029	186 175	183 687	169 063
RISK-WEIGHTED ASSETS (AMOUNTS)					
4 Total risk-weighted assets	**1 323 864**	1 259 198	1 212 421	1 189 283	1 135 517
RISK-BASED CAPITAL RATIOS AS A PERCENTAGE OF RWA*					
5 CET1 ratio (%)	**12.7%**	12.3%	12.6%	12.7%	12.1%
5a Fully loaded ECL accounting model CET1 ratio (%)	**12.7%**	12.3%	12.6%	12.7%	12.1%
6 Tier 1 ratio (%)	**13.4%**	13.0%	13.3%	13.2%	12.7%
6a Fully loaded ECL accounting model Tier 1 ratio (%)	**13.4%**	13.0%	13.3%	13.2%	12.7%
7 Total capital ratio (%)	**15.2%**	15.2%	15.4%	15.4%	14.9%
7a Fully loaded ECL accounting model total capital ratio (%)	**15.2%**	15.2%	15.4%	15.4%	14.9%
ADDITIONAL CET1 BUFFER REQUIREMENTS AS A PERCENTAGE OF RWA					
8 Capital conservation buffer requirement (2.5% from 2019) (%)	**2.5%**	2.5%	2.5%	2.5%	2.5%
9 Countercyclical buffer (CCyB) requirement (%)#	**0.3%**	0.3%	0.2%	0.0%	0.0%
10 Bank G-SIB and/or D-SIB additional requirements (%)†	**1.0%**	1.0%	1.0%	1.0%	1.0%
11 Total of bank CET1 specific buffer requirements (%) (row 8 + row 9 + row 10)	**3.8%**	3.8%	3.7%	3.5%	3.5%
12 CET1 available after meeting the bank's minimum capital requirements (%)	**1.9%**	1.9%	2.1%	2.4%	1.9%
BASEL III LEVERAGE RATIO‡					
13 Total Basel III leverage ratio exposure measure	**2 339 059**	2 231 926	2 191 435	2 140 751	2 058 696
14 Basel III leverage ratio (%) (row 2/row13)	**7.6%**	7.3%	7.4%	7.4%	7.0%
14a Fully loaded ECL accounting model Basel III leverage ratio (%) (row 2a/row 13)	**7.6%**	7.3%	7.4%	7.4%	7.0%
LIQUIDITY COVERAGE RATIO (LCR)					
15 Total high-quality liquid assets	**415 529**	397 617	392 351	374 303	341 208
16 Total net cash outflow	**336 232**	348 841	324 919	312 944	281 888
17 LCR (%)	**124%**	114%	121%	120%	121%
NET STABLE FUNDING RATIO (NSFR)					
18 Total available stable funding	**1 502 620**	1 425 733	1 390 388	1 369 446	1 333 179
19 Total required stable funding	**1 242 628**	1 198 116	1 163 470	1 145 010	1 093 451
20 NSFR	**121%**	119%	120%	120%	122%

* *Excluding unappropriated profits.*

** *Relates to total qualifying capital and reserves, which includes Tier 1 and Tier 2 capital.*

The Prudential Regulatory Authority (PRA) reinstated the UK CCyB in December 2022 which has resulted in a buffer add-on of 0.28% at 30 June 2023.

† *Total D-SIB requirement is 1.5% at 30 June 2023, of which 1% is held in CET1 capital.*

‡ *Based on month-end balances.*

Key drivers: March 2023 to June 2023

Risk-based capital ratios	**Available capital** ● Tier 1 capital: Increase in the foreign currency translation reserve due to the rand depreciation against hard currencies and appropriation of profits. ● Tier 2 capital: Decrease due to the redemption of the USD Tier 2 instrument, partly offset by the issuance of Tier 2 instruments in June 2023. **RWA** ● Increase in RWA driven primarily by credit, counterparty credit, equity investment and market risk.
Leverage ratio	**Total exposure measure** ● Increase in exposure measure driven by derivatives, on- and off-balance sheet exposures, partly offset by securities financing transaction exposures. **Tier 1 capital** ● Refer to commentary above.
Liquidity ratios	The increase in the LCR reflects the expected cyclical changes from the previous quarter. Both the LCR and NSFR exceeded their minimum requirement of 100%.

KM1: Key metrics (FirstRand Bank Limited*)

The table below consists of key prudential metrics related to regulatory capital, leverage and liquidity for FirstRand Bank Limited (FRB or the bank).

	FirstRand Bank Limited				
R million	**June 23**	March 23	December 22	September 22	June 22
AVAILABLE CAPITAL (AMOUNTS)**					
1 CET1	**101 027**	96 735	96 454	94 752	92 145
1a Fully loaded ECL accounting model	**101 027**	96 735	96 454	94 752	92 145
2 Tier 1	**108 370**	104 296	104 175	99 714	97 116
2a Fully loaded ECL accounting model Tier 1	**108 370**	104 296	104 175	99 714	97 116
3 Total capital[#]	**124 866**	127 442	124 856	122 060	118 113
3a Fully loaded ECL accounting model total capital	**124 866**	127 442	124 856	122 060	118 113
RISK-WEIGHTED ASSETS (AMOUNTS)					
4 Total RWA	**841 472**	823 737	806 672	792 266	757 205
RISK-BASED CAPITAL RATIOS AS A PERCENTAGE OF RWA**					
5 CET1 ratio (%)	**12.0%**	11.7%	12.0%	12.0%	12.2%
5a Fully loaded ECL accounting model CET1 ratio (%)	**12.0%**	11.7%	12.0%	12.0%	12.2%
6 Tier 1 ratio (%)	**12.9%**	12.7%	12.9%	12.6%	12.8%
6a Fully loaded ECL accounting model Tier 1 ratio (%)	**12.9%**	12.7%	12.9%	12.6%	12.8%
7 Total capital ratio (%)	**14.8%**	15.5%	15.5%	15.4%	15.6%
7a Fully loaded ECL accounting model total capital ratio (%)	**14.8%**	15.5%	15.5%	15.4%	15.6%
ADDITIONAL CET1 BUFFER REQUIREMENTS AS A PERCENTAGE OF RWA					
8 Capital conservation buffer requirement (2.5% from 2019) (%)	**2.5%**	2.5%	2.5%	2.5%	2.5%
9 Countercyclical buffer (CCyB) requirement (%)[†]	**0.0%**	0.0%	0.0%	0.0%	0.0%
10 Bank G-SIB and/or D-SIB additional requirements (%)[‡]	**1.0%**	1.0%	1.0%	1.0%	1.0%
11 Total of bank CET1 specific buffer requirements (%) (row 8 + row 9 + row 10)	**3.5%**	3.5%	3.5%	3.5%	3.5%
12 CET1 available after meeting the bank's minimum capital requirements (%)	**1.8%**	1.9%	2.2%	1.8%	2.1%
BASEL III LEVERAGE RATIO^					
13 Total Basel III leverage ratio exposure measure	**1 717 743**	1 664 879	1 647 119	1 622 145	1 557 964
14 Basel III leverage ratio (%) (row 2/row13)	**6.3%**	6.3%	6.3%	6.1%	6.2%
14a Fully loaded ECL accounting model Basel III leverage ratio (%) (row 2a/row 13)	**6.3%**	6.3%	6.3%	6.1%	6.2%
LIQUIDITY COVERAGE RATIO◊					
15 Total HQLA	**364 177**	345 902	349 255	334 133	303 744
16 Total net cash outflow	**281 514**	289 308	281 601	272 229	245 147
17 LCR (%)	**129%**	120%	124%	123%	124%
NET STABLE FUNDING RATIO◊					
18 Total available stable funding	**1 016 854**	998 781	980 065	973 164	944 069
19 Total required stable funding	**846 123**	855 359	835 962	823 700	785 233
20 NSFR	**120%**	117%	117%	118%	120%

* *FRB including foreign branches.*
** *Excluding unappropriated profits.*
\# *Relates to total qualifying capital and reserves, which includes Tier 1 and Tier 2 capital.*
† *The PRA reinstated the UK CCyB in December 2022. The buffer add-on for FRB is nil at 30 June 2023.*
‡ *Total D-SIB requirement is 1.5% at 30 June, of which 1% is held in CET1 capital.*
^ *Based on month-end balances.*
◊ *Reflects FRB's operations in South Africa.*

CC1: Composition of regulatory capital

The table below provides a detailed breakdown of regulatory capital according to the scope of regulatory consolidation for the group.

		FIRSTRAND LIMITED as at 30 June			
	R million	**2023**	**Amounts subject to pre-Basel III treatment**	**Reference***	2022
	COMMON EQUITY TIER 1 CAPITAL: INSTRUMENTS AND RESERVES				
1	Directly issued qualifying common share (and equivalent for non-joint stock companies) capital plus related stock surplus	**7 916**		a	7 961
2	Retained earnings	**156 346**		b	132 846
3	Accumulated other comprehensive income (and other reserves)	**13 714**		c	3 179
4	Directly issued capital subject to phase-out from CET1 (only applicable to non-joint stock companies)				
5	Common share capital issued by subsidiaries and held by third parties (amount allowed in group CET1)	**3 978**	4 288	d	3 864
6	**CET1 capital before regulatory adjustments**	**181 954**			147 850
	COMMON EQUITY TIER 1 CAPITAL: REGULATORY ADJUSTMENTS				
7	Prudential valuation adjustments	**403**			490
8	Goodwill (net of related tax liability)	**8 645**		e	7 722
9	Other intangibles other than mortgage servicing rights (net of related tax liability)	**1 488**		f	1 527
10	Deferred tax assets that rely on future probability excluding those arising from temporary differences (net of related tax liability)	**364**		g	325
11	Cash flow hedge reserve	**(3 096)**			(2 357)
12	Shortfall of provisions to expected losses	**–**			–
13	Securitisation gain on sale	**–**			–
14	Gains and losses due to changes in own credit risk on fair valued liabilities	**–**			–
15	Defined benefit pension fund net assets	**25**			35
16	Investments in own shares (if not already subtracted from paid in capital on reported balance sheet)	**–**			8
17	Reciprocal cross-holdings in common equity	**–**			–
18	Investments in the capital of banking, financial and insurance entities that are outside the scope of regulatory consolidation, where the bank does not own more than 10% of the issued share capital (amount above 10% threshold)	**–**			–
19	Significant investments in the common stock of banking, financial and insurance entities that are outside the scope of regulatory consolidation (amount above 10% threshold)	**–**			–
20	Mortgage servicing rights (amount above 10% threshold)				
21	Deferred tax assets arising from temporary differences (amount above 10% threshold, net of related tax liability)	**–**			–
22	Amount exceeding the 15% threshold	**–**			–
23	Of which: significant investments in the common stock of financials	**–**			–
24	Of which: mortgage servicing rights				
25	Of which: deferred tax assets arising from temporary differences	**–**			–
26	National specific regulatory adjustments	**5 478**		h	2 911
27	Regulatory adjustments applied to CET1 due to insufficient Additional Tier 1 (AT1) and Tier 2 to cover deductions	**–**			–
28	**Total regulatory adjustments to CET1**	**13 307**			10 661
29	**CET1 capital**	**168 647**			137 189
	ADDITIONAL TIER 1 CAPITAL: INSTRUMENTS				
30	Directly issued qualifying AT1 instruments plus related stock surplus	**–**			–
31	Of which: classified as equity under applicable accounting standards	**–**			–
32	Of which: classified as liabilities under applicable accounting standards	**–**			–
33	Directly issued capital instruments subject to phase-out from AT1	**–**			–
34	AT1 instruments (and CET1 instruments not included in row 5) issued by subsidiaries and held by third parties (amount allowed in group AT1)	**10 240**		i	7 545
35	Of which: instruments issued by subsidiaries subject to phase-out	**–**			–
36	**AT1 capital before regulatory adjustments**	**10 240**			7 545

* *Reference to CC2: Reconciliation of regulatory capital to balance sheet table on page 187.*

CC1: Composition of regulatory capital *continued*

		FIRSTRAND LIMITED as at 30 June			
	R million	**2023**	**Amounts subject to pre-Basel III treatment**	**Reference***	2022
	ADDITIONAL TIER 1: REGULATORY ADJUSTMENTS				
37	Investments in own AT1 instruments	**–**			–
38	Reciprocal cross holdings in AT1 instruments	**–**			–
39	Investments in the capital of banking, financial and insurance entities that are outside the scope of regulatory consolidation, where the bank does not own more than 10% of the issued common share capital of the entity (amount above 10% threshold)	**–**			–
40	Significant investments in the capital of banking, financial and insurance entities that are outside the scope of regulatory consolidation	**–**			–
41	National specific regulatory adjustments	**1 046**		j	505
42	Regulatory adjustments applied to AT1 due to insufficient Tier 2 to cover deductions	**–**			–
43	**Total regulatory adjustments to AT1 capital**	**1 046**			505
44	**AT1 capital**	**9 194**		k	7 040
45	**Tier 1 capital (CET1 + AT1)**	**177 841**			144 229
	TIER 2 CAPITAL INSTRUMENTS AND PROVISIONS				
46	Directly issued qualifying Tier 2 instruments plus related stock surplus	**–**			–
47	Directly issued capital instruments subject to phase-out from Tier 2	**–**			–
48	Tier 2 instruments (and CET1 and AT1 instruments not included in rows 5 or 34) issued by subsidiaries and held by third parties (amount allowed in group Tier 2)	**16 183**		l	20 375
49	Of which: instruments issued by subsidiaries subject to phase-out	**–**			–
50	Provisions	**8 486**			7 186
51	**Tier 2 capital before regulatory adjustments**	**24 669**			27 561
	TIER 2 CAPITAL: REGULATORY ADJUSTMENTS				
52	Investments in own Tier 2 instruments	**–**			–
53	Reciprocal cross holdings in Tier 2 instruments and other TLAC liabilities	**–**			–
54	Investments in the capital of banking, financial and insurance entities that are outside the scope of regulatory consolidation, where the bank does not own more than 10% of the issued common share capital of the entity (amount above the 10% threshold)	**–**			–
54a	Investments in the other TLAC liabilities of banking, financial and insurance entities that are outside the scope of regulatory consolidation and where the bank does not own more than 10% of the issued common share capital of the entity: amount previously designated for the 5% threshold but that no longer meets the conditions (for G-SIBs only)	**–**			–
55	Significant investments in the capital and other TLAC liabilities of banking, financial and insurance entities that are outside the scope of regulatory consolidation (net of eligible short positions)	**–**			–
56	National specific regulatory adjustments	**1 236**		m	2 727
57	**Total regulatory adjustments to Tier 2 capital**	**1 236**			2 727
58	**Tier 2 capital**	**23 433**			24 834
59	**Total regulatory capital (Tier 1 + Tier 2)**	**201 274**			169 063
60	**Total RWA**	**1 323 864**			1 135 517
	CAPITAL RATIOS AND BUFFERS				
61	CET1 (as a percentage of RWA)	**12.7%**			12.1%
62	Tier 1 (as a percentage of RWA)	**13.4%**			12.7%
63	Total capital (as a percentage of RWA)	**15.2%**			14.9%
64	Institution-specific buffer requirement (capital conservation buffer plus CCyB requirements plus higher loss-absorbency requirement, expressed as a percentage of RWA)	**8.8%**			8.5%
65	Of which: capital conservation buffer requirement	**2.5%**			2.5%
66	Of which: bank-specific CCyB requirement**	**0.3%**			0.0%
67	Of which: higher loss absorbency requirement (D-SIB) buffer requirement#	**1.0%**			1.0%
68	CET1 (as a percentage of RWA) available after meeting the bank's minimum capital requirements	**1.9%**			1.9%

* *Reference to CC2: Reconciliation of regulatory capital to balance sheet table on page 187.*
** *FirstRand's CCyB requirement is 0.28% for June 2023.*
# *The total D-SIB requirement is 1.5%, of which CET1 is 1.0%.*

CC1: Composition of regulatory capital *continued*

R million		FIRSTRAND LIMITED as at 30 June			
		2023	**Amounts subject to pre-Basel III treatment**	**Reference***	2022
NATIONAL MINIMA (IF DIFFERENT FROM BASEL III)					
69	National CET1 minimum ratio	**8.8%**			8.5%
70	National Tier 1 minimum ratio	**11.0%**			10.8%
71	National total capital minimum ratio	**13.3%**			13.0%
AMOUNTS BELOW THE THRESHOLD FOR DEDUCTIONS (BEFORE RISK WEIGHTING)					
72	Non-significant investments in the capital and other TLAC liabilities of other financial entities	**401**			255
73	Significant investments in the common stock of financial entities	**7 990**			7 009
74	Mortgage servicing rights (net of related tax liability)				
75	Deferred tax assets arising from temporary differences (net of tax liability)	**8 299**		n	7 696
APPLICABLE CAPS ON THE INCLUSION OF PROVISIONS IN TIER 2					
76	Provisions eligible for inclusion in Tier 2 in respect of exposures subject to standardised approach (prior to application of cap)	**9 957**			7 896
77	Cap on inclusion of provisions in Tier 2 under standardised approach	**5 205**			4 093
78	Provisions eligible for inclusion in Tier 2 in respect of exposures subject to internal ratings-based approach (prior to application of cap)	**3 659**			4 487
79	Cap for inclusion of provisions in Tier 2 under internal ratings-based approach	**3 281**			3 093
CAPITAL INSTRUMENTS SUBJECT TO PHASE-OUT ARRANGEMENTS (ONLY APPLICABLE BETWEEN 1 JAN 2018 AND 1 JAN 2022)					
80	Current cap on CET1 instruments subject to phase-out arrangements				
81	Amount excluded from CET1 due to cap (excess over cap after redemptions and maturities)				
82	Current cap on AT1 instruments subject to phase-out arrangements	**–**			–
83	Amount excluded from AT1 due to cap (excess over cap after redemptions and maturities)	**–**			4 519
84	Current cap on Tier 2 instruments subject to phase-out arrangements	**–**			–
85	Amount excluded from Tier 2 due to cap (excess over cap after redemptions and maturities)	**–**			–

* *Reference to CC2: Reconciliation of regulatory capital to balance sheet table on page 187.*

CC2: Reconciliation of regulatory capital to balance sheet

The table below highlights the differences between the scope of accounting and regulatory consolidation. It also links the group's published statement of financial position and the CC1 composition of regulatory capital disclosure template.

	FIRSTRAND LIMITED as at 30 June 2023		
R million	**Balance sheet as in published financial statements**	**Under regulatory scope of consolidation***	**Reference****
ASSETS			
Cash and cash equivalents	175 304	175 160	
Derivative financial instruments	85 956	85 956	
Commodities	17 252	17 252	
Investment securities	419 140	408 640	
Advances	1 539 375	1 539 375	
– Advances to customers	1 455 422	1 455 422	
– Marketable advances	83 953	83 953	
Other assets	3 760	3 333	
Current tax asset	925	925	
Non-current assets and disposal groups held for sale	1 359	1 359	
Reinsurance assets	554	–	
Investments in subsidiary companies	–	2 312	
Investments in associates	10 400	10 400	
Investments in joint ventures	3 105	3 105	
Property and equipment	21 155	21 129	
Intangible assets	10 278	10 133	
– Goodwill		8 645	e
– Intangibles		1 488	f
Investment properties	353	353	
Defined benefit post-employment asset	25	25	
Deferred income tax asset	8 669	8 663	
– Relating to temporary differences		8 299	n
– Other than temporary differences		364	g
Total assets	2 297 610		
EQUITY AND LIABILITIES			
Liabilities	12 753	12 753	
Short trading positions	70 354	70 354	
Derivative financial instruments	43 389	43 127	
Creditors, accruals and provisions	471	436	
Current tax liability	–	–	
Deposits	1 923 103	1 923 051	
Employee liabilities	17 074	16 896	
Other liabilities	7 033	7 030	
Amounts due to subsidiary companies	–	388	
Policyholder liabilities	8 131	–	
Tier 2 liabilities	16 869	14 947	l-m#
Deferred income tax liability	752	709	
Total liabilities	2 099 929		
Equity			
Ordinary shares	56	56	a
Share premium	7 860	7 860	a
Reserves	172 631	170 060	
– Retained earnings		156 346	b†
– Accumulated other comprehensive income (and other reserves)		13 714	c
Capital and reserves attributable to equityholders of the group	180 547		
Other equity instruments and reserves	12 846	9 194	k
Of which: Non-controlling interests – AT1		9 194	i-j#
Non-controlling interests – CET1	4 288	2 442	d-h#
Total equity	197 681		
Total equity and liabilities	2 297 610		

* *Amounts included under regulatory scope of consolidation exclude balances related to insurance entities as the deduction approach is applied. Deduction for insurance entities is included in line 26 of CC1: Composition of regulatory capital table on page 184.*
** *Reference to CC1: Composition of regulatory capital table on page 184.*
# *Subject to the minority and third-party capital rule: net amount reported under regulatory scope of consolidation. Reference h relates to line 26 (regulatory deductions) on CC1: Composition of regulatory capital which includes surplus minority capital of R1.5 billion.*
† *Excluding unappropriated profits.*
Note: Greyed out cells not applicable or information not available.

OV1: Overview of RWA

The following table provides an overview of RWA per risk type for the group.

		FIRSTRAND LIMITED			
		RWA			Minimum capital requirement*
	R million	**As at 30 June 2023**	As at 31 March 2023	As at 30 June 2022	**As at 30 June 2023**
1	**Credit risk (excluding counterparty credit risk)****	**930 968**	901 405	812 491	**123 632**
2	– Standardised approach	**403 663**	383 938	322 442	**53 606**
5	– Advanced internal ratings-based approach	**527 305**	517 467	490 049	**70 026**
16	**Securitisation exposures in banking book**	**5 359**	7 037	5 123	**712**
17	– IRB ratings-based approach	**–**	–	–	**–**
18	– IRB supervisory formula approach	**5 290**	5 131	1 887	**703**
19	– Standardised approach/simplified supervisory formula approach	**69**	1 906	3 236	**9**
	Total credit risk	**936 327**	908 442	817 614	**124 344**
6	**Counterparty credit risk**#	**14 922**	14 997	15 910	**1 982**
7	– Standardised approach for counterparty credit risk (SA-CCR)	**14 922**	14 997	15 910	**1 982**
10	**Credit valuation adjustment**	**11 006**	9 709	10 373	**1 462**
11	**Equity positions in banking book under market-based approach**†	**25 459**	22 274	22 820	**3 381**
12	**Equity investments in funds – look-through approach**	**309**	296	266	**41**
13	**Equity investments in funds – mandate-based approach**	**22 254**	9 573	8 444	**2 955**
14	**Equity investments in funds – fall-back approach**	**781**	124	270	**104**
20	**Market risk**‡	**43 897**	34 322	28 163	**5 830**
21	– Standardised approach	**13 124**	12 819	9 468	**1 743**
22	– Internal model approach	**30 773**	21 503	18 695	**4 087**
24	**Operational risk**	**154 576**	151 344	144 389	**20 528**
	– Basic indicator approach	**25 796**	23 086	21 131	**3 426**
	– Standardised approach	**26 850**	25 560	25 047	**3 566**
	– Advanced measurement approach	**101 930**	102 698	98 211	**13 536**
25	**Amounts below the thresholds for deduction (subject to 250% risk weight)**	**40 723**	39 362	36 760	**5 408**
26	**Floor adjustment**	**38 467**	32 990	20 483	**5 108**
	Other assets	**35 143**	35 765	30 025	**4 667**
27	**Total**^	**1 323 864**	1 259 198	1 135 517	**175 810**

* *The capital requirement is calculated at 13.3% (June 2022: 13%) of RWA. The minimum requirement excludes the Pillar 2B capital requirement. The difference to the BCBS base minimum (8%) relates to the buffer add-ons for Pillar 2A, CCyB, capital conservation and the D-SIB as prescribed in the Regulations. The CCyB requirement was 0.28% at 30 June 2023.*

** *The group does not apply the foundation internal ratings-based and the supervisory slotting approaches (rows 3 and 4 of OV1 template).*

The group does not apply the internal model method to counterparty credit risk (row 8 of OV1 template) and there were no other counterparty credit risks (CCRs) (row 9 of OV1 template).

† *Subject to the simple risk weighted method.*

‡ *There were no switches between trading and banking book during the period under review (row 23 of OV1 template).*

^ *Settlement risk was nil for the period under review (row 15 in OV1 template) and is therefore excluded.*

CCA: Main features of regulatory capital instruments

The table below provides a description of the terms and conditions or main features of the group's qualifying regulatory capital instruments.

		FirstRand Limited July 2023														
		Ordinary share capital and premium	**FRB24**	**FRB25***	**FRB28**	**FRB34**	**FRB37**	**FRB26**	**FRB27**	**FRB29**	**FRB30**	**FRB31**	**FRB32**	**FRB33**	**FRB35**	**FRB36**
1	Issuer	FirstRand Limited	FirstRand Bank Limited	FirstRand Bank Limited	FirstRand Bank Limited	FirstRand Bank Limited	FirstRand Bank Limited	FirstRand Bank Limited	FirstRand Bank Limited	FirstRand Bank Limited	FirstRand Bank Limited	FirstRand Bank Limited	FirstRand Bank Limited	FirstRand Bank Limited	FirstRand Bank Limited	FirstRand Bank Limited
2	Unique identifier (e.g. CUSIP, ISIN or Bloomberg identifier for private placement)	ZAE000066304	ZAG000155102	ZAG000157512	ZAG000172925	ZAG000192238	ZAG000197674	ZAG000159955	ZAG000159963	ZAG000175555	ZAG000175563	ZAG000181520	ZAG000189838	ZAG000189846	ZAG000193269	ZAG000196601
3	Governing law(s) of the instrument	South African law	South African law	South African law	South African law	South African law	South African law	South African law	South African law	South African law	South African law	South African law	South African law	South African law	South African law	South African law
	Regulatory treatment															
4	Transitional Basel III rules	CET1	AT1	AT1	AT1	AT1	AT1	Tier 2	Tier 2	Tier 2	Tier 2	Tier 2	Tier 2	Tier 2	Tier 2	Tier 2
5	Post-transitional Basel III rules	CET1	AT1	AT1	AT1	AT1	AT1	Tier 2	Tier 2	Tier 2	Tier 2	Tier 2	Tier 2	Tier 2	Tier 2	Tier 2
6	Eligible at solo/group/group and solo	Group	Group and solo	Group and solo	Group and solo	Group and solo	Group and solo	Group and solo	Group and solo	Group and solo	Group and solo	Group and solo	Group and solo	Group and solo	Group and solo	Group and solo
7	Instrument type (types to be specified by each jurisdiction)	CET1	AT1	AT1	AT1	AT1	AT1	Subordinated debt	Subordinated debt	Subordinated debt	Subordinated debt	Subordinated debt	Subordinated debt	Subordinated debt	Subordinated debt	Subordinated debt
8	Amount recognised in regulatory capital (R million)	7 916**	2 265	3 461	1 400	2 804	1 387	1 910	715	2 374	698	2 500	2 296	890	2 300	2 500
9	Par value of instrument (R million)	7 916**	2 265	3 461	1 400	2 804	1 387	1 910	715	2 374	698	2 500	2 296	890	2 300	2 500
10	Accounting classification	shareholders' equity	Equity	Equity	Equity	Equity	Equity	Liability – amortised cost	Liability – amortised cost	Liability – amortised cost	Liability – amortised cost	Liability – amortised cost	Liability – amortised cost	Liability – amortised cost	Liability – amortised cost	Liability – amortised cost
11	Original date of issuance	1 April 1998	8 November 2018	19 March 2019	2 December 2020	2 December 2022	26 July 2023	3 June 2019	3 June 2019	19 April 2021	19 April 2021	24 November 2021	28 September 2022	28 September 2022	6 February 2023	14 June 2023
12	Perpetual or dated	Perpetual	Perpetual	Perpetual	Perpetual	Perpetual	Perpetual	Dated	Dated	Dated	Dated	Dated	Dated	Dated	Dated	Dated
13	Original maturity date	No maturity	No maturity	No maturity	No maturity	No maturity	No maturity	3 June 2029	3 June 2031	19 April 2031	19 April 2031	24 November 2031	28 September 2032	28 September 2034	6 February 2033	14 September 2033
14	Issuer call subject to prior supervisory approval	Not applicable	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
15	Optional call date, contingent call dates and redemption amount	Not applicable	8 November 2023	19 September 2024	2 December 2025	2 June 2028	26 February 2029	3 June 2024	3 June 2026	19 April 2026	19 April 2026	24 November 2026	28 September 2027	28 September 2029	6 February 2028	14 September 2028
	Tax and/or regulatory event call	Not applicable	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	Redemption amount	Not applicable	100% of principal	100% of principal	100% of principal	100% of principal	100% of principal	100% of principal	100% of principal	100% of principal	100% of principal	100% of principal	100% of principal	100% of principal	100% of principal	100% of principal
16	Subsequent call dates, if applicable	Not applicable	Any interest payment date after 8 November 2023	Any interest payment date after 19 September 2024	Any interest payment date after 2 December 2025	Any interest payment date after 2 June 2028	Any interest payment date after 26 February 2029	Each interest payment date after optional call date	Each interest payment date after optional call date	Each interest payment date after optional call date	Each interest payment date after optional call date	Each interest payment date after optional call date	Each interest payment date after optional call date	Each interest payment date after optional call date	Each interest payment date after optional call date	Each interest payment date after optional call date
	Coupons / dividends															
17	Fixed or floating dividend/coupon	Floating	Floating	Floating	Floating	Floating	Floating	Floating	Fixed to floating#	Floating	Fixed to floating†	Floating	Floating	Floating	Floating	Floating
18	Coupon rate and any related index	Not applicable	445 bps over 3 month JIBAR	440 bps over 3 month JIBAR	440 bps over 3 month JIBAR	340 bps over 3 month JIBAR	310 bps over 3 month JIBAR	224 bps over 3 month JIBAR	10.19%	234 bps over 3 month JIBAR	8.155%	190 bps over 3 month JIBAR	205 bps over 3 month JIBAR	220 bps over 3 month JIBAR	190 bps over 3 month JIBAR	188 bps over 3 month JIBAR
19	Existence of a dividend stopper	No	Yes	Yes	Yes	Yes	Yes	No	No	No	No	No	No	No	No	No
20	Fully discretionary, partially discretionary or mandatory	Fully discretionary	Fully discretionary	Fully discretionary	Fully discretionary	Fully discretionary	Fully discretionary	Mandatory	Mandatory	Mandatory	Mandatory	Mandatory	Mandatory	Mandatory	Mandatory	Mandatory

* *Includes tap issuances of R223 million on 18 April 2019 and R761 million on 5 July 2019 respectively.*
** *As at 30 June 2023.*
\# *Floating rate is effective 3 June 2026 at 254 bps over 3 month JIBAR.*
† *Floating rate is effective 19 April 2026 at 234 bps over 3 month JIBAR.*

CCA: Main features of regulatory capital instruments *continued*

		FirstRand Limited July 2023													
		Ordinary share capital and premium	FRB24	FRB25	FRB28	FRB34	FRB37	FRB26	FRB27	FRB29	FRB30	FRB31	FRB32	FRB33	FRB35	FRB36
21	Existence of step up or other incentive to redeem	Not applicable	No	No	No	No	No	No	No	No	No	No	No	No	No	No
22	Non-cumulative or cumulative	Non-cumulative	Non-cumulative	Non-cumulative	Non-cumulative	Non-cumulative	Non-cumulative	Non-cumulative	Non-cumulative	Non-cumulative	Non-cumulative	Non-cumulative	Non-cumulative	Non-cumulative	Non-cumulative	Non-cumulative
23	Convertible or non-convertible	Not applicable	Non-convertible	Non-convertible	Non-convertible	Non-convertible	Non-convertible	Non-convertible	Non-convertible	Non-convertible	Non-convertible	Non-convertible	Non-convertible	Non-convertible	Non-convertible	Non-convertible
24	If convertible, conversion trigger(s)															
25	If convertible, fully or partially															
26	If convertible, conversion rate															
27	If convertible, mandatory or optional conversion															
28	If convertible, specify instrument type convertible into															
29	If convertible, specify issuer of instrument it converts into															
30	Write-down feature	Not applicable	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
31	If write-down, write-down trigger(s)		Contractual. Replaced with statutory once implemented, however, Prudential Authority can still elect contractual	Contractual. Replaced with statutory once implemented, however, Prudential Authority can still elect contractual	Contractual. Replaced with statutory once implemented, however, Prudential Authority can still elect contractual	Contractual. Replaced with statutory once implemented, however, Prudential Authority can still elect contractual	Contractual. Replaced with statutory once implemented, however, Prudential Authority can still elect contractual	Contractual. Replaced with statutory once implemented, however, Prudential Authority can still elect contractual	Contractual. Replaced with statutory once implemented, however, Prudential Authority can still elect contractual	Contractual. Replaced with statutory once implemented, however, Prudential Authority can still elect contractual	Contractual. Replaced with statutory once implemented, however, Prudential Authority can still elect contractual	Contractual. Replaced with statutory once implemented, however, Prudential Authority can still elect contractual	Contractual. Replaced with statutory once implemented, however, Prudential Authority can still elect contractual	Contractual. Replaced with statutory once implemented, however, Prudential Authority can still elect contractual	Contractual. Replaced with statutory once implemented, however, Prudential Authority can still elect contractual	Contractual. Replaced with statutory once implemented, however, Prudential Authority can still elect contractual
32	If write-down, full or partial		Partial	Partial	Partial	Partial	Partial	Partial	Partial	Partial	Partial	Partial	Partial	Partial	Partial	Partial
33	If write-down, permanent or temporary		Permanent	Permanent	Permanent	Permanent	Permanent	Permanent	Permanent	Permanent	Permanent	Permanent	Permanent	Permanent	Permanent	Permanent
34	If temporary write-down, description of write-up mechanism		Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
35	Position in subordination hierarchy in liquidation (specify instrument type immediately senior to instrument)	AT1	Subordinated debt*	Subordinated debt*	Subordinated debt*	Subordinated debt*	Subordinated debt*	Senior unsecured	Senior unsecured	Senior unsecured	Senior unsecured	Senior unsecured	Senior unsecured	Senior unsecured	Senior unsecured	Senior unsecured
36	Non-compliant transitioned features	Not applicable	No	No	No	No	No	No	No	No	No	No	No	No	No	No
37	If yes, specify non-compliant features		Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable

* *Ranking as Tier 2 capital instruments.*

CCYB1: Geographical distribution of credit exposures used in the countercyclical capital buffer*

The table below provides an overview of the geographical distribution of private sector credit exposures relevant for the calculation of the countercyclical buffer.

R million		Risk-weighted assets used in the computation of the countercyclical capital buffer		
Geographical breakdown	Countercyclical buffer rate	RWA	Bank-specific countercyclical capital buffer rate	Countercyclical buffer amount
United Kingdom	**1.00%**	**223 754**		
Sum**		223 754		
Total#		**807 081**	**0.28%**	**3 640**

* *Applied materiality threshold in Directive 2 of 2018, Materiality threshold in respect of exposure to a foreign jurisdiction in applying jurisdictional reciprocity in the countercyclical capital buffer calculation to determine exposures to foreign jurisdictions.*
** *Total exposures with non-zero countercyclical buffer requirements.*
# *Total exposures across all jurisdictions, non-zero countercyclical buffer requirements.*

CC1: Composition of regulatory capital

The table below provides a detailed breakdown of regulatory capital according to the scope of regulatory consolidation for the bank.

		FIRSTRAND BANK LIMITED* as at 30 June			
	R million	2023	Amounts subject to pre-Basel III treatment	Reference**	2022
	COMMON EQUITY TIER 1 CAPITAL: INSTRUMENTS AND RESERVES				
1	Directly issued qualifying common share (and equivalent for non-joint stock companies) capital plus related stock surplus	**16 808**		a	16 808
2	Retained earnings	**82 265**		b	74 265
3	Accumulated other comprehensive income (and other reserves)	**150**		c	(82)
4	Directly issued capital subject to phase-out from CET1 (only applicable to non-joint stock companies)				
5	Common share capital issued by subsidiaries and held by third parties (amount allowed in group CET1)	**–**			–
6	**CET1 capital before regulatory adjustments**	**99 223**			90 991
	COMMON EQUITY TIER 1 CAPITAL: REGULATORY ADJUSTMENTS				
7	Prudential valuation adjustments	**376**			474
8	Goodwill (net of related tax liability)	**–**			–
9	Other intangibles other than mortgage servicing rights (net of related tax liability)	**787**		d	512
10	Deferred tax assets that rely on future probability excluding those arising from temporary differences (net of related tax liability)	**258**		e	238
11	Cash flow hedge reserve	**(3 225)**			(2 379)
12	Shortfall of provisions to expected losses	**–**			–
13	Securitisation gain on sale	**–**			–
14	Gains and losses due to changes in own credit risk on fair valued liabilities	**–**			–
15	Defined benefit pension fund net assets	**–**			–
16	Investments in own shares (if not already subtracted from paid in capital on reported balance sheet)	**–**			1
17	Reciprocal cross-holdings in common equity	**–**			–
18	Investments in the capital of banking, financial and insurance entities that are outside the scope of regulatory consolidation, where the bank does not own more than 10% of the issued share capital (amount above 10% threshold)	**–**			–
19	Significant investments in the common stock of banking, financial and insurance entities that are outside the scope of regulatory consolidation (amount above 10% threshold)	**–**			–
20	Mortgage servicing rights (amount above 10% threshold)				
21	Deferred tax assets arising from temporary differences (amount above 10% threshold, net of related tax liability)	**–**			–
22	Amount exceeding the 15% threshold	**–**			–
23	Of which: significant investments in the common stock of financials	**–**			–
24	Of which: mortgage servicing rights				
25	Of which: deferred tax assets arising from temporary differences	**–**			–
26	National specific regulatory adjustments	**–**			–
27	Regulatory adjustments applied to CET1 due to insufficient AT1 and Tier 2 to cover deductions	**–**			–
28	**Total regulatory adjustments to CET1**	**(1 804)**			(1 154)
29	**CET1 capital**	**101 027**			92 145
	ADDITIONAL TIER 1 CAPITAL: INSTRUMENTS				
30	Directly issued qualifying AT1 instruments plus related stock surplus	**9 930**			7 126
31	Of which: classified as equity under applicable accounting standards	**9 930**		f	7 126
32	Of which: classified as liabilities under applicable accounting standards	**–**			–
33	Directly issued capital instruments subject to phase-out from AT1	**–**			–
34	AT1 instruments (and CET1 instruments not included in row 5) issued by subsidiaries and held by third parties (amount allowed in group AT1)	**–**			–
35	Of which: instruments issued by subsidiaries subject to phase out	**–**			–
36	**AT1 capital before regulatory adjustments**	**9 930**			7 126

* *FRB including foreign branches.*

** *Reference to CC2: Reconciliation of regulatory capital to balance sheet table on page 195.*

CC1: Composition of regulatory capital *continued*

		FIRSTRAND BANK LIMITED* as at 30 June			
R million		2023	Amounts subject to pre-Basel III treatment	Reference**	2022
ADDITIONAL TIER 1 CAPITAL: REGULATORY ADJUSTMENTS					
37	Investments in own AT1 instruments	**–**			–
38	Reciprocal cross holdings in AT1 instruments	**–**			–
39	Investments in the capital of banking, financial and insurance entities that are outside the scope of regulatory consolidation, where the bank does not own more than 10% of the issued common share capital of the entity (amount above 10% threshold)	**–**			–
40	Significant investments in the capital of banking, financial and insurance entities that are outside the scope of regulatory consolidation	**–**			–
41	National specific regulatory adjustments	**2 587**			2 155
42	Regulatory adjustments applied to AT1 due to insufficient Tier 2 to cover deductions	**–**			–
43	**Total regulatory adjustments to AT1 capital**	**2 587**			2 155
44	**AT1 capital**	**7 343**			4 971
45	**Tier 1 capital (CET1 + AT1)**	**108 370**			97 116
TIER 2 CAPITAL INSTRUMENTS AND PROVISIONS					
46	Directly issued qualifying Tier 2 instruments plus related stock surplus	**16 183**		g	20 401
47	Directly issued capital instruments subject to phase-out from Tier 2	**–**			–
48	Tier 2 instruments (and CET1 and AT1 instruments not included in rows 5 or 34) issued by subsidiaries and held by third parties (amount allowed in group Tier 2)	**–**			–
49	Of which: instruments issued by subsidiaries subject to phase out	**–**			–
50	Provisions	**3 954**			3 628
51	**Tier 2 capital before regulatory adjustments**	**20 137**			24 029
TIER 2 CAPITAL: REGULATORY ADJUSTMENTS					
52	Investments in own Tier 2 instruments	**–**			–
53	Reciprocal cross holdings in Tier 2 instruments and other TLAC liabilities	**–**			–
54	Investments in the capital of banking, financial and insurance entities that are outside the scope of regulatory consolidation, where the bank does not own more than 10% of the issued common share capital of the entity (amount above the 10% threshold)	**–**			–
54a	Investments in the other TLAC liabilities of banking, financial and insurance entities that are outside the scope of regulatory consolidation, where the bank does not own more than 10% of the issued common share capital of the entity: amount previously designated for the 5% threshold but that no longer meets the conditions (for G-SIBs only)	**–**			–
55	Significant investments in the capital and other TLAC liabilities of banking, financial and insurance entities that are outside the scope of regulatory consolidation (net of eligible short positions)	**–**			–
56	National specific regulatory adjustments	**3 641**			3 032
57	**Total regulatory adjustments to Tier 2 capital**	**3 641**			3 032
58	**Tier 2 capital**	**16 496**			20 997
59	**Total regulatory capital (Tier 1 + Tier 2)**	**124 866**			118 113
60	**Total RWA**	**841 472**			757 205
CAPITAL RATIOS AND BUFFERS					
61	CET1 (as a percentage of RWA)	**12.0%**			12.2%
62	Tier 1 (as a percentage of RWA)	**12.9%**			12.8%
63	Total capital (as a percentage of RWA)	**14.8%**			15.6%
64	Institution-specific buffer requirement (capital conservation buffer plus countercyclical buffer (CCyB) requirements plus higher loss absorbency requirement, expressed as a percentage of RWA)#	**8.5%**			8.5%
65	Of which: capital conservation buffer requirement	**2.5%**			2.5%
66	Of which: bank specific CCyB requirement#	**0.0%**			0.0%
67	Of which: D-SIB buffer requirement†	**1.0%**			1.0%
68	CET1 (as a percentage of RWA) available after meeting the bank's minimum capital requirements	**1.8%**			2.1%

* *FRB including foreign branches*
** *Reference to CC2: Reconciliation of regulatory capital to balance sheet table on page 195.*
\# *FRB's CCyB requirement is nil for June 2023.*
† *The total D-SIB requirement is 1.5%, of which CET1 is 1.0%.*

CC1: Composition of regulatory capital *continued*

R million		FIRSTRAND BANK LIMITED* as at 30 June 2023	Amounts subject to pre-Basel III treatment	Reference**	2022
NATIONAL MINIMA (IF DIFFERENT FROM BASEL III)					
69	National CET1 minimum ratio	**8.5%**			8.5%
70	National Tier 1 minimum ratio	**10.8%**			10.8%
71	National total capital minimum ratio	**13.0%**			13.0%
AMOUNTS BELOW THE THRESHOLD FOR DEDUCTIONS (BEFORE RISK WEIGHTING)					
72	Non-significant investments in the capital and other TLAC liabilities of other financial entities	**268**			121
73	Significant investments in the common stock of financial entities	**150**			143
74	Mortgage servicing rights (net of related tax liability)				
75	Deferred tax assets arising from temporary differences (net of tax liability)	**7 141**		h	6 503
APPLICABLE CAPS ON THE INCLUSION OF PROVISIONS IN TIER 2					
76	Provisions eligible for inclusion in Tier 2 in respect of exposures subject to standardised approach (prior to application of cap)	**901**			788
77	Cap on inclusion of provisions in Tier 2 under standardised approach	**547**			416
78	Provisions eligible for inclusion in Tier 2 in respect of exposures subject to internal ratings-based approach (prior to application of cap)	**4 070**			5 219
79	Cap for inclusion of provisions in Tier 2 under internal ratings-based approach	**3 407**			3 212
CAPITAL INSTRUMENTS SUBJECT TO PHASE-OUT ARRANGEMENTS (ONLY APPLICABLE BETWEEN 1 JAN 2018 AND 1 JAN 2022)					
80	Current cap on CET1 instruments subject to phase-out arrangements				
81	Amount excluded from CET1 due to cap (excess over cap after redemptions and maturities)				
82	Current cap on AT1 instruments subject to phase-out arrangements	**–**			–
83	Amount excluded from AT1 due to cap (excess over cap after redemptions and maturities)	**–**			–
84	Current cap on Tier 2 instruments subject to phase-out arrangements	**–**			–
85	Amount excluded from Tier 2 due to cap (excess over cap after redemptions and maturities)	**–**			–

* *FRB including foreign branches.*
** *Reference to CC2: Reconciliation of regulatory capital to balance sheet table on page 195.*

CC2: Reconciliation of regulatory capital to balance sheet

The table below highlights the differences between the scope of accounting and regulatory consolidation. It also links the bank's published statement of financial position and the CC1 composition of regulatory capital disclosure template.

	FIRSTRAND BANK LIMITED* as at 30 June 2023		
R million	**Balance sheet as in published financial statements**	**Under regulatory scope of consolidation**	**Reference****
ASSETS			
Cash and cash equivalents	103 714	103 714	
Derivative financial instruments	63 307	63 307	
Commodities	17 252	17 252	
Investment securities	305 259	305 259	
Advances	1 066 891	1 066 891	
– Advances to customers	981 244	981 244	
– Marketable advances	85 647	85 647	
Other assets	8 908	8 908	
Current tax asset	530	530	
Amounts due by holding company and fellow subsidiaries	63 205	63 205	
Property and equipment	17 433	17 433	
Intangible assets	787	787	d
Investment properties	281	281	
Deferred income tax asset	7 397	7 397	
– Relating to temporary differences		7 139	h
– Other than temporary differences		258	e
Total assets	1 654 964		
EQUITY AND LIABILITIES			
Liabilities			
Short trading positions	12 473	12 473	
Derivative financial instruments	66 533	66 533	
Creditors, accruals and provisions	19 953	19 953	
Current tax liability	–	–	
Deposits	1 381 773	1 381 773	
Employee liabilities	14 282	14 282	
Other liabilities	2 878	2 878	
Amounts due to holding company and fellow subsidiaries	26 444	26 444	
Tier 2 liabilities	16 337	16 183	g
Total liabilities	1 540 673		
Equity			
Ordinary shares	4	4	a
Share premium	16 804	16 804	a
Reserves	87 553	82 415	
– Retained earnings		82 265	b#
– Accumulated other comprehensive income (and other reserves)		150	c
Capital and reserves attributable to equityholders	104 361		
Other equity instruments	9 930	9 930	f
Total equity	114 291		
Total equity and liabilities	1 654 964		

* *FRB including foreign branches.*
** *Reference to CC1: Composition of regulatory capital table on page 192.*
\# *Excluding unappropriated profits.*
Note: Dark blue cells not applicable or information not available.

OV1: Overview of RWA

The following table provides an overview of RWA per risk type for the bank.

		FirstRand Bank Limited*			
		RWA			Minimum capital requirement**
	R million	**As at 30 June 2023**	As at 31 March 2023	As at 30 June 2022	**As at 30 June 2023**
1	**Credit risk (excluding counterparty credit risk)#**	**591 783**	582 174	540 052	**76 931**
2	– Standardised approach	**43 334**	29 868	31 073	**5 633**
5	– Advanced internal ratings-based approach	**548 449**	552 306	508 979	**71 298**
16	**Securitisation exposures in banking book**	**5 359**	7 037	5 123	**697**
17	– IRB ratings-based approach	–	–	–	**–**
18	– IRB supervisory formula approach	**5 290**	5 131	1 887	**688**
19	– Standardised approach/simplified supervisory formula approach	**69**	1 906	3 236	**9**
	Total credit risk	**597 142**	589 211	545 175	**77 628**
6	**Counterparty credit risk†**	**8 432**	11 240	14 042	**1 096**
7	– SA-CCR	**8 432**	11 240	14 042	**1 096**
10	**Credit valuation adjustment**	**6 032**	7 787	9 427	**784**
11	**Equity positions in banking book under market-based approach‡**	**1 854**	1 895	1 651	**241**
12	**Equity investments in funds – look-through approach**	**–**	–	–	**–**
13	**Equity investments in funds – mandate-based approach**	**102**	83	104	**13**
14	**Equity investments in funds – fall-back approach**	**124**	124	270	**16**
20	**Market risk^**	**37 382**	28 038	23 938	**4 859**
21	– Standardised approach	**6 609**	6 535	5 243	**859**
22	– Internal model approach	**30 773**	21 503	18 695	**4 000**
24	**Operational risk**	**102 356**	102 942	98 205	**13 306**
	– Basic indicator approach	**–**	–	–	**–**
	– Standardised approach	**2 875**	2 823	2 990	**374**
	– Advanced measurement approach	**99 481**	100 119	95 215	**12 932**
25	**Amounts below the thresholds for deduction (subject to 250% risk weight)**	**18 228**	16 826	16 615	**2 370**
26	**Floor adjustment**	**42 383**	37 213	25 001	**5 510**
	Other assets	**27 437**	28 378	22 777	**3 567**
27	**Total◊**	**841 472**	823 737	757 205	**109 390**

* *FRB including foreign branches.*

** *The capital requirement is calculated at 13% (June 2022: 13%) of RWA. The minimum requirement excludes the Pillar 2B capital requirement. The difference to the BCBS base minimum (8%) relates to the buffer add-ons for Pillar 2A, CCyB, capital conservation and the D-SIB as prescribed in the Regulations. The CCyB requirement was nil at 30 June 2023.*

\# *The bank does not apply the foundation internal ratings-based and the supervisory slotting approaches (rows 3 and 4 of OV1 template).*

† *The bank does not apply the internal model method to counterparty credit risk (row 8 of OV1 template) and there were no other CCRs (row 9 of OV1 template).*

‡ *Subject to the simple risk weighted method.*

^ *There were no switches between trading and banking book during the period under review (row 23 of OV1 template).*

◊ *Settlement risk was nil for the period under review (row 15 in OV1 template) and is therefore excluded.*

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LR1: Summary comparison of accounting assets vs leverage ratio exposure measure*

The table below provides a reconciliation of the published total assets as per the statement of financial position to the leverage ratio exposure measure for the group and bank.

	R million	FirstRand Limited	FirstRand Bank Limited**
		As at 30 June 2023	
1	Total consolidated assets as per published financial statements	2 297 610	1 654 964
2	Adjustment for investments in banking, financial, insurance or commercial entities that are consolidated for accounting purposes but outside the scope of regulatory consolidation	(9 953)	–
3	Adjustment for fiduciary assets recognised on the balance sheet pursuant to the operative accounting framework but excluded from the leverage ratio exposure measure	–	–
4	Adjustments for derivative financial instruments	(60 168)	(34 163)
5	Adjustment for securities financing transactions (i.e. repos and similar secured lending)	1 321	1 321
6	Adjustment for off-balance sheet items (i.e. conversion to credit equivalent amounts of off-balance sheet exposures)	114 607	100 059
7	Other adjustments	(4 358)	(4 438)
8	**Leverage ratio exposure**	**2 339 059**	**1 717 743**

* *Based on month-end balances.*
** *FRB including foreign branches.*

LR2: Leverage ratio common disclosure template*

The table below provides a detailed breakdown of the components of the leverage ratio exposure measure for the group and bank.

		FirstRand Bank Limited**			
	R million	**As at 30 June 2023**	As at 31 March 2023	**As at 30 June 2023**	As at 31 March 2023
	ON-BALANCE SHEET EXPOSURES				
1	On-balance sheet exposures (excluding derivatives and SFTs, but including collateral)	**2 182 948**	2 080 346	**1 537 023**	1 493 845
2	(Asset amounts deducted in determining Basel III Tier 1 capital)	**(65 013)**	(62 491)	**(41 123)**	(39 771)
3	**Total on-balance sheet exposures (excluding derivatives and SFTs) (sum of lines 1 and 2)**	**2 117 935**	2 017 855	**1 495 900**	1 454 074
	DERIVATIVE EXPOSURES				
4	Replacement cost associated with all derivatives transactions (ie net of eligible cash variation margin)	**19 889**	6 435	**25 710**	11 732
5	Add-on amounts for PFE associated with all derivatives transactions#	**19 998**	21 225	**20 749**	21 410
6	Gross-up for derivatives collateral provided where deducted from the balance sheet assets pursuant to the operative accounting framework	**–**	–	**–**	–
7	(Deductions of receivables assets for cash variation margin provided in derivatives transactions)#	**(17 642)**	(6 832)	**(17 642)**	(6 832)
8	(Exempted CCP leg of client-cleared trade exposures)	**–**	–	**–**	–
9	Adjusted effective notional amount of written credit derivatives	**6 591**	7 364	**6 591**	7 364
10	(Adjusted effective notional offsets and add-on deductions for written credit derivatives)	**(3 050)**	(6 365)	**(3 050)**	(6 365)
11	**Total derivative exposures (sum of lines 4 to 10)†**	**25 786**	21 827	**32 358**	27 309
	SECURITIES FINANCING TRANSACTION EXPOSURES*				
12	Gross SFT assets (with no recognition of netting), after adjusting for sale accounting transactions	**79 410**	81 187	**88 105**	89 261
13	(Netted amounts of cash payables and cash receivables of gross SFT assets)	**–**	–	**–**	–
14	CCR exposure for SFT assets	**1 321**	2 600	**1 321**	2 600
15	Agent transaction exposures	**–**	–	**–**	–
16	**Total securities financing transaction exposures (sum of lines 12 to 15)**	**80 731**	83 787	**89 426**	91 861
	OTHER OFF-BALANCE SHEET EXPOSURES				
17	Off-balance sheet exposure at gross notional amount	**512 052**	494 470	**484 445**	464 562
18	(Adjustments for conversion to credit equivalent amounts)	**(397 445)**	(386 013)	**(384 386)**	(372 927)
19	**Off–balance sheet items (sum of lines 17 and 18)**	**114 607**	108 457	**100 059**	91 635
	CAPITAL AND TOTAL EXPOSURES				
20	**Tier 1 capital**	**177 841**	163 871	**108 370**	104 296
21	**Total exposures (sum of lines 3, 11, 16 and 19)**	**2 339 059**	2 231 926	**1 717 743**	1 664 879
	LEVERAGE RATIO				
22	**Basel III leverage ratio**	**7.6%**	7.3%	**6.3%**	6.3%

* *Based on month-end balances.*
** *FRB including foreign branches.*
\# *Restated to reflect the cash variation margin provided and PFE separately.*
† *The increase in the total derivative exposures was driven by mark-to-market movements in interest rates and foreign currency changes, coupled with increased client trades. This increased the replacement cost and variation margin exchanged, while the PFE decreased on the back of lower equities exposures.*

LIQ1: Liquidity coverage ratio

The table below provides a breakdown of the group and bank's available HQLA, cash outflows and cash inflows, as measured and defined according to the LCR standards.

		FirstRand Limited*		FirstRand Bank Limited South Africa*	
R million		Total unweighted value (average)	Total weighted value (average)	Total unweighted value (average)	Total weighted value (average)
HIGH-QUALITY LIQUID ASSETS					
1	Total high-quality liquid assets (HQLA)		492 617		364 177
CASH OUTFLOWS					
2	Retail deposits and deposits from small business customers, of which:	763 321	54 438	441 539	39 008
3	Stable deposits	128 711	4 224	–	–
4	Less stable deposits	634 610	50 214	441 539	39 008
5	Unsecured wholesale funding, of which:	649 980	328 519	551 354	275 561
6	Operational deposits (all counterparties) and deposits in networks of cooperative banks	181 970	45 492	166 223	41 556
7	Non-operational deposits (all counterparties)	460 707	275 724	378 124	226 998
8	Unsecured debt	7 303	7 303	7 007	7 007
9	Secured wholesale funding		7 783		3 122
10	Additional requirements, of which:	341 711	54 289	309 524	46 810
11	Outflows related to derivative exposures and other collateral requirements	16 514	16 514	11 178	11 178
12	Outflows related to loss of funding on debt products	117 087	5 854	110 185	5 509
13	Credit and liquidity facilities	208 110	31 921	188 161	30 123
14	Other contractual funding obligations	–	–	–	–
15	Other contingent funding obligations	267 344	10 054	245 842	9 074
16	**TOTAL CASH OUTFLOWS**		455 083		373 575
CASH INFLOWS					
17	Secured lending (e.g. reverse repos)	13 754	6 143	9 547	1 955
18	Inflows from fully performing exposures	144 941	120 358	104 882	87 109
19	Other cash inflows	3 743	3 815	2 922	2 997
20	**TOTAL CASH INFLOWS**	162 438	130 316	117 351	92 061
			Total adjusted value		**Total adjusted value**
21	**TOTAL HQLA****		415 529		364 177
22	**TOTAL NET CASH OUTFLOW**#		336 232		281 514
23	**LIQUIDITY COVERAGE RATIO (%)**†		124%		129%

* *The consolidated LCR for the group (FirstRand) includes FRB and all other banking subsidiaries. FRB's LCR reflects its operations in South Africa.*

** *The weighted values have been calculated after the application of the respective haircuts for HQLA, outflows and inflows. The surplus HQLA holdings by subsidiaries and foreign branches in excess of the minimum required LCR which is not considered as fully transferable has been excluded in the calculation of the consolidated LCR for the group.*

\# *The regulatory cap on inflows is applied per entity and is reflected in total net cash outflow. The total cash inflows balance is prior to the application of the cap.*

† *The LCR is calculated as a simple average of 91 days of daily observations over the period ended 30 June 2023 for FRB South Africa and the London branch, as well as FNB Botswana and FNB Namibia. The remaining banking entities, including Aldermore, are based on the quarter end values. The figures are based on the regulatory submissions to the Prudential Authority.*

LIQ2: Net stable funding ratio

The table below provides a breakdown of the bank's available stable funding and required stable funding components, as measured and defined according to the NSFR standards.

	FIRSTRAND BANK LIMITED SOUTH AFRICA*				
	a	b	c	d	e
	Unweighted value by residual maturity				
R million	No maturity	< 6 months	6 months to < 1 year	>= 1 year	Weighted value**
AVAILABLE STABLE FUNDING (ASF) ITEM					
1 Capital:	109 949	–	–	14 273	124 222
2 Regulatory capital	109 949	–	–	14 273	124 222
3 Other capital instruments	–	–	–	–	–
4 Retail deposit and deposits from small business customers:	177 272	261 294	12 829	20 652	426 908
5 Stable deposits	–	–	–	–	–
6 Less stable deposits	177 272	261 294	12 829	20 652	426 908
7 Wholesale funding	268 432	410 439	74 528	137 344	456 154
8 Operational deposits	192 914	–	–	–	96 457
9 Other wholesale funding	75 518	410 439	74 528	137 344	359 697
10 Liabilities with matching interdependent assets	–	–	–	–	–
11 Other liabilities:	20 757	26 411	–	32 094	9 570
12 NSFR derivative liabilities		–	–	30 807	
13 All other liabilities and equity not included in the above categories	20 757	26 411	–	1 287	9 570
14 Total ASF					1 016 854
REQUIRED STABLE FUNDING (RSF) ITEM					
15 Total NSFR high-quality liquid assets (HQLA)					29 486
16 Deposits held at other financial institutions for operational purposes					
17 Performing loans and securities:					727 936
18 Performing loans to financial institutions secured by Level 1 HQLA	–	76 125	3 696	4 410	13 871
19 Performing loans to financial institutions secured by non-Level 1 HQLA and unsecured performing loans to financial institutions	–	60 448	15 694	79 909	96 823
20 Performing loans to non-financial corporate clients, loans to retail and small business customers, and loans to sovereigns, central banks and PSEs, of which:	–	103 636	68 049	373 377	403 213
21 With a risk weight of less than or equal to 35% under the Basel II standardised approach for credit risk	–	–	–	–	–
22 Performing residential mortgages, of which:	–	5 084	4 168	220 202	149 845
23 With a risk weight of less than or equal to 35% under the Basel II standardised approach for credit risk	–	4 987	4 071	209 763	140 875
24 Securities that are not in default and do not qualify as HQLA, including exchange-traded equities	5 440	4 330	3 477	65 478	64 184
25 Assets with matching interdependent liabilities					
26 Other assets:					66 616
27 Physical traded commodities, including gold	17 252				14 664
28 Assets posted as initial margin for derivative contracts and contributions to default funds of CCPs		–	–	18 978	9 610
29 NSFR derivative assets		–	–	25 413	–
30 NSFR derivative liabilities before deduction of variation margin posted		–	–	34 861	3 486
31 All other assets not included in the above categories		–	–	38 856	38 856
32 Off-balance sheet items		555 661			22 085
33 Total RSF					846 123
34 Net stable funding ratio					120%

* *The NSFR is calculated as at the month ended 30 June 2023 for FRB's operations in South Africa.*
** *The weighted values have been calculated after the application of the respective haircuts for ASF and RSF as defined by the Prudential Authority.*

LIQ2: Net stable funding ratio *continued*

The table below provides a breakdown of the group available stable funding and required stable funding components, as measured and defined according to the NSFR standards.

	FIRSTRAND LIMITED*				
	a	b	c	d	e
	Unweighted value by residual maturity				
R million	No maturity	< 6 months	6 months to < 1 year	>= 1 year	Weighted value**
ASF ITEM					
1 Capital:	164 550	–	–	16 579	181 129
2 Regulatory capital	164 550	–	–	16 579	181 129
3 Other capital instruments	–	–	–	–	–
4 Retail deposit and deposits from small business customers:	194 139	532 255	49 512	54 271	752 720
5 Stable deposits	–	2 666	–	–	2 533
6 Less stable deposits	194 139	529 589	49 512	54 271	750 187
7 Wholesale funding	304 801	475 360	93 566	185 085	543 279
8 Operational deposits	192 914	–	–	–	96 457
9 Other wholesale funding	111 887	475 360	93 566	185 085	446 822
10 Liabilities with matching interdependent assets					
11 Other liabilities:	49 961	35 333	428	43 169	25 492
12 NSFR derivative liabilities		–	–	32 442	
13 All other liabilities and equity not included in the above categories	49 961	35 333	428	10 727	25 492
14 Total ASF					1 502 620
RSF ITEM					
15 Total NSFR high-quality liquid assets (HQLA)					36 750
16 Deposits held at other financial institutions for operational purposes					
17 Performing loans and securities:					1 080 952
18 Performing loans to financial institutions secured by Level 1 HQLA	–	82 358	4 558	11 670	22 185
19 Performing loans to financial institutions secured by non-Level 1 HQLA and unsecured performing loans	–	59 364	19 235	143 899	162 421
20 Performing loans to non-financial corporate clients, loans to retail and small business customers, and loans to sovereigns, central banks and PSEs, of which:	–	141 738	88 189	491 720	532 926
21 With a risk weight of less than or equal to 35% under the Basel II standardised approach for credit risk	–	–	–	–	–
22 Performing residential mortgages, of which:	–	7 624	7 096	396 311	297 784
23 With a risk weight of less than or equal to 35% under the Basel II standardised approach for credit risk	–	6 917	6 274	355 315	262 173
24 Securities that are not in default and do not qualify as HQLA, including exchange-traded equities	5 440	4 828	4 538	66 269	65 636
25 Assets with matching interdependent liabilities					
26 Other assets:					100 672
27 Physical traded commodities, including gold	17 252				14 664
28 Assets posted as initial margin for derivative contracts and contributions to default funds of CCPs		–	–	18 978	9 610
29 NSFR derivative assets		–	–	41 921	9 479
30 NSFR derivative liabilities before deduction of variation margin posted		–	–	37 316	3 732
31 All other assets not included in the above categories		–	–	63 187	63 187
32 Off-balance sheet items		672 414			24 254
33 Total RSF					1 242 628
34 Net stable funding ratio (%)					121%

* *The NSFR is calculated as at the month ended 30 June 2023 for FRB's operations in South Africa and all registered banks and foreign branches within the group.*
** *The weighted values have been calculated after the application of the respective haircuts for ASF and RSF as defined by the Prudential Authority.*

CR6: AIRB FRBSA 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.

CR6: AIRB – FRBSA CREDIT RISK EXPOSURES BY PORTFOLIO AND PD RANGE

	Corporate					
	As at 30 June 2023					
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	1 700	1 609	51.56	2 453	0.09	6
0.15 to <0.25	39 144	35 419	49.13	55 147	0.20	47
0.25 to <0.50	59 304	49 094	47.04	79 605	0.40	110
0.50 to <0.75	43 234	19 247	53.22	50 137	0.68	112
0.75 to <2.50	46 048	25 326	57.07	59 698	1.60	285
2.50 to <10	12 729	4 757	54.40	15 296	4.50	155
10 to <100	1 116	591	52.39	1 414	11.04	79
100 (default)	2 441	123	26.60	2 474	100.00	7
Total	**205 716**	**136 166**	**50.64**	**266 224**	**1.90**	**801**

	Corporate					
	As at 30 June 2023					
PD scale	Average LGD (%)	Average maturity (years)	RWA (R million)	RWA density (%)	Expected loss (R million)	Provisions (R million)
0.00 to <0.15	30.10	1.27	317	12.92	1	
0.15 to <0.25	31.28	1.77	15 568	28.23	34	
0.25 to <0.50	28.88	1.84	30 347	38.12	91	
0.50 to <0.75	25.50	1.91	22 034	43.95	86	
0.75 to <2.50	30.79	1.72	41 091	68.83	295	
2.50 to <10	37.45	1.58	17 986	117.59	262	
10 to <100	39.34	1.58	2 394	169.31	59	
100 (default)	50.79	1.07	–	–	1 256	
Total	**29.93**	**1.78**	**129 737**	**48.73**	**2 084**	**2 158**

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

	Corporate					
	As at 30 June 2022					
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	1 380	615	46.98	1 671	0.09	2
0.15 to <0.25	29 896	35 521	49.16	47 942	0.19	46
0.25 to <0.50	43 232	38 250	45.74	56 022	0.41	100
0.50 to <0.75	22 502	12 430	51.85	26 975	0.70	87
0.75 to <2.50	48 390	19 977	51.93	58 532	1.53	264
2.50 to <10	15 254	6 118	58.97	18 194	4.35	143
10 to <100	1 454	882	54.14	1 972	11.02	90
100 (default)	1 699	178	–	1 821	100.00	9
Total	163 807	113 971	49.27	213 129	1.99	741

	Corporate					
	As at 30 June 2022					
PD scale	Average LGD (%)	Average maturity (years)	RWA (R million)	RWA density (%)	Expected loss (R million)	Provisions (R million)
0.00 to <0.15	30.00	1.37	227	13.58	–	
0.15 to <0.25	31.13	1.64	12 731	26.56	29	
0.25 to <0.50	29.61	1.58	21 068	37.61	66	
0.50 to <0.75	26.91	1.78	12 253	45.42	50	
0.75 to <2.50	30.84	2.04	42 177	72.06	282	
2.50 to <10	34.14	1.57	19 455	106.93	280	
10 to <100	38.02	1.22	3 082	156.29	80	
100 (default)	53.07	1.32	–	–	967	
Total	30.61	1.74	110 993	52.08	1 754	2 485

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

	Specialised lending					
	As at 30 June 2023					
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	95	5	–	95	0.08	1
0.15 to <0.25	1 493	536	21.04	1 661	0.20	4
0.25 to <0.50	45 807	5 727	52.73	46 377	0.41	66
0.50 to <0.75	15 275	2 685	57.92	16 151	0.69	46
0.75 to <2.50	31 664	2 891	60.61	32 875	1.52	1 119
2.50 to <10	6 376	686	58.74	6 735	3.72	441
10 to <100	5 207	31	–	5 255	19.92	144
100 (default)	2 181	–	–	2 181	100.00	40
Total	108 098	12 561	54.48	111 330	3.85	1 861

	Specialised lending					
	As at 30 June 2023					
PD scale	Average LGD (%)	Average maturity (years)	RWA (R million)	RWA density (%)	Expected loss (R million)	Provisions (R million)
0.00 to <0.15	25.00	2.36	14	14.74	–	
0.15 to <0.25	15.95	1.91	236	14.21	1	
0.25 to <0.50	16.59	2.57	11 575	24.96	32	
0.50 to <0.75	22.56	3.17	7 441	46.07	25	
0.75 to <2.50	24.28	2.31	19 444	59.15	130	
2.50 to <10	27.81	3.37	6 680	99.18	84	
10 to <100	26.60	3.30	7 823	148.87	264	
100 (default)	20.17	4.04	51	2.34	382	
Total	20.95	2.68	53 264	47.84	918	1 364

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

	Specialised lending					
	As at 30 June 2022					
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	99	5	–	99	0.08	1
0.15 to <0.25	733	91	–	733	0.18	2
0.25 to <0.50	38 760	9 872	87.18	40 976	0.41	62
0.50 to <0.75	14 914	2 973	58.56	16 118	0.68	56
0.75 to <2.50	35 838	3 017	57.32	37 548	1.45	1 211
2.50 to <10	4 604	154	57.87	4 798	3.78	360
10 to <100	3 552	132	57.80	3 629	13.12	35
100 (default)	711	–	–	711	100.00	35
Total	99 211	16 244	75.37	104 612	2.09	1 762

	Specialised lending					
	As at 30 June 2022					
PD scale	Average LGD (%)	Average maturity (years)	RWA (R million)	RWA density (%)	Expected loss (R million)	Provisions (R million)
0.00 to <0.15	25.00	3.19	18	18.18	–	
0.15 to <0.25	18.12	2.59	131	17.87	–	
0.25 to <0.50	16.80	2.60	10 609	25.89	28	
0.50 to <0.75	22.38	3.19	7 432	46.11	24	
0.75 to <2.50	25.54	2.41	23 021	61.31	140	
2.50 to <10	29.65	3.11	4 898	102.08	56	
10 to <100	20.48	4.02	3 953	108.93	105	
100 (default)	41.77	4.91	–	–	248	
Total	21.70	2.71	50 062	47.85	601	1 082

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

	Sovereign					
	As at 30 June 2023					
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	**24 187**	**1 413**	**58.00**	**25 007**	**0.04**	**6**
0.15 to <0.25	**–**	**–**	**–**	**–**	**–**	**–**
0.25 to <0.50	**240 782**	**6 787**	**55.98**	**247 684**	**0.48**	**34**
0.50 to <0.75	**2 130**	**358**	**43.37**	**2 305**	**0.65**	**23**
0.75 to <2.50	**1 223**	**96**	**–**	**1 264**	**1.22**	**115**
2.50 to <10	**1 460**	**374**	**53.49**	**1 661**	**4.93**	**896**
10 to <100	**401**	**762**	**50.99**	**872**	**25.98**	**10**
100 (default)	**590**	**–**	**–**	**590**	**100.00**	**1**
Total	**270 773**	**9 790**	**54.78**	**279 383**	**0.76**	**1 085**

	Sovereign					
	As at 30 June 2023					
PD scale	**Average LGD (%)**	**Average maturity (years)**	**RWA (R million)**	**RWA density (%)**	**Expected loss (R million)**	**Provisions (R million)**
0.00 to <0.15	**14.31**	**0.37**	**564**	**2.26**	**1**	
0.15 to <0.25	**–**	**–**	**–**	**–**	**–**	
0.25 to <0.50	**7.07**	**2.30**	**27 493**	**11.10**	**84**	
0.50 to <0.75	**28.99**	**3.79**	**1 572**	**68.20**	**4**	
0.75 to <2.50	**33.48**	**3.50**	**1 127**	**89.16**	**5**	
2.50 to <10	**7.58**	**4.03**	**488**	**29.38**	**6**	
10 to <100	**48.76**	**2.11**	**2 260**	**259.17**	**99**	
100 (default)	**4.97**	**1.84**	**–**	**–**	**30**	
Total	**8.15**	**2.15**	**33 504**	**11.99**	**229**	**383**

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

	Sovereign					
	As at 30 June 2022					
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	43 172	985	57.08	43 734	0.04	8
0.15 to <0.25	–	–	–	–	–	–
0.25 to <0.50	191 201	2 598	55.88	190 024	0.48	23
0.50 to <0.75	2 592	388	37.87	2 800	0.70	39
0.75 to <2.50	693	274	45.70	843	1.47	99
2.50 to <10	3 154	277	51.15	2 798	4.92	998
10 to <100	539	1 036	52.47	1 141	23.60	10
100 (default)	24	6	50.00	27	100.00	1
Total	241 375	5 564	53.46	241 367	0.58	1 178

	Sovereign					
	As at 30 June 2022					
PD scale	Average LGD (%)	Average maturity (years)	RWA (R million)	RWA density (%)	Expected loss (R million)	Provisions (R million)
0.00 to <0.15	15.14	0.46	1 114	2.55	3	
0.15 to <0.25	–	–	–	–	–	
0.25 to <0.50	7.79	2.08	21 764	11.45	71	
0.50 to <0.75	28.68	2.60	1 980	70.71	2	
0.75 to <2.50	29.85	2.75	650	77.11	4	
2.50 to <10	9.43	3.26	971	34.70	13	
10 to <100	44.46	1.92	2 676	234.53	114	
100 (default)	2.50	1.24	–	–	1	
Total	9.64	1.81	29 155	12.08	208	388

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

	Banks and securities firms					
	As at 30 June 2023					
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	**19 034**	**3 508**	**28.59**	**29 417**	**0.06**	**43**
0.15 to <0.25	**3 115**	**5 573**	**52.99**	**6 479**	**0.17**	**35**
0.25 to <0.50	**10 784**	**4 763**	**43.68**	**11 146**	**0.41**	**70**
0.50 to <0.75	**914**	**443**	**40.83**	**1 105**	**0.68**	**22**
0.75 to <2.50	**1 473**	**544**	**37.30**	**1 744**	**1.21**	**43**
2.50 to <10	**678**	**1 568**	**28.88**	**1 128**	**5.22**	**34**
10 to <100	**778**	**481**	**21.44**	**889**	**11.40**	**30**
100 (default)	**–**	**–**	**–**	**–**	**–**	**–**
Total	**36 776**	**16 880**	**41.33**	**51 908**	**0.51**	**277**

	Banks and securities firms					
	As at 30 June 2023					
PD scale	Average LGD (%)	Average maturity (years)	RWA (R million)	RWA density (%)	Expected loss (R million)	Provisions (R million)
0.00 to <0.15	**28.44**	**0.11**	**2 150**	**7.31**	**5**	
0.15 to <0.25	**24.15**	**0.61**	**1 059**	**16.35**	**3**	
0.25 to <0.50	**32.04**	**0.84**	**4 548**	**40.80**	**14**	
0.50 to <0.75	**34.71**	**0.53**	**550**	**49.77**	**3**	
0.75 to <2.50	**29.31**	**1.88**	**1 243**	**71.27**	**7**	
2.50 to <10	**48.18**	**0.84**	**1 750**	**155.14**	**29**	
10 to <100	**31.86**	**0.91**	**1 192**	**134.08**	**30**	
100 (default)	**–**	**–**	**–**	**–**	**–**	
Total	**29.33**	**0.43**	**12 492**	**24.07**	**91**	**96**

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

	Banks and securities firms					
	As at 30 June 2022					
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	24 591	2 415	32.74	22 497	0.07	42
0.15 to <0.25	2 228	5 059	55.20	7 621	0.17	37
0.25 to <0.50	15 683	4 151	36.72	13 852	0.42	68
0.50 to <0.75	1 344	363	51.85	1 533	0.65	28
0.75 to <2.50	2 968	1 795	30.99	3 452	1.95	44
2.50 to <10	1 175	869	23.85	1 372	4.67	41
10 to <100	208	620	21.50	361	10.98	22
100 (default)	–	–	–	–	–	–
Total	48 197	15 272	40.55	50 688	0.53	282

	Banks and securities firms					
	As at 30 June 2022					
PD scale	Average LGD (%)	Average maturity (years)	RWA (R million)	RWA density (%)	Expected loss (R million)	Provisions (R million)
0.00 to <0.15	29.63	0.08	1 783	7.93	5	
0.15 to <0.25	26.90	0.48	1 282	16.82	3	
0.25 to <0.50	29.32	0.66	4 914	35.48	17	
0.50 to <0.75	19.22	1.25	512	33.40	2	
0.75 to <2.50	36.22	1.53	3 442	99.71	24	
2.50 to <10	49.52	0.90	2 046	149.13	32	
10 to <100	47.62	0.81	710	196.68	17	
100 (default)	–	–	–	–	–	
Total	29.93	0.46	14 689	28.98	100	78

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

	SME corporate					
	As at 30 June 2023					
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	302	585	38.15	517	0.09	6 969
0.15 to <0.25	8 537	193	47.46	12 281	0.24	3 356
0.25 to <0.50	9 026	6 676	45.19	11 888	0.43	17 147
0.50 to <0.75	9 467	5 776	44.10	11 808	0.65	9 172
0.75 to <2.50	47 924	15 176	55.42	54 289	1.50	16 951
2.50 to <10	13 957	4 544	58.58	15 592	4.03	9 409
10 to <100	1 906	313	72.49	2 087	20.78	2 558
100 (default)	2 474	–	–	2 520	100.00	5 594
Total	93 593	33 263	51.64	110 982	4.10	71 156

	SME corporate					
	As at 30 June 2023					
PD scale	Average LGD (%)	Average maturity (years)	RWA (R million)	RWA density (%)	Expected loss (R million)	Provisions (R million)
0.00 to <0.15	26.06	1.14	41	7.93	–	
0.15 to <0.25	25.38	1.01	3 237	26.36	7	
0.25 to <0.50	24.62	2.11	4 104	34.52	12	
0.50 to <0.75	22.91	1.94	4 457	37.75	18	
0.75 to <2.50	21.61	1.91	25 013	46.07	170	
2.50 to <10	24.65	2.10	10 906	69.95	152	
10 to <100	21.66	2.14	2 108	101.01	96	
100 (default)	31.93	2.48	2 547	101.07	852	
Total	23.17	1.88	52 413	47.23	1 307	1 483

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

	SME corporate					
	As at 30 June 2022					
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	23	62.16	17	0.09	582
0.15 to <0.25	9 375	2 090	86.90	11 191	0.24	162
0.25 to <0.50	7 995	5 920	41.29	10 326	0.44	3 578
0.50 to <0.75	8 065	3 551	53.84	9 731	0.66	2 738
0.75 to <2.50	42 811	14 350	54.77	48 874	1.54	21 308
2.50 to <10	13 076	5 538	55.83	13 966	3.85	10 730
10 to <100	2 197	183	64.04	2 301	21.15	1 257
100 (default)	1 668	–	–	1 611	100.00	7 846
Total	85 191	31 655	54.51	98 017	3.59	48 201

	SME corporate					
	As at 30 June 2022					
PD scale	Average LGD (%)	Average maturity (years)	RWA (R million)	RWA density (%)	Expected loss (R million)	Provisions (R million)
0.00 to <0.15	88.30	1.00	5	29.41	–	
0.15 to <0.25	24.75	1.01	2 921	26.10	7	
0.25 to <0.50	21.13	2.41	3 347	32.41	9	
0.50 to <0.75	21.14	2.18	3 866	39.73	13	
0.75 to <2.50	21.21	2.00	22 015	45.04	156	
2.50 to <10	24.56	1.97	10 471	74.97	132	
10 to <100	19.52	2.10	2 120	92.13	98	
100 (default)	43.91	2.92	357	22.16	729	
Total	22.42	1.96	45 102	46.01	1 144	1 533

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

	SME retail					
	As at 30 June 2023					
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	140	140	44.84	208	0.06	1 726
0.15 to <0.25	94	83	43.39	130	0.20	1 045
0.25 to <0.50	1 732	1 019	50.27	2 225	0.42	5 326
0.50 to <0.75	3 897	2 583	70.06	5 941	0.64	8 855
0.75 to <2.50	31 000	9 990	57.79	38 137	1.73	149 008
2.50 to <10	31 603	3 844	46.07	35 399	4.11	373 661
10 to <100	4 791	215	29.58	4 997	27.17	32 614
100 (default)	3 856	–	–	3 923	100.00	41 822
Total	77 113	17 874	56.14	90 960	8.18	614 057

	SME retail					
	As at 30 June 2023					
PD scale	Average LGD (%)	Average maturity* (years)	RWA (R million)	RWA density (%)	Expected loss (R million)	Provisions (R million)
0.00 to <0.15	41.45		12	5.77	–	
0.15 to <0.25	41.31		28	21.54	–	
0.25 to <0.50	28.36		427	19.19	3	
0.50 to <0.75	31.58		1 641	27.62	12	
0.75 to <2.50	31.56		15 633	40.99	216	
2.50 to <10	39.51		21 407	60.47	601	
10 to <100	42.62		4 956	99.18	606	
100 (default)	53.02		1 774	45.22	2 929	
Total	36.15		45 878	50.44	4 367	4 884

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

	SME retail					
	As at 30 June 2022					
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	101	3	112.15	104	0.07	1 026
0.15 to <0.25	10	45	64.17	38	0.22	1 027
0.25 to <0.50	1 368	666	51.89	1 702	0.42	4 923
0.50 to <0.75	3 224	2 255	70.82	5 003	0.63	19 603
0.75 to <2.50	26 714	9 531	57.62	33 332	1.74	368 248
2.50 to <10	25 574	3 798	48.19	29 136	4.15	1 989 704
10 to <100	3 728	239	26.51	3 904	29.57	77 049
100 (default)	4 038	–	–	4 029	100.00	132 404
Total	64 757	16 537	56.60	77 248	9.08	2 593 984

	SME retail					
	As at 30 June 2022					
PD scale	Average LGD (%)	Average maturity* (years)	RWA (R million)	RWA density (%)	Expected loss (R million)	Provisions (R million)
0.00 to <0.15	37.70		7	6.73	–	
0.15 to <0.25	83.97		14	36.84	–	
0.25 to <0.50	25.51		289	16.98	2	
0.50 to <0.75	31.75		1 390	27.78	10	
0.75 to <2.50	31.90		13 862	41.59	192	
2.50 to <10	40.55		18 131	62.23	515	
10 to <100	45.09		4 101	105.05	529	
100 (default)	59.01		2 996	74.36	3 208	
Total	37.13		40 790	52.80	4 456	5 009

* *As per the Regulations, average maturity is not applied to the SME retail RWA calculation.*

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

	Retail mortgages					
	As at 30 June 2023					
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	**40 832**	**32 068**	**42.23**	**54 373**	**0.09**	**59 498**
0.15 to <0.25	**24 993**	**11 626**	**64.18**	**32 454**	**0.20**	**33 415**
0.25 to <0.50	**45 759**	**10 257**	**92.20**	**55 217**	**0.36**	**55 703**
0.50 to <0.75	**31 505**	**2 123**	**122.14**	**34 098**	**0.62**	**38 518**
0.75 to <2.50	**60 298**	**2 248**	**161.14**	**63 921**	**1.29**	**81 717**
2.50 to <10	**20 455**	**283**	**287.92**	**21 269**	**4.68**	**33 539**
10 to <100	**14 973**	**23**	**1 236.15**	**15 254**	**30.45**	**22 935**
100 (default)	**14 192**	**–**	**–**	**14 202**	**100**	**22 021**
Total	**253 007**	**58 628**	**64.43**	**290 788**	**7.29**	**347 346**

	Retail mortgages					
	As at 30 June 2023					
PD scale	Average LGD (%)	Average maturity* (years)	RWA (R million)	RWA density (%)	Expected loss (R million)	Provisions (R million)
0.00 to <0.15	**16.55**		**1 993**	**3.67**	**8**	
0.15 to <0.25	**17.08**		**2 328**	**7.17**	**11**	
0.25 to <0.50	**16.73**		**6 002**	**10.87**	**33**	
0.50 to <0.75	**15.60**		**5 074**	**14.88**	**33**	
0.75 to <2.50	**16.13**		**15 991**	**25.02**	**134**	
2.50 to <10	**15.83**		**10 997**	**51.70**	**157**	
10 to <100	**15.42**		**12 496**	**81.92**	**730**	
100 (default)	**26.11**		**12 068**	**84.97**	**2 799**	
Total	**16.79**		**66 949**	**23.02**	**3 905**	**4 288**

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

	Retail mortgages					
	As at 30 June 2022					
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	8 124	9 541	23.22	10 340	0.09	19 771
0.15 to <0.25	7 084	7 048	44.87	10 247	0.18	12 568
0.25 to <0.50	24 550	12 859	58.17	32 030	0.38	33 809
0.50 to <0.75	42 904	6 282	55.24	46 374	0.63	45 243
0.75 to <2.50	100 849	23 631	85.12	120 965	1.36	151 074
2.50 to <10	29 357	2 178	95.58	31 439	4.48	47 868
10 to <100	8 762	213	133.95	9 047	28.77	14 594
100 (default)	12 991	–	–	12 990	100.00	21 979
Total	234 621	61 752	62.85	273 432	6.98	346 906

	Retail mortgages					
	As at 30 June 2022					
PD scale	Average LGD (%)	Average maturity* (years)	RWA (R million)	RWA density (%)	Expected loss (R million)	Provisions (R million)
0.00 to <0.15	15.39		369	3.57	1	
0.15 to <0.25	14.89		610	5.95	3	
0.25 to <0.50	15.23		3 353	10.47	19	
0.50 to <0.75	16.99		7 816	16.85	51	
0.75 to <2.50	17.31		34 296	28.35	292	
2.50 to <10	17.04		17 310	55.06	241	
10 to <100	16.76		8 404	92.89	433	
100 (default)	23.90		8 730	67.21	2 519	
Total	17.11		80 888	29.58	3 559	4 013

* *As per the Regulations, average maturity is not applied to the retail mortgages RWA calculation.*

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

	Retail revolving					
	As at 30 June 2023					
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	13	576	114.26	672	0.12	22 623
0.15 to <0.25	129	1 397	105.37	1 601	0.21	57 729
0.25 to <0.50	1 592	8 585	77.79	8 270	0.38	248 462
0.50 to <0.75	2 191	6 569	75.20	7 131	0.61	202 643
0.75 to <2.50	14 035	17 417	75.60	27 202	1.49	732 860
2.50 to <10	16 165	9 478	80.64	23 808	4.51	578 936
10 to <100	3 248	688	97.86	3 921	25.62	126 228
100 (default)	4 373	–	–	4 450	100.00	129 479
Total	41 746	44 710	78.80	77 055	9.10	2 098 960

	Retail revolving					
	As at 30 June 2023					
PD scale	Average LGD (%)	Average maturity* (years)	RWA (R million)	RWA density (%)	Expected loss (R million)	Provisions (R million)
0.00 to <0.15	66.59		34	5.06	1	
0.15 to <0.25	67.46		125	7.81	2	
0.25 to <0.50	70.98		1 124	13.59	23	
0.50 to <0.75	71.23		1 406	19.72	31	
0.75 to <2.50	71.76		10 555	38.80	291	
2.50 to <10	72.47		20 338	85.43	778	
10 to <100	69.45		6 888	175.67	701	
100 (default)	78.36		4 148	93.21	3 170	
Total	71.98		44 618	57.90	4 997	5 390

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

	Retail revolving					
	As at 30 June 2022					
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	579	4 796	65.49	3 720	0.13	105 604
0.15 to <0.25	541	3 714	74.64	3 313	0.20	95 973
0.25 to <0.50	2 670	9 088	76.12	9 588	0.35	321 943
0.50 to <0.75	2 659	5 088	79.58	6 708	0.63	201 381
0.75 to <2.50	12 515	12 211	79.82	22 263	1.48	637 395
2.50 to <10	13 029	6 253	83.72	18 265	4.54	455 139
10 to <100	3 289	563	99.22	3 847	25.23	120 841
100 (default)	4 146	–	–	4 147	100.00	128 103
Total	39 428	41 713	77.72	71 851	8.86	2 066 379

	Retail revolving					
	As at 30 June 2022					
PD scale	Average LGD (%)	Average maturity* (years)	RWA (R million)	RWA density (%)	Expected loss (R million)	Provisions (R million)
0.00 to <0.15	73.46		209	5.62	3	
0.15 to <0.25	71.40		271	8.18	5	
0.25 to <0.50	70.86		1 216	12.68	24	
0.50 to <0.75	71.18		1 350	20.13	30	
0.75 to <2.50	71.41		8 577	38.53	236	
2.50 to <10	72.17		15 569	85.24	598	
10 to <100	70.96		6 837	177.72	685	
100 (default)	80.89		4 634	111.74	3 076	
Total	72.14		38 663	53.81	4 657	4 929

* *As per the Regulations, average maturity is not applied to the retail revolving RWA calculation.*

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

	Other retail*					
	As at 30 June 2023					
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	68	144	63.87	118	0.11	48
0.15 to <0.25	102	137	144.05	158	0.21	147
0.25 to <0.50	269	215	86.28	424	0.39	2 612
0.50 to <0.75	5 661	92	211.00	5 726	0.55	31 618
0.75 to <2.50	48 882	234	327.75	49 152	1.72	280 585
2.50 to <10	49 471	91	109.94	50 347	5.12	628 018
10 to <100	14 313	21	110.82	15 018	27.70	1 835 047
100 (default)	12 289	–	–	12 290	100.00	336 133
Total	131 055	934	166.94	133 324	14.94	3 114 208

	Other retail					
	As at 30 June 2023					
PD scale	Average LGD (%)	Average maturity** (years)	RWA (R million)	RWA density (%)	Expected loss (R million)	Provisions (R million)
0.00 to <0.15	15.70		5	4.24	–	
0.15 to <0.25	14.47		10	6.33	–	
0.25 to <0.50	42.99		119	28.07	1	
0.50 to <0.75	20.17		928	16.21	6	
0.75 to <2.50	26.75		17 057	34.70	231	
2.50 to <10	53.47		42 595	85.43	1 489	
10 to <100	54.47		18 199	124.64	2 128	
100 (default)	62.19		9 537	77.60	7 535	
Total	42.91		88 450	66.84	11 390	12 956

* *Included in other retail is VAF, which comprises 80% of the original on-balance sheet performing gross exposures with a total average risk density of 42%.*

** *As per the Regulations, average maturity is not applied to the other retail RWA calculation.*

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

	Other retail					
	As at 30 June 2022					
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	54	82	80.71	110	0.08	389
0.15 to <0.25	70	145	42.85	124	0.20	325
0.25 to <0.50	520	340	87.81	690	0.40	3 304
0.50 to <0.75	4 382	106	57.52	4 429	0.55	26 953
0.75 to <2.50	43 013	197	90.72	43 125	1.72	273 683
2.50 to <10	46 598	121	99.90	46 719	4.95	604 934
10 to <100	12 893	10	102.29	12 903	27.16	1 745 659
100 (default)	11 828	–	–	11 828	100.00	494 108
Total	119 358	1 001	79.69	119 928	15.35	3 149 355

	Other retail					
	As at 30 June 2022					
PD scale	Average LGD (%)	Average maturity* (year)	RWA (R million)	RWA density (%)	Expected loss (R million)	Provisions (R million)
0.00 to <0.15	50.78		14	12.73	–	
0.15 to <0.25	44.93		23	18.55	–	
0.25 to <0.50	32.96		151	21.88	1	
0.50 to <0.75	20.45		728	16.44	5	
0.75 to <2.50	27.20		15 252	35.37	207	
2.50 to <10	50.98		37 973	81.28	1 281	
10 to <100	52.68		15 860	122.92	1 818	
100 (default)	62.41		9 704	82.04	7 457	
Total	42.50		79 705	66.46	10 769	12 284

* *As per the Regulations, average maturity is not applied to the other retail RWA calculation.*

CR9: AIRB – Backtesting of PD per portfolio

The following table provides backtesting 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 2023							
				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	0.08	2	6	–	–	–
0.12 to <0.45	BBB	0.29	0.31	97	107	–	–	–
0.45 to <1.08	BB+, BB	0.65	0.65	165	192	–	–	–
1.08 to <1.80	BB-	1.39	1.39	161	170	–	–	–
1.80 to <3.23	B+	2.45	2.45	73	85	–	–	–
3.23 to <9.12	B	4.50	4.80	144	155	–	–	–
9.12 to <18.23	B-	10.07	10.07	55	47	–	–	–
18.23 to <99.99	Below B-	21.51	25.71	35	32	–	–	–
100 (default)	Defaulted	100.00	100.00	9	7	3	–	100.00
Total		1.90	5.68	741	801	3	–	0.39

	Corporate							
	As at 30 June 2022							
				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	3	2	–	–	–
0.12 to <0.45	BBB	0.27	0.30	90	97	–	–	–
0.45 to <1.08	BB+, BB	0.66	0.65	152	166	–	–	–
1.08 to <1.80	BB-	1.33	1.37	130	161	–	–	–
1.80 to <3.23	B+	2.45	2.45	62	73	–	–	–
3.23 to <9.12	B	4.35	4.63	124	143	–	–	–
9.12 to <18.23	B-	10.07	10.07	66	55	–	–	–
18.23 to <99.99	Below B-	20.82	25.05	40	35	–	–	–
100 (default)	Defaulted	100.00	100.00	9	9	3	–	100.00
Total		1.99	5.58	676	741	3	–	0.40

CR9: AIRB – BACKTESTING OF PD PER PORTFOLIO continued

	Specialised lending							
	As at 30 June 2023							
				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**	**1**	**1**	**–**	**–**	**–**
0.12 to <0.45	BBB	**0.37**	**0.37**	**37**	**42**	**–**	**–**	**–**
0.45 to <1.08	BB+, BB	**0.65**	**0.85**	**299**	**282**	**–**	**–**	**0.39**
1.08 to <1.80	BB-	**1.32**	**1.38**	**693**	**598**	**7**	**7**	**0.77**
1.80 to <3.23	B+	**2.44**	**2.39**	**461**	**495**	**9**	**9**	**0.95**
3.23 to <9.12	B	**4.15**	**4.19**	**201**	**259**	**5**	**5**	**1.56**
9.12 to <18.23	B-	**15.71**	**15.91**	**18**	**129**	**1**	**1**	**2.17**
18.23 to <99.99	Below B-	**24.91**	**26.57**	**17**	**15**	**5**	**5**	**10.76**
100 (default)	Defaulted	**100.00**	**100.00**	**35**	**40**	**33**	**2**	**100.00**
Total		**3.85**	**6.47**	**1 762**	**1 861**	**60**	**29**	**4.04**

	Specialised lending							
	As at 30 June 2022							
				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	–	1	–	–	–
0.12 to <0.45	BBB	0.37	0.38	37	37	–	–	–
0.45 to <1.08	BB+, BB	0.65	0.86	297	299	4	4	0.44
1.08 to <1.80	BB-	1.32	1.38	674	693	22	22	0.91
1.80 to <3.23	B+	2.43	2.37	384	461	12	12	0.92
3.23 to <9.12	B	4.44	4.21	184	201	11	11	1.36
9.12 to <18.23	B-	11.14	14.68	16	18	–	–	2.40
18.23 to <99.99	Below B-	27.03	27.53	17	17	11	4	10.14
100 (default)	Defaulted	100.00	100.00	33	35	304	17	100.00
Total		2.09	6.44	1 642	1 762	364	70	4.16

CR9: AIRB – BACKTESTING OF PD PER PORTFOLIO continued

	Sovereign							
	As at 30 June 2023							
				Number of obligors		**Defaulted obligors**		
PD scale	**External rating equivalent**	**Weighted average PD %**	**Arithmetic average PD by obligors %**	**End of prior year**	**End of current year**	**During current year**	**New during current year**	**Average historical annual default rate %**
0.00 to <0.12	AAA, AA, A	**0.04**	**0.04**	**8**	**6**	**–**	**–**	**–**
0.12 to <0.45	BBB	**–**	**0.20**	**–**	**–**	**–**	**–**	**12.16**
0.45 to <1.08	BB+, BB	**0.48**	**0.75**	**67**	**117**	**–**	**–**	**–**
1.08 to <1.80	BB-	**1.35**	**1.49**	**30**	**36**	**–**	**–**	**–**
1.80 to <3.23	B+	**2.46**	**2.45**	**65**	**21**	**–**	**–**	**0.17**
3.23 to <9.12	B	**4.94**	**6.67**	**997**	**894**	**–**	**–**	**0.27**
9.12 to <18.23	B-	**10.11**	**11.46**	**6**	**5**	**–**	**–**	**–**
18.23 to <99.99	Below B-	**26.23**	**33.09**	**4**	**5**	**–**	**–**	**8.33**
100 (default)	Defaulted	**100.00**	**100.00**	**1**	**1**	**1**	**–**	**100.00**
Total		**0.76**	**7.02**	**1 178**	**1 085**	**1**	**–**	**0.56**

	Sovereign							
	As at 30 June 2022							
				Number of obligors		Defaulted obligors		
PD scale	External rating equivalent	Weighted average PD %	Arithmetic average PD by obligors %	End of prior year	End of current year	During current year	New during current year	Average historical annual default rate %
0.00 to <0.12	AAA, AA, A	0.04	0.04	5	8	–	–	–
0.12 to <0.45	BBB	–	0.17	1	–	–	–	–
0.45 to <1.08	BB+, BB	0.48	0.58	70	67	–	–	–
1.08 to <1.80	BB-	1.39	1.49	30	30	–	–	–
1.80 to <3.23	B+	2.46	2.46	21	65	–	–	0.50
3.23 to <9.12	B	4.92	6.65	656	997	–	–	0.31
9.12 to <18.23	B-	10.07	10.61	5	6	–	–	–
18.23 to <99.99	Below B-	25.86	12.34	3	4	–	–	–
100 (default)	Defaulted	97.69	100.00	2	1	–	–	100.00
Total		0.58	4.29	793	1 178	–	–	0.13

CR9: AIRB – BACKTESTING OF PD PER PORTFOLIO continued

	Banks and securities firms							
	As at 30 June 2023							
				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**	**42**	**43**	**–**	**–**	**–**
0.12 to <0.45	BBB	**0.25**	**0.31**	**69**	**66**	**–**	**–**	**–**
0.45 to <1.08	BB+, BB	**0.57**	**0.58**	**69**	**66**	**–**	**–**	**–**
1.08 to <1.80	BB-	**1.13**	**1.21**	**21**	**21**	**–**	**–**	**–**
1.80 to <3.23	B+	**2.45**	**2.45**	**18**	**17**	**–**	**–**	**–**
3.23 to <9.12	B	**5.22**	**4.83**	**41**	**34**	**–**	**–**	**–**
9.12 to <18.23	B-	**10.07**	**10.07**	**16**	**20**	**–**	**–**	**–**
18.23 to <99.99	Below B-	**34.87**	**34.42**	**6**	**10**	**–**	**–**	**–**
100 (default)	Defaulted	**–**	**–**	**–**	**–**	**–**	**–**	**–**
Total		**0.51**	**6.74**	**282**	**277**	**–**	**–**	**–**

	Banks and securities firms							
	As at 30 June 2022							
				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	51	42	–	–	–
0.12 to <0.45	BBB	0.24	0.32	67	69	–	–	–
0.45 to <1.08	BB+, BB	0.54	0.55	73	69	–	–	–
1.08 to <1.80	BB-	1.41	1.29	21	21	–	–	–
1.80 to <3.23	B+	2.45	2.45	22	18	–	–	–
3.23 to <9.12	B	4.67	4.86	43	41	–	–	–
9.12 to <18.23	B-	10.07	10.07	17	16	–	–	–
18.23 to <99.99	Below B-	30.66	27.50	12	6	–	–	–
100 (default)	Defaulted	–	–	–	–	–	–	–
Total		0.53	5.89	306	282	–	–	–

CR9: AIRB – BACKTESTING OF PD PER PORTFOLIO continued

	SME corporate							
	As at 30 June 2023							
				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**	**0.05**	**554**	**6 337**	**90**	**79**	**–**
0.12 to <0.45	BBB	**0.01**	**0.32**	**3 125**	**17 201**	**208**	**196**	**0.28**
0.45 to <1.08	BB+, BB	**0.08**	**0.77**	**14 221**	**19 929**	**1 093**	**1 065**	**0.69**
1.08 to <1.80	BB-	**0.27**	**1.38**	**7 150**	**6 583**	**793**	**785**	**2.32**
1.80 to <3.23	B+	**0.31**	**2.37**	**5 021**	**7 442**	**148**	**122**	**1.98**
3.23 to <9.12	B	**0.88**	**4.71**	**8 973**	**5 467**	**1 568**	**1 530**	**3.57**
9.12 to <18.23	B-	**1.17**	**12.59**	**435**	**537**	**49**	**36**	**8.38**
18.23 to <99.99	Below B-	**3.92**	**27.90**	**876**	**2 066**	**208**	**182**	**24.21**
100 (default)	Defaulted	**100.00**	**100.00**	**7 846**	**5 594**	**11 773**	**7 025**	**100.00**
Total		**4.10**	**6.26**	**48 201**	**71 156**	**15 930**	**11 020**	**4.63**

	SME corporate							
	As at 30 June 2022							
				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	–	554	26	26	–
0.12 to <0.45	BBB	0.15	0.43	1 512	3 125	548	172	0.25
0.45 to <1.08	BB+, BB	0.13	0.79	12 197	14 221	2 996	1 997	0.59
1.08 to <1.80	BB-	0.21	1.39	4 496	7 150	714	650	1.12
1.80 to <3.23	B+	0.50	2.32	4 839	5 021	589	537	1.78
3.23 to <9.12	B	0.99	4.38	6 770	8 973	3 085	2 037	3.39
9.12 to <18.23	B-	7.61	12.65	1 948	435	314	281	4.97
18.23 to <99.99	Below B-	4.58	25.96	1 807	876	664	507	20.28
100 (default)	Defaulted	5.20	100.00	1 055	7 846	28 247	21 505	100.00
Total		3.59	6.00	34 624	48 201	37 183	27 712	132.37

CR9: AIRB – BACKTESTING OF PD PER PORTFOLIO continued

	SME retail							
	As at 30 June 2023							
				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**	**0.05**	**1 009**	**1 706**	**261**	**261**	**0.02**
0.12 to <0.45	BBB	**0.02**	**0.41**	**5 127**	**5 533**	**75**	**73**	**0.65**
0.45 to <1.08	BB+, BB	**0.01**	**0.82**	**32 075**	**18 942**	**1 068**	**1 063**	**1.45**
1.08 to <1.80	BB-	**0.02**	**1.36**	**96 791**	**33 794**	**718**	**692**	**0.79**
1.80 to <3.23	B+	**1.07**	**2.45**	**637 516**	**222 975**	**12 730**	**12 002**	**3.95**
3.23 to <9.12	B	**0.12**	**5.42**	**1 604 036**	**252 153**	**69 146**	**64 812**	**9.35**
9.12 to <18.23	B-	**1.12**	**12.80**	**55 039**	**19 373**	**3 098**	**2 834**	**13.84**
18.23 to <99.99	Below B-	**13.04**	**37.03**	**29 987**	**17 759**	**4 957**	**4 422**	**34.85**
100 (default)	Defaulted	**100.00**	**100.00**	**132 404**	**41 822**	**99 519**	**12 715**	**100.00**
Total		**8.18**	**7.54**	**2 593 984**	**614 057**	**191 572**	**98 874**	**9.73**

	SME retail							
	As at 30 June 2022							
				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	0.06	80	1 009	535	535	0.12
0.12 to <0.45	BBB	0.01	0.40	3 857	5 127	13	13	0.64
0.45 to <1.08	BB+, BB	0.02	0.82	22 160	32 075	88	88	1.45
1.08 to <1.80	BB-	0.12	1.38	115 049	96 791	855	855	0.80
1.80 to <3.23	B+	1.15	2.43	621 355	637 516	19 802	19 801	4.08
3.23 to <9.12	B	0.85	5.34	1 646 772	1 604 036	89 047	89 045	10.36
9.12 to <18.23	B-	3.24	12.43	57 606	55 039	4 434	4 431	14.75
18.23 to <99.99	Below B-	12.98	38.24	26 823	29 987	7 606	7 547	30.12
100 (default)	Defaulted	39.29	100.00	85 504	132 404	80 865	13 690	100.00
Total		9.08	7.64	2 579 206	2 593 984	203 245	136 005	10.11

CR9: AIRB – BACKTESTING OF PD PER PORTFOLIO continued

Retail mortgages – As at 30 June 2023

PD scale	External rating equivalent	Weighted average PD %	Arithmetic average PD by obligors %	Number of obligors: End of prior year	Number of obligors: End of current year	Defaulted obligors: During current year	Defaulted obligors: New during current year	Average historical annual default rate %
0.00 to <0.12	AAA, AA, A	**0.07**	**0.07**	**18 246**	**45 822**	**20**	**1**	**0.08**
0.12 to <0.45	BBB	**0.26**	**0.26**	**39 397**	**93 676**	**26**	**3**	**0.21**
0.45 to <1.08	BB+, BB	**0.71**	**0.72**	**101 399**	**81 416**	**20**	**–**	**0.73**
1.08 to <1.80	BB-	**1.37**	**1.37**	**69 470**	**32 986**	**19**	**3**	**1.20**
1.80 to <3.23	B+	**2.36**	**2.38**	**43 187**	**24 132**	**23**	**2**	**2.40**
3.23 to <9.12	B	**5.22**	**5.25**	**36 949**	**23 045**	**98**	**6**	**4.91**
9.12 to <18.23	B-	**13.27**	**13.30**	**6 125**	**11 378**	**92**	**5**	**12.40**
18.23 to <99.99	Below B-	**41.93**	**40.77**	**10 154**	**12 870**	**112**	**13**	**39.98**
100 (default)	Defaulted	**100.00**	**100.00**	**21 979**	**22 021**	**9 087**	**324**	**100.00**
Total		**7.29**	**8.02**	**346 906**	**347 346**	**9 497**	**357**	**7.62**

Retail mortgages – As at 30 June 2022

PD scale	External rating equivalent	Weighted average PD %	Arithmetic average PD by obligors %	Number of obligors: End of prior year	Number of obligors: End of current year	Defaulted obligors: During current year	Defaulted obligors: New during current year	Average historical annual default rate %
0.00 to <0.12	AAA, AA, A	0.09	0.08	19 822	18 246	1	–	0.09
0.12 to <0.45	BBB	0.30	0.29	37 973	39 397	3	–	0.20
0.45 to <1.08	BB+, BB	0.73	0.74	105 250	101 399	26	–	0.67
1.08 to <1.80	BB-	1.34	1.36	65 850	69 470	49	–	1.10
1.80 to <3.23	B+	2.30	2.34	50 183	43 187	118	–	2.22
3.23 to <9.12	B	4.78	4.71	27 519	36 949	381	–	4.77
9.12 to <18.23	B-	12.23	12.12	5 697	6 125	72	–	11.23
18.23 to <99.99	Below B-	38.57	41.61	11 501	10 154	452	1	39.65
100 (default)	Defaulted	100.00	100.00	19 740	21 979	10 255	65	100.00
Total		6.98	7.91	343 535	346 906	11 357	66	7.23

CR9: AIRB – BACKTESTING OF PD PER PORTFOLIO continued

	Retail revolving							
	As at 30 June 2023							
				Number of obligors		Defaulted obligors		
PD scale	External rating equivalent	Weighted average PD %	Arithmetic average PD by obligors %	End of prior year	End of current year	During current year	New during current year	Average historical annual default rate %
0.00 to <0.12	AAA, AA, A	**0.11**	**0.11**	**44 169**	**10 100**	**1**	**1**	**0.62**
0.12 to <0.45	BBB	**0.32**	**0.32**	**440 377**	**274 625**	**96**	**1**	**0.73**
0.45 to <1.08	BB+, BB	**0.74**	**0.74**	**429 079**	**453 155**	**232**	**8**	**1.09**
1.08 to <1.80	BB-	**1.41**	**1.38**	**272 131**	**340 035**	**226**	**7**	**2.09**
1.80 to <3.23	B+	**2.46**	**2.45**	**311 127**	**346 247**	**305**	**8**	**3.28**
3.23 to <9.12	B	**5.10**	**5.16**	**305 943**	**407 266**	**634**	**43**	**6.64**
9.12 to <18.23	B-	**12.03**	**12.16**	**67 402**	**67 496**	**204**	**21**	**13.76**
18.23 to <99.99	Below B-	**38.98**	**100.00**	**68 048**	**70 577**	**559**	**30**	**37.00**
100 (default)	Defaulted	**100.00**	**100.00**	**128 103**	**129 479**	**59 350**	**2 449**	**100.00**
Total		**9.10**	**7.37**	**2 066 379**	**2 098 960**	**61 047**	**2 567**	**12.88**

	Retail revolving							
	As at 30 June 2022							
				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	0.08	36 608	44 169	–	–	1.06
0.12 to <0.45	BBB	0.27	0.28	412 644	440 377	12	–	1.24
0.45 to <1.08	BB+, BB	0.73	0.73	403 763	429 079	40	–	2.29
1.08 to <1.80	BB-	1.42	1.41	262 316	272 131	44	–	3.77
1.80 to <3.23	B+	2.46	2.44	320 679	311 127	71	–	6.06
3.23 to <9.12	B	5.05	5.07	344 886	305 943	202	2	11.90
9.12 to <18.23	B-	11.71	12.09	81 552	67 402	140	3	26.65
18.23 to <99.99	Below B-	37.84	36.85	63 088	68 048	628	3	65.56
100 (default)	Defaulted	100.00	100.00	138 535	128 103	53 157	1 100	100.00
Total		8.86	7.37	2 064 071	2 066 379	54 294	1 108	16.86

CR9: AIRB – BACKTESTING OF PD PER PORTFOLIO continued

	Other retail							
	As at 30 June 2023							
				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**	**375**	**36**	**–**	**–**	**1.23**
0.12 to <0.45	BBB	**0.29**	**0.37**	**2 301**	**1 618**	**–**	**–**	**1.99**
0.45 to <1.08	BB+, BB	**0.72**	**0.70**	**49 381**	**55 342**	**8**	**1**	**0.97**
1.08 to <1.80	BB-	**1.48**	**1.50**	**112 504**	**114 469**	**7**	**1**	**1.58**
1.80 to <3.23	B+	**2.35**	**2.42**	**237 520**	**232 719**	**57**	**1**	**2.68**
3.23 to <9.12	B	**5.48**	**5.85**	**473 783**	**498 571**	**289**	**3**	**7.24**
9.12 to <18.23	B-	**11.83**	**13.00**	**252 820**	**269 854**	**1 464**	**26**	**14.38**
18.23 to <99.99	Below B-	**37.76**	**35.95**	**1 526 563**	**1 605 466**	**39 759**	**5 163**	**25.04**
100 (default)	Defaulted	**100.00**	**100.00**	**494 108**	**336 133**	**242 290**	**76 703**	**100.00**
Total		**14.94**	**7.48**	**3 149 355**	**3 114 208**	**283 874**	**81 898**	**29.47**

	Other retail							
	As at 30 June 2022							
				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	340	375	1	–	18.09
0.12 to <0.45	BBB	0.35	0.36	7 980	2 301	4	2	1.10
0.45 to <1.08	BB+, BB	0.73	0.71	46 782	49 381	400	393	0.24
1.08 to <1.80	BB-	1.49	1.50	109 914	112 504	18	3	0.61
1.80 to <3.23	B+	2.38	2.45	223 325	237 520	82	42	1.07
3.23 to <9.12	B	5.37	5.69	478 558	473 783	263	5	2.76
9.12 to <18.23	B-	11.88	12.83	244 657	252 820	1 443	43	6.97
18.23 to <99.99	Below B-	37.45	35.49	1 601 604	1 526 563	38 720	4 536	14.04
100 (default)	Defaulted	100.00	100.00	453 818	494 108	350 283	98 599	100.00
Total		15.35	7.38	3 166 978	3 149 355	391 214	103 623	87.20

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

The following tables provide the counterparty credit risk exposures per portfolio and PD range where the AIRB approach is used for credit risk. They also include the main parameters used in the calculation of RWA.

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

	Banks						
	As at 31 June 2023						
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	**8 375**	**0.07**	**19**	**33.66**	**2.12**	**1 265**	**15.50**
0.15 to <0.25	**713**	**0.16**	**7**	**37.29**	**2.23**	**206**	**28.90**
0.25 to <0.50	**1 060**	**0.46**	**13**	**36.51**	**1.09**	**469**	**44.23**
0.50 to <0.75	**81**	**1.00**	**2**	**33.00**	**1.00**	**44**	**54.00**
0.75 to <2.50	**28**	**1.20**	**5**	**42.40**	**1.13**	**21**	**77.44**
2.50 to <10	**8**	**5.28**	**8**	**52.13**	**1.20**	**13**	**160.03**
10 to <100	**20**	**34.79**	**7**	**43.57**	**0.86**	**43**	**213.46**
100 (default)	**–**	**–**	**–**	**–**	**–**	**–**	**–**
Subtotal	**10 285**		**61**			**2 061**	**20.03**

	Banks						
	As at 31 June 2022						
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	13 212	0.07	13	25.19	1.27	2 047	15.50
0.15 to <0.25	764	0.16	7	37.22	1.42	260	33.99
0.25 to <0.50	538	0.46	9	31.01	1.52	237	44.11
0.50 to <0.75	–	–	–	–	–	–	–
0.75 to <2.50	12	1.20	4	38.90	1.27	9	74.67
2.50 to <10	11	5.28	6	51.93	1.57	20	174.45
10 to <100	1	34.79	5	40.86	1.00	3	221.93
100 (default)	–	–	–	–	–	–	–
Subtotal	14 538		44			2 576	17.72

The reduction in exposure in the 0 to <0.15 PD band was because of further recognition of collateral offsets for exposures to counterparties through the London Clearing House as a qualified central clearing counterparty.

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

	Corporate						
	As at 30 June 2023						
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**	**0.09**	**1**	**30.00**	**1.86**	**1**	**11.79**
0.15 to <0.25	**482**	**0.20**	**20**	**34.73**	**1.42**	**120**	**24.85**
0.25 to <0.50	**693**	**0.41**	**53**	**33.38**	**1.06**	**275**	**39.64**
0.50 to <0.75	**2 340**	**0.69**	**43**	**29.65**	**1.27**	**895**	**38.24**
0.75 to <2.50	**448**	**1.56**	**68**	**33.76**	**1.17**	**251**	**56.10**
2.50 to <10	**216**	**4.43**	**22**	**39.53**	**1.27**	**205**	**95.05**
10 to <100	**18**	**11.87**	**5**	**34.02**	**2.11**	**27**	**151.23**
100 (default)	**–**	**–**	**–**	**–**	**–**	**–**	**–**
Subtotal	**4 207**		**212**			**1 774**	**42.18**

	Corporate						
	As at 30 June 2022						
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	1 129	0.18	15	32.86	1.00	241	21.36
0.25 to <0.50	588	0.43	32	31.49	1.13	228	38.85
0.50 to <0.75	5 337	0.74	21	40.41	1.01	3 247	60.85
0.75 to <2.50	425	1.39	38	26.52	1.23	222	52.30
2.50 to <10	280	4.61	17	30.56	1.04	261	93.07
10 to <100	93	10.47	8	26.97	0.58	103	111.11
100 (default)	–	–	–	–	–	–	–
Subtotal	7 852		131			4 302	54.80

The reductions in EAD and RWA in the 0.5 to <0.75 PD bands were driven by the maturation of significant hedges against corporate counterparties.

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

	Sovereign						
	As at 30 June 2023						
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	**3**	**0.17**	**2**	**34.25**	**0.68**	**1.00**	**35.57**
0.25 to <0.50	**25**	**0.48**	**3**	**31.67**	**0.91**	**3**	**12.18**
0.50 to <0.75	**3**	**0.60**	**2**	**45.00**	**0.80**	**2**	**56.81**
0.75 to <2.50	**–**	**–**	**–**	**–**	**–**	**–**	**–**
2.50 to <10	**–**	**–**	**–**	**–**	**–**	**–**	**–**
10 to <100	**–**	**–**	**–**	**–**	**–**	**–**	**–**
100 (default)	**–**	**–**	**–**	**–**	**–**	**–**	**–**
Subtotal	**31**		**7**			**6**	**19.00**

	Sovereign						
	As at 30 June 2022						
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	–	–	–	–	–	–	–
0.25 to <0.50	49	0.48	2	5.00	1.00	3	5.98
0.50 to <0.75	3	0.60	2	45.00	0.18	1	50.19
0.75 to <2.50	–	–	–	–	–	–	–
2.50 to <10	–	–	–	–	–	–	–
10 to <100	–	–	–	–	–	–	–
100 (default)	–	–	–	–	–	–	–
Subtotal	52		4			4	7.69

The reduction in exposure in the 0.25 to <0.5 PD band was as a result of reduced mark-to-market movements on foreign exchange trades.

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

	Securities firms						
	As at 30 June 2023						
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	**6 288**	**0.07**	**5**	**27.85**	**0.79**	**474**	**7.54**
0.15 to <0.25	**6 428**	**0.19**	**33**	**32.07**	**1.43**	**800**	**12.45**
0.25 to <0.50	**2 081**	**0.43**	**49**	**31.90**	**1.19**	**582**	**27.97**
0.50 to <0.75	**519**	**0.72**	**14**	**31.17**	**1.42**	**258**	**49.73**
0.75 to <2.50	**1 948**	**2.04**	**79**	**49.02**	**1.20**	**1 725**	**88.52**
2.50 to <10	**36**	**4.82**	**7**	**41.71**	**1.33**	**35**	**97.08**
10 to <100	**1**	**10.07**	**2**	**39.00**	**0.90**	**2**	**180.00**
100 (default)	**–**	**–**	**–**	**–**	**–**	**–**	**–**
Subtotal	**17 301**		**189**			**3 876**	**22.40**

	Securities firms						
	As at 30 June 2022						
PD scale	EAD post CRM (R million)	Average PD (%)	Number of obligors	Average LGD (%)	Average maturity (years)	RWA (R million)	RWA density (%)
0.00 to <0.15	5 862	0.06	2	18.63	1.28	474	8.08
0.15 to <0.25	5 546	0.22	26	39.76	0.40	541	9.75
0.25 to <0.50	6 341	0.47	36	19.31	0.88	1 901	29.97
0.50 to <0.75	1 611	0.65	6	34.08	0.97	772	47.93
0.75 to <2.50	1 466	2.06	44	25.86	0.45	998	68.12
2.50 to <10	59	4.27	7	37.13	1.18	67	113.42
10 to <100	13	10.07	3	38.97	0.51	21	159.73
100 (default)	–	–	–	–	–	–	–
Subtotal	20 898		124			4 774	22.84

The large reduction in exposure in the 0.25 to <0.5 PD band was driven by reduced equity trading and increased collateral received against exposures.

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

	Public sector and local government						
	As at 30 June 2023						
PD scale	**EAD post CRM (R million)**	**Average PD (%)**	**Number of obligors**	**Average LGD (%)**	**Average maturity (years)**	**RWA (R million)**	**RWA density (%)**
0.00 to <0.15	**–**	**–**	**–**	**–**	**–**	**–**	**–**
0.15 to <0.25	**5**	**0.24**	**1**	**23.01**	**1.00**	**1**	**25.02**
0.25 to <0.50	**1 005**	**0.48**	**3**	**30.00**	**1.23**	**408**	**40.62**
0.50 to <0.75	**–**	**–**	**–**	**–**	**–**	**–**	**–**
0.75 to <2.50	**–**	**–**	**–**	**–**	**–**	**–**	**–**
2.50 to <10	**33**	**4.93**	**1**	**30.00**	**1.00**	**32**	**96.79**
10 to <100	**–**	**–**	**–**	**–**	**–**	**–**	**–**
100 (default)	**–**	**–**	**–**	**–**	**–**	**–**	**–**
Subtotal	**1 043**		**5**			**441**	**42.32**

	Public sector and local government						
	As at 30 June 2022						
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	23	0.18	2	40.88	0.40	6	27.93
0.25 to <0.50	169	0.48	2	30.00	0.63	56	32.90
0.50 to <0.75	–	–	–	–	–	–	–
0.75 to <2.50	–	–	–	–	–	–	–
2.50 to <10	32	4.93	1	30.00	1.93	32	100.57
10 to <100	0.02	19.03	1	64.00	1.00	0.07	332.01
100 (default)	–	–	–	–	–	–	–
Subtotal	224		6			94	41.96

The overall increase in exposure was driven by short-term cross-currency swap exposures to state-owned enterprises, which primarily affected the 0.25 to <0.5 PD band.

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

	Other						
	As at 30 June 2023						
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	66	0.24	1	15	1.00	8	11.88
0.25 to <0.50	1 171	0.43	23	20.49	1.17	302	25.85
0.50 to <0.75	88	0.67	16	21.03	1.13	42	48.65
0.75 to <2.50	14	1.48	21	25.83	1.43	8	51.76
2.50 to <10	17	5.31	9	32.80	1.09	13	80.55
10 to <100	28	23.02	2	29.26	1.00	25	89.79
100 (default)	15	100	1	37	1.00	–	–
Subtotal	1 399		73			398	28.54

	Other						
	As at 30 June 2022						
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	–	–	–	–	–	–	–
0.25 to <0.50	758	0.44	6	23.75	2.55	280	36.89
0.50 to <0.75	73	0.67	7	23.55	3.78	40	53.52
0.75 to <2.50	275	1.52	16	29.09	1.23	165	59.95
2.50 to <10	7	4.55	2	18.27	2.86	3	60.22
10 to <100	69	10.07	1	25.55	4.92	91	132.97
100 (default)	–	–	–	–	–	–	–
Subtotal	1 181		32			579	48.94

The increase in exposure in the 0.25 to <0.5 PD band was driven by increased mark-to-market movements on medium-term cross-currency swaps. The reduction in exposure and RWA observed in the 0.75 to <2.50 PD band was driven by cross-currency swaps maturing during the year.

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