



SOUTH AFRICAN RESERVE BANK
Prudential Authority

Statement of the need for, expected impact and intended operation of the proposed amendments to the Regulations relating to Banks (Regulations)

Incorporating the revised standardised approach for credit risk, internal ratings-based approaches for credit risk, revised operational risk framework, leverage ratio framework and output floor into the domestic regulatory framework

September 2023

(DRAFT – FOR CONSULTATION)

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1 Executive Summary

The Prudential Authority (PA) is proposing to incorporate the remaining Basel III post-crisis reforms into the domestic regulatory framework with effect from 1 July 2025. The reforms provide prudent and credible approaches for calculating risk-weighted capital ratios by (a) implementing robust and risk-sensitive standardised approaches for credit risk as well as operational risk, (b) restricting the use of internal models and (c) complementing risk-weighted assets with the leverage ratio and the revised output floor. To ensure that any potential unintended consequences are considered, the PA conducted a quantitative impact study (QIS). This report summarises the key findings per each framework as follows:

(a) New operational risk framework

On aggregate, banks conducting business in South Africa are expected to hold less capital for operational risk under the new operational risk framework. This is regardless of whether the ZAR buckets or the Basel Committee on Banking Supervision (BCBS) buckets are applied in the calculation of operational risk capital. At a solo level operational risk capital is expected to decrease by 15% and 5% under the BCBS buckets and ZAR buckets¹ respectively. The capital adequacy ratio (CAR) increases by 10 basis points from the current levels under the ZAR buckets and 20 basis points under the BCBS buckets.

(b) Revised credit risk framework

The implementation of the revised credit risk framework is expected to result in an aggregate capital reduction of 1.9% at a solo level. The five largest banks are expected to register a 2.7% reduction in risk-weighted assets (RWA) for credit risk and consequently, capital held in respect of the credit risk exposures. CAR is expected to increase by 27 basis points.

(c) Revised exposure definition of the leverage ratio

The revised exposure definition of the leverage ratio is expected to lead to a decrease in the leverage ratio from the current levels by 10 basis points. The twenty banks that provided leverage data are all above the minimum required leverage ratio of 4%. The lowest leverage ratio recorded on a solo basis is 5% while the highest is 53%. On a consolidated basis, the eight banks that provided data show the lowest leverage ratio of 7% and a high of 17.8%. The leverage ratio for the eight banks that provided data on a consolidated basis is above the 4% prudential minimum requirement.

(d) Output floor

On a solo basis, from 2027, four banks are expected to be required to hold additional capital as a result of the application of the output floor. The additional amount of capital required to be held will range from 2% to 5.5% of total capital. The four banks are all part of the five largest banks category. On a consolidated basis, only 1 bank expects to be impacted by the output floor framework from 2027 onwards. This bank will be required to hold an additional amount of capital and reserve funds of 1.5% resulting from the implementation of the output floor of 72.5% in 2028.

¹ Specified in Draft 1 of the proposed amendments to the Regulations.

2 Introduction

- 2.1 In addressing the weaknesses identified following the global financial crisis that commenced in 2007, the BCBS finalised the Basel III post-crisis reforms which are central to addressing the shortcomings of the pre-crisis regulatory framework. The reforms are meant to provide an enhanced regulatory foundation for a more resilient banking system.
- 2.2 The BCBS reforms are meant to restore confidence in the regulatory capital ratios, lost during and post the crisis by providing prudent and credible approaches for calculating risk-weighted capital ratios which will be achieved by: (a) implementing robust and risk-sensitive standardised approaches for credit risk as well as operational risk, (b) restricting the use of internal models and (c) complementing RWA with the leverage ratio and the revised output floor.
- 2.3 The reforms will enable comparability and transparency in RWA calculated by banks that will enable stakeholders to assess the respective risk profiles of the different banks. As part of the process of finalising the aforementioned reforms, the BCBS conducted a comprehensive quantitative impact study (QIS), at a global scale, to assess the impact of implementing these reforms.
- 2.4 To ensure that the South African legal framework is current and appropriate, the PA is proposing to incorporate the remaining components of the Basel III post-crisis reforms into the domestic regulatory framework, for implementation with effect from 1 July 2025. The reforms include:
 - 2.4.1 the standardised approach (SA) for operational risk;
 - 2.4.2 the standardised approach (STA) for credit risk;
 - 2.4.3 the internal ratings-based (IRB) approaches for credit risk;
 - 2.4.4 revisions to the definition of the leverage ratio; and
 - 2.4.5 an output floor.
- 2.5 The above-mentioned frameworks will be implemented through amendments to the Regulations relating to Banks (Regulations).
- 2.6 In addition to the above-mentioned frameworks, the PA also proposes to incorporate the revised market risk and credit valuation adjustment (CVA) standards into the domestic regulatory framework through prudential standards.

These are also envisaged for implementation from 1 July 2025. The PA compiled a separate impact assessment report on these frameworks but the consolidated impact of all the Basel III reforms due for implementation on 1 July 2025 are also incorporated in this report.

- 2.7 This report accompanies the proposed draft amended Regulations and seeks to provide the rationale for incorporating the above-mentioned regulatory reforms into the domestic regulatory framework as well as the expected impact and intended operation of the proposed draft amended Regulations.
- 2.8 As part of the initial consultation process, the PA conducted a QIS and solicited industry inputs through a questionnaire on the frameworks outlined above. The industry inputs received were analysed and incorporated into this report.

3 Background

Revised operational risk framework

- 3.1 Following a consultative process that identified weaknesses with the current operational risk framework, the BCBS proposed a standardised approach for operational risk. The revised framework refines the operational risk proxy indicator by replacing the gross income measure (GI) with a superior indicator called the business indicator (BI). Furthermore, the revised framework improves the calibration of the regulatory coefficients.
- 3.2 The SA embodies the simplicity, comparability and risk sensitivity of the advanced approach. The SA integrates the business indicator component (BIC) and bank-specific loss data.
- 3.3 In December 2017, the BCBS published the revised minimum capital requirements for operational risk² which introduced the SA for calculating operational risk capital and replaced all four of the operational risk approaches specified in the Basel II framework.

Revised standardised approach for credit risk

- 3.4 Following a consultative process that commenced in 2014, the BCBS published the final revised STA framework to credit risk in 2017. The revised STA is meant

² <https://www.bis.org/bcbs/publ/d424.pdf>

to balance risk sensitivity and simplicity as well as to reduce variability in RWA by enhancing the comparability of capital requirements across banks. In addition, the framework seeks to ensure that the revised STA provides an alternative to and complements the internal ratings-based (IRB) approaches.

Revised internal-ratings-based approaches for credit risk

- 3.5 The BCBS highlighted the shortcomings of the IRB approaches, and these include excessive complexity of the IRB approaches and internally modelled IRB capital requirements which resulted in a lack of comparability and lack of robustness in modelling certain exposures. In addressing these shortcomings, the BCBS revised the IRB approaches for credit risk as part of the post-crisis reforms.
- 3.6 The revisions included the removal of the use of advanced IRB (A-IRB) on certain asset classes, implementation of input floors on metrics used to estimate parameters and greater specification on the methods used for parameter estimation.

Leverage ratio – revised exposure definition

- 3.7 During the 2007 global financial crisis, there was an excessive build-up of on- and off-balance sheet leverage in the banking system while banks were maintaining strong risk-based capital ratios. The market forced banks to deleverage, and this resulted in a decline in asset prices and bank capital which restricted the availability of credit.
- 3.8 The leverage ratio is defined as the capital measure divided by the exposure measure, expressed as a percentage. The post-crisis reforms introduced a leverage ratio that restricts the build-up of excessive exposures in the banking sector. The leverage ratio is a non-risk-based backstop measure which is simple and strengthens the risk-based requirements.

Revised output floor

- 3.9 In reducing inconsistency in RWA, improving comparability and maintaining a level playing field, the BCBS revised the output floor as part of the post-crisis reforms. The revised output floor places a floor to limit the extent to which banks can lower their capital requirements under the internal models relative to the standardised approaches.

- 3.10 The output floor will be phased in to minimise the potential negative impact of the floor. The BCBS phased-in period commenced in 2022 with the initial floor set at 50% and will increase annually by 5% until it reaches 70% and then finally it will be set at 72.5% in 2027. The PA proposes a phase-in period that will commence in 2024 with an initial floor set at 55% in 2024, 60% in 2025, 65% in 2026, 70% in 2027 and 72.5% in 2028. The output floor will impact banks that use internal models to compute RWA for applicable risk areas. There are certain risk areas where the BCBS has done away with the use of internal models e.g., operational risk, where the four approaches available in terms of the Basel II framework have been replaced with a single standardised approach.

4 Statement of the need – context and definition of the policy problem

- 4.1 Under this section, the frameworks covered in this report are analysed with respect to the context and definition of the challenges they seek to address as follows:

Revised operational risk framework

- 4.2 *The need for recalibration:* According to the BCBS findings, the current standardised approach is under-calibrated, especially for large and complex banks. In addressing this weakness, the BCBS replaced the GI with the BI. The BI can capture a bank's exposure to the operational risk inherent in a bank's mix of business activities. The BI also captures items that are risk-sensitive and are omitted by the GI definition.
- 4.3 *The need to amend regulatory coefficients:* The BCBS observed that capital needs for operational risk increase in a non-linear manner with the bank size and therefore warranted amendments to the current regulatory coefficients. The BCBS has made the BI operational risk requirement more linear in the way it applies to banks of different sizes. The BI component is divided into three buckets and the marginal coefficient increases with the size of the BI. The value of the BI is reflective of the size of the bank.
- 4.4 *The need to include losses as an indicator of exposure to operational risk:* The SA introduces the loss component. Historical losses are used as a risk indicator of future operational risk losses and therefore enhance the effectiveness of the BI as a proxy. Additionally, the loss component enhances the SA risk sensitivity and provides incentives for banks to improve operational risk management.

Revised standardised approach for credit risk

- 4.5 *The need to enhance risk sensitivity granularity:* In restoring the lack of confidence in RWA, the revised STA for credit risk recalibrates some of the exposures to banks, residential real estate exposures, and commercial real estate. Different risk weights are applied to the treatment of subordinate debt and equity exposure as opposed to the flat risk weight of the current STA for credit risk. The credit conversion factors determining the amount to be risk-weighted are also made more risk-sensitive. The revised framework provides for granularity on the treatment of retail exposures, corporate exposures, as well as rated and unrated exposures.
- 4.6 *The need to reduce the mechanistic reliance on credit ratings:* The revised STA for credit risk is also intended to reduce the reliance of banks on credit rating agencies. The BCBS requires banks to implement robust internal credit risk assessment approaches and develop the capability for internal credit assessment rather than mechanistic reliance on credit ratings. In jurisdictions that do not wish or cannot use external credit ratings, banks can develop a more granular non-ratings-based approach.

Revised Internal ratings-based approaches for credit risk

- 4.7 *The need for prudent and robust modelling approaches:* The BCBS removed the use of the A-IRB approach for exposures to corporates with a consolidated annual revenue greater than €500 million. Furthermore, the A-IRB approach is removed for exposures to banks, exposures to other financial institutions and exposures to equity. The approaches available for use include the foundation IRB (F-IRB) and the STA. The revisions make it simpler to differentiate between exposures to corporates, banks and other financial institutions and provide better recognition of the effect of the different collateral types. The removal of the A-IRB approach avoids the underestimation of the riskiness of portfolios by corporates, banks and other financial institutions.
- 4.8 *The need to reduce excessive variability in risk parameters:* The revised IRB approaches increase the specification of input floor by introducing probabilities of default (PD) for the F-IRB approach and the A-IRB approach, loss-given-default (LGD), exposure at default (EAD) for the A-IRB approach. The introduction of these metrics reduces variability in risk parameters and enhances comparability in IRB capital requirements.

- 4.9 *The need to align credit conversion factors (CCF) under the F-IRB approach with STA:* The revised IRB framework makes changes to off-balance sheet exposures. The scope and method for calculating CCF estimates have been revised to align with the STA.
- 4.10 During the 2007 global financial crisis, the BCBS introduced a scaling factor of 1.06 to maintain the aggregate level of minimum capital requirements when calculating RWA for credit risk under the IRB approaches. The Basel III improvements in the IRB framework and output floor framework have allowed for the removal of the 1.06 scaling factor used when calculating the RWA under the IRB approaches to credit risk.

Leverage ratio – revised exposure definition

- 4.11 *The need to safeguard against unsustainable levels of leverage:* The calculation of leverage has been reconfigured to ensure that banks maintain sustainable levels of leverage. A leverage ratio buffer has also been introduced to mitigate the externalities created by the global systemically important banks (G-SIBs). The leverage ratio buffer is set at 50% of the G-SIB's risk-based capital buffer. The PA has proposed that the minimum leverage ratio for both D-SIB and non-D-SIBs be set at 4%.
- 4.12 *The need to enhance consistency and comparability across banks:* To facilitate consistency, the BCBS has specified the disclosure requirements for banks. This introduced additional disclosure items and specified line items which should be included in the disclosure templates to enhance the transparency of the values that are used in calculating the leverage ratio.

Revised Output Floor

- 4.13 *The need to improve comparability in RWA:* Calibration of capital requirements by banks using internal models resulted in substantially lower capital requirements compared to those banks using the SA. The excessive variation in RWA for the same exposures created an unlevelled playing field between SA approach banks and IRB approach banks. The revised output floor limits the inconsistencies in RWA by providing a risk-based backstop to limit the extent to which capital requirements can be lowered by banks. In other words, RWAs generated by

internal models cannot, in aggregate, fall below the output floor of the RWA computed through the SA.

5 Statement of the expected impact of implementing the proposed reforms

5.1 The PA conducted a QIS and solicited industry inputs through a questionnaire to assess the expected impact of implementing the draft amended Regulations from 1 July 2025. The inputs received from the industry were analysed and incorporated into the report.

5.2 The expected impact, benefits, and areas of concern pertaining to the frameworks under consideration were separately analysed and consolidated to determine the overall expected impact.

Scope and sample of the impact study

5.3 Banks and local branches of foreign banks conducting business in South Africa that provided data within the set timeframe were considered for the various components of the study. These included South Africa's five largest banks as measured by assets which accounted for 89% of the total banking sector assets as at June 2022.

Methodology

5.4 The expected impact of the various frameworks was assessed by comparing the changes in metrics such as RWA, the minimum required capital (MRC), as well as the impact on CAR resulting from the proposed implementation of the revised frameworks in South Africa.

5.5 Data received from the industry was in some respects categorised and analysed under the five largest banks conducting business in South Africa, branches of foreign banks, as well as other local banks. Where necessary, the analysis was also conducted on a consolidated basis in addition to a solo basis.

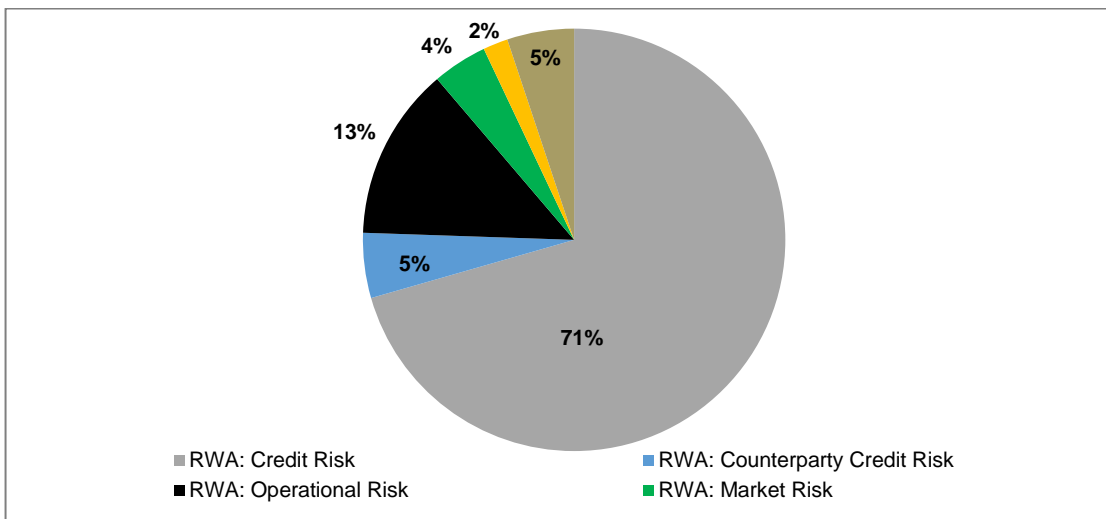
A. Impact of implementing revised operational risk framework

5.6 Apart from the five largest banks, eight branches of foreign banks and eight other local banks that submitted complete data within the stipulated time were considered for the operational risk framework QIS. These twenty-one banks

account for 99.04% of the total banking sector assets and 98.61% of the total operational risk-weighted assets (OR RWA) as at June 2022.

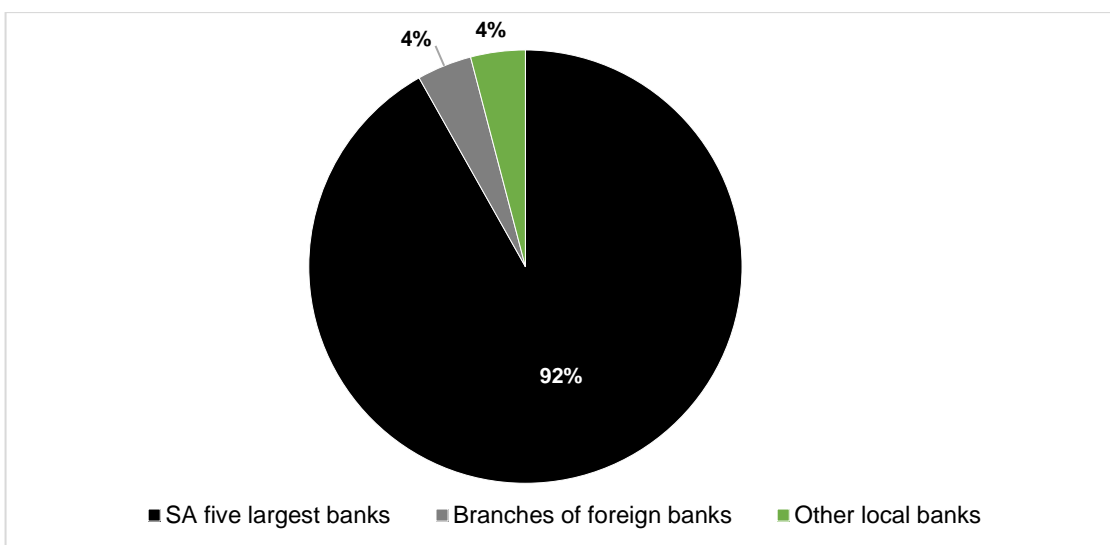
5.7 As at June 2022, OR RWA accounted for 13% of the total banking sector RWA. Credit risk accounted for a significant portion of the total RWA (71%) while counterparty credit risk (CCR), market risk, other assets, and equity risk account for 5%, 4%, 5%, and 2% of the total RWA, respectively (see Figure A1).

Figure A1: Composition of OR RWA relative to other risk types



5.8 South Africa's five largest banks account for 92% of the OR RWA while branches of foreign banks and other local banks account for 4% each (see Figure A2).

Figure A2: Distribution of OR RWA per categories of banks



5.9 Under the current Basel II operational risk framework, four approaches are available for the measurement of capital requirements for operational risk. These

are (a) the business indicator approach (BIA), (b) the standardised approach (TSA), (c) the alternative standardised approach (ASA) and (d) the advanced measurement approach (AMA). The adoption of ASA is subject to national discretion. The BIA is the simplest. Under the BIA, the capital requirement is calculated as a percentage of the GI. The AMA is the most advanced approach and requires approval by the PA. The TSA is positioned as an intermediate approach between the BIA and the AMA. The ASA is a variant of the TSA and is suitable for use by banks with high-interest margins to calculate their operational risk capital requirements.

- 5.10 The twenty-one banks that were considered in the study use different approaches for the calculation of the capital requirement for operational risk (see Table A1).

Table A1: Banks under different operational risk approaches

Number of banks using different approaches			
BIA	TSA	ASA	AMA
10	5	2	4

- 5.11 Two sets of data were solicited from banks. One data set was compiled based on the ZAR buckets proposed by the PA (specified in Draft 1 of the proposed amendments to the Regulations) and the other data set assumed the application of the BCBS buckets (see Tables A2 and A3, respectively for ZAR buckets and the BCBS buckets converted to the Rand equivalent).

Table A2: ZAR buckets

BI ranges and marginal coefficients		
Bucket	BI range (R billions)	BI marginal coefficients
1	≤4	12%
2	4 < BI ≤ 100	15%
3	>100	18%

Table A3: BCBS buckets³

BI ranges and marginal coefficients		
Bucket	BI range (R billions)	BI marginal coefficients
1	≤17.5	12%
2	17.5 < BI ≤ 525	15%
3	>525	18%

³ Converted at an exchange of €1: R17.5

5.12 The current draft amended Regulations assume the ZAR buckets but for comparison purposes, a scenario of applying the BCBS buckets was also analysed.

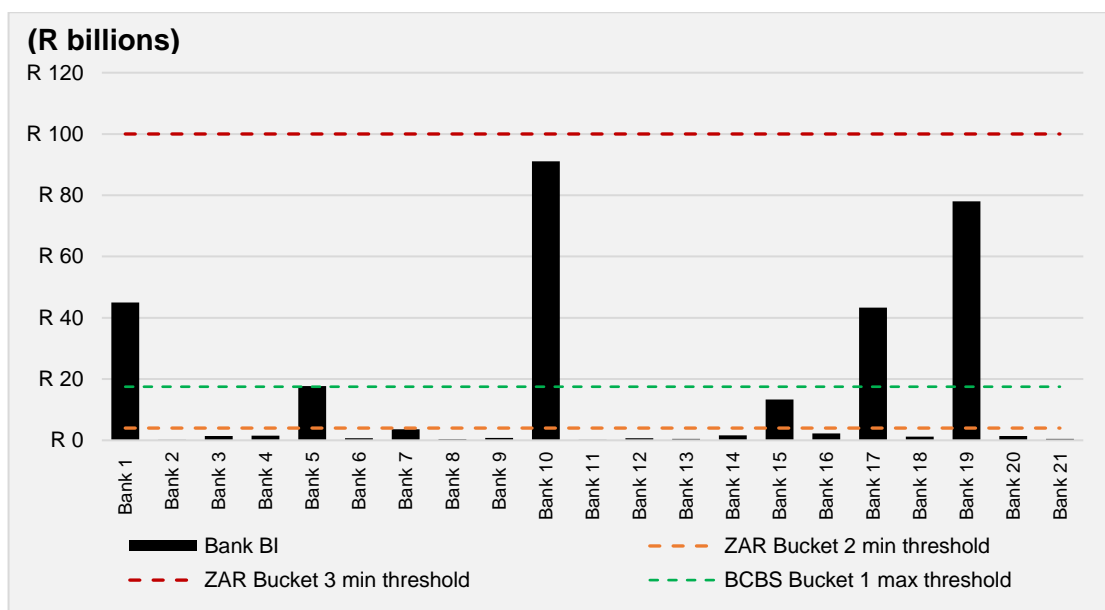
5.13 As outlined in Table A4 and depicted in Figure A3, when taking into consideration the ZAR buckets in the application of the BI marginal coefficients, out of the twenty-one banks that participated in the study, on a solo basis, fifteen banks have BI qualifying under bucket 1 for the computation of their BIC. These are all branches of foreign banks and other local banks. When the limits are increased in line with the proposals under the BCBS framework, sixteen banks will be able to fully compute BIC in terms of BI marginal coefficients under bucket 1.

Table A4: Range of BI for South African Banks

Bucket	Number of banks qualifying under the ZAR buckets	Number of Banks qualifying under the BCBS buckets
Bucket 1	15	16
Bucket 2	6	5
Bucket 3	None	None

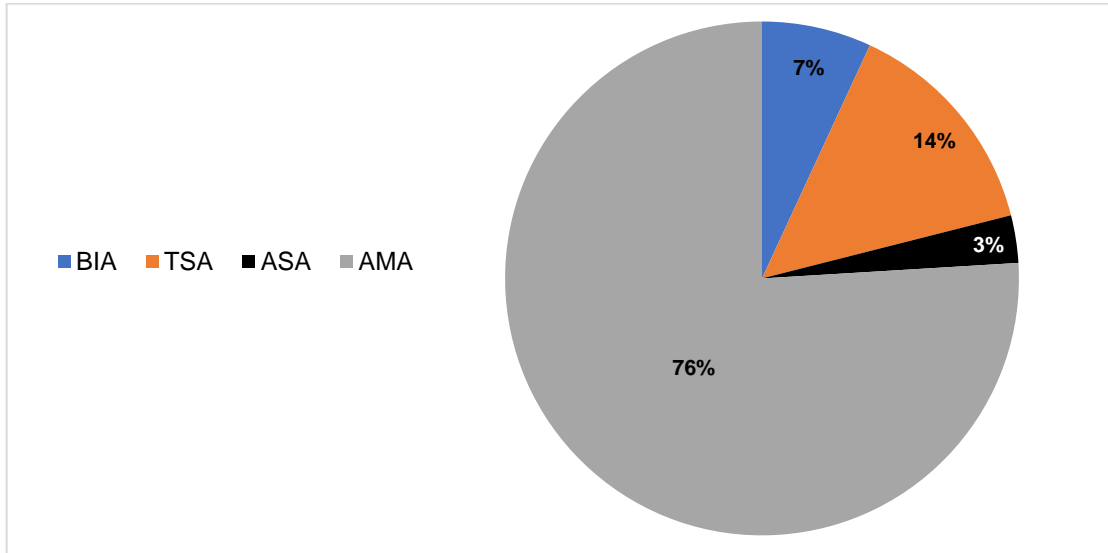
5.14 Six banks have BI that qualifies under bucket 2 when considering the ZAR buckets proposed by the PA but when considering the BCBS buckets, only five banks will qualify. Under both the ZAR and BCBS buckets, none of the banks conducting business in South Africa qualify under bucket 3. Only one bank is closer to the entry level of bucket 3 under the ZAR buckets (see Figure 3).

Figure A3: Range of BI for South African Banks



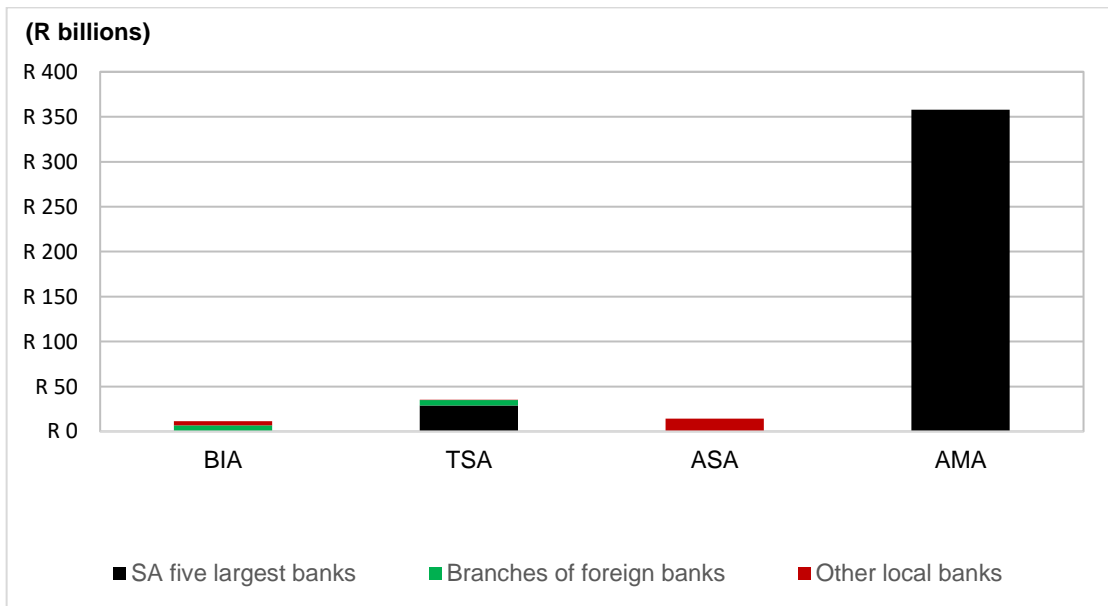
5.15 As shown in Figure A4, based on the data provided by twenty-one banks on a solo basis, AMA is used to calculate capital for 76% of the OR RWA under the current operational risk framework. This is followed by TSA and BIA which are used to calculate capital in respect of 14% and 7% of the OR RWA, respectively. The alternative to the TSA is used to calculate capital for 3% of the total OR RWA.

Figure A4: Distribution of OR RWA under the current capitalisation methods



5.16 Regulatory capital calculated through AMA is attributed to the four largest banks. The five largest banks also account for 65% of the OR RWA that is capitalised under SA as well as under the BIA (see Figure A5).

Figure A5: Distribution of OR RWA per categories of banks per approach



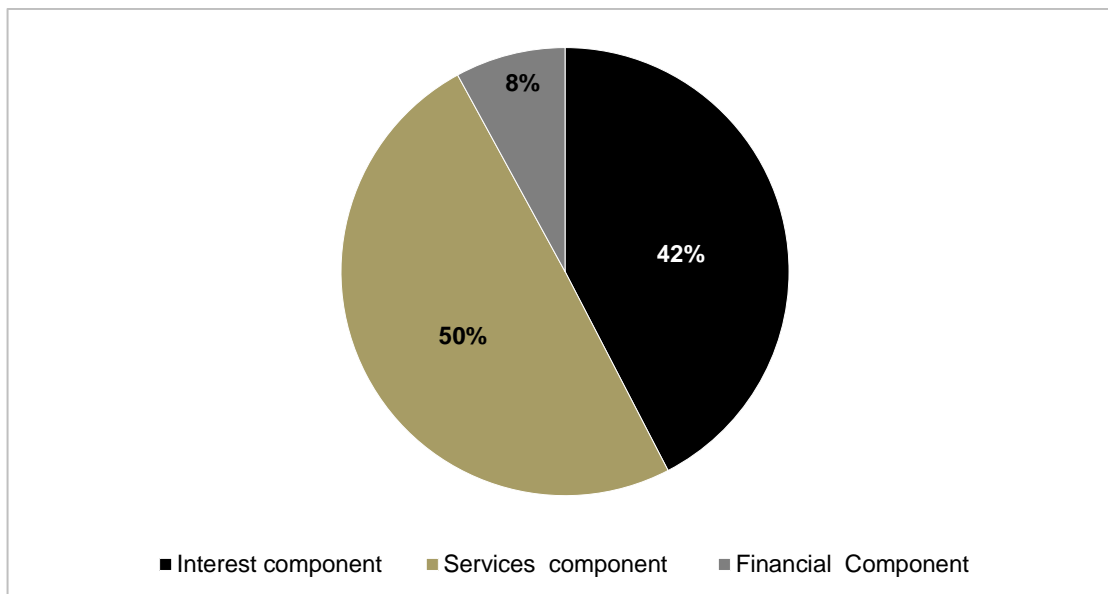
5.17 Branches of foreign banks use BIA and TSA to calculate the required capital for operational risk. None of the branches of foreign banks capitalises for operational risk using ASA or AMA. Only the other local banks calculate their capital for operational risk under the ASA, in addition to BIA and TSA (see Figure A5).

Assessment of the BIC

5.18 Under the new operational risk framework, the operational risk capital requirement is calculated by multiplying BIC with the internal loss multiplier (ILM). The BIC is calculated by multiplying the different components that make BI by the respective marginal coefficients. The ILM is a scaling factor that is based on a bank's average historical losses.

5.19 Under the BI, the services component accounts for 50% of the total aggregate BI. This is followed by the interest component which accounts for 42% and the financial component which accounts for only 8% (see Figure A6).

Figure A6: Split of the BI components under the new SA approach

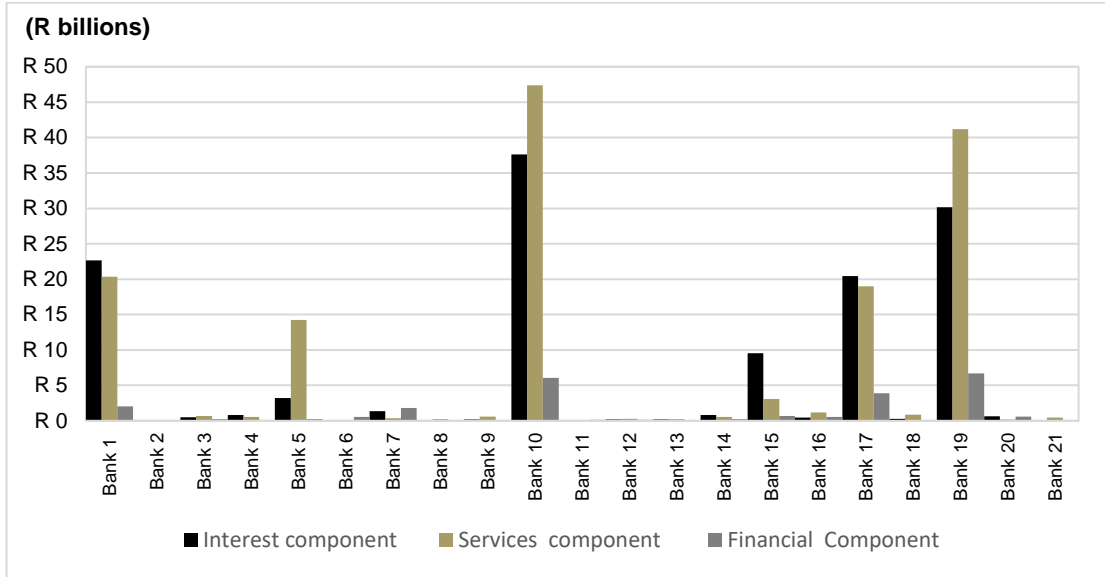


5.20 South Africa's domestic systemically important banks (D-SIBs) account for a significant portion of the different BI components. As depicted in Figure A7, the interest and services components are dominant across the larger banks.

5.21 Using the ZAR buckets, out of the twenty-one banks considered, fifteen banks have average BI marginal coefficients of 12% while six banks have average BI marginal coefficients ranging between 14% and 14.6%.

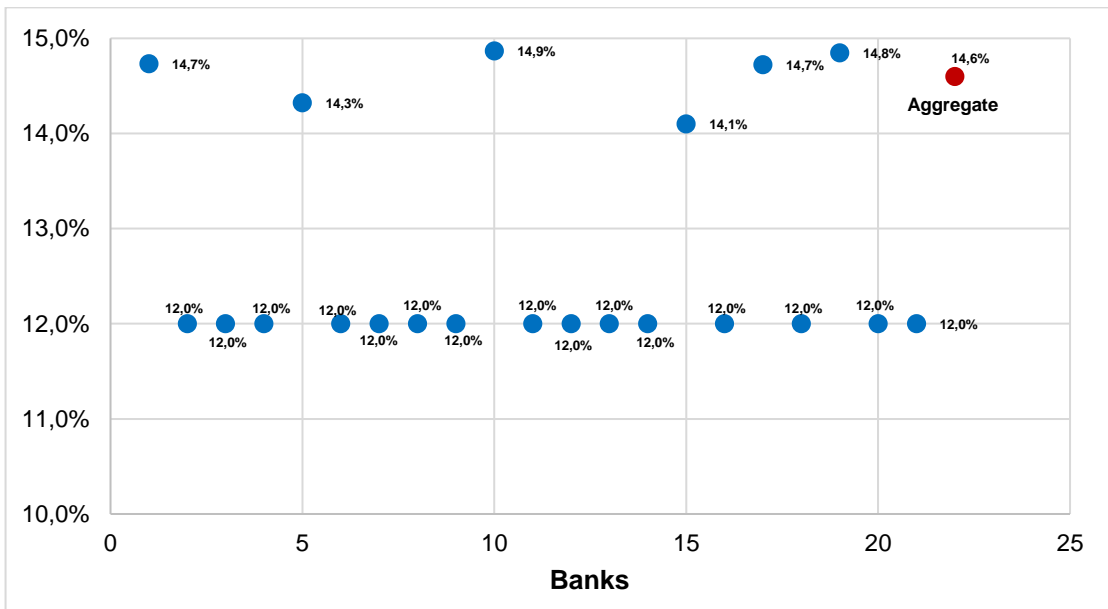
5.22 This also indicates that on average, six banks have BI marginal coefficients falling under bucket 2 while fifteen banks fall under bucket 1 of the ZAR buckets thresholds.

Figure A7: BI components per bank



5.23 On aggregate, the BI marginal coefficient for all twenty-one banks is 14.6% (see Figure A8).

Figure A8: Average BI marginal coefficients per bank

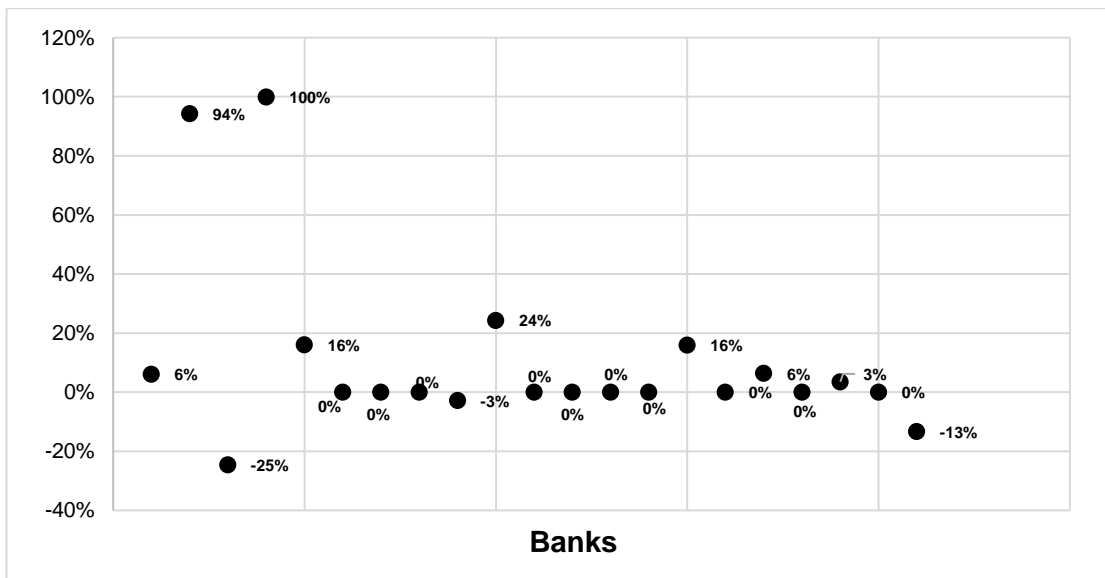


5.24 As shown in Tables A2 and A3, marginal coefficients increase with the size of the BI. For banks in bucket 1, under the ZAR buckets, BIC would be equal to BI multiplied by 12%.

5.25 For eight of the banks that participated in the study, the calculated BIC under the ZAR buckets is higher than the BIC calculated under the BCBS buckets. The magnitude of the effect ranges from 6.1% to 100%. All the five largest banks reported an increase in BIC when using the ZAR buckets compared to the BCBS buckets. The increase in BIC when applying the ZAR buckets signals an increase in the amount of the required OR capital.

5.26 On aggregate, BIC under the ZAR buckets increases by 12% when compared to that calculated under the BCBS buckets. Three banks had a decrease in BIC ranging between 2.8% and 24.6%. These banks tend to benefit from the implementation of the BCBS buckets relative to the ZAR buckets. All three banks are small local banks. Ten banks indicated that the use of either the ZAR or the BCBS buckets thresholds would have a neutral impact on their BIC (see Figure A9).

Figure A9: BIC calculated using the ZAR versus BCBS buckets per bank

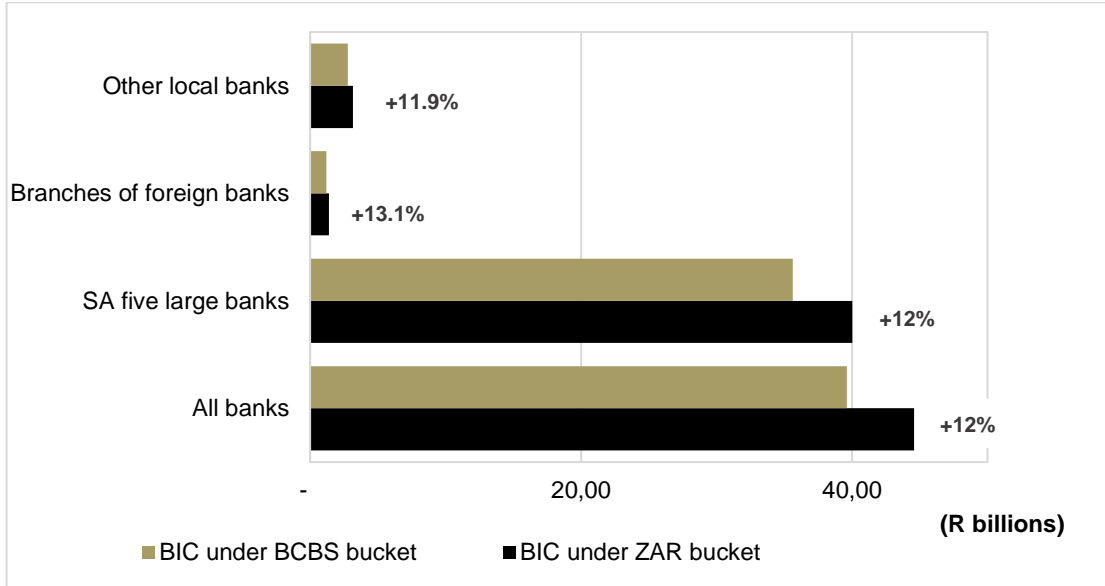


5.27 The application of the ZAR buckets in the computation of BIC increases the BIC across the different categories of banks conducting business in South Africa relative to a scenario where the BCBS buckets are used in the computation of BIC.

5.28 Other local banks category will have BIC increase by 11.9% while the five largest banks recorded increased BIC by 12%. The application of ZAR buckets on branches of foreign banks will result in a 13.1% increase in BIC relative to a scenario where the BCBS buckets are used.

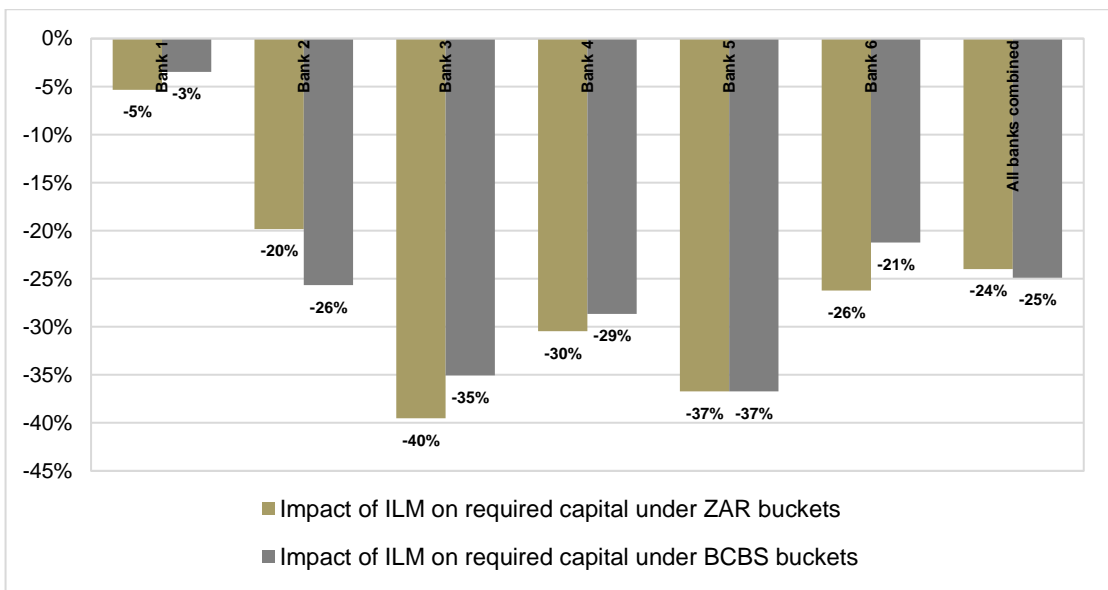
5.29 On aggregate, across all the categories of banks, BIC increases by 12% from the application of the ZAR buckets as opposed to the BCBS buckets.

Figure A10: BIC under ZAR versus BCBS buckets per category of banks



5.30 Overall, the application of ILM has a significant impact on the operational risk capital for the D-SIBs which will see a reduction in the amount of required capital by up to 24% and 25% under the ZAR buckets and BCBS buckets, respectively. There is a significant benefit to using the ILM in the computation of the operational risk capital (see Figure A11).

Figure A11: Effect of ILM on required capital under ZAR and BCBS buckets for D-SIBs



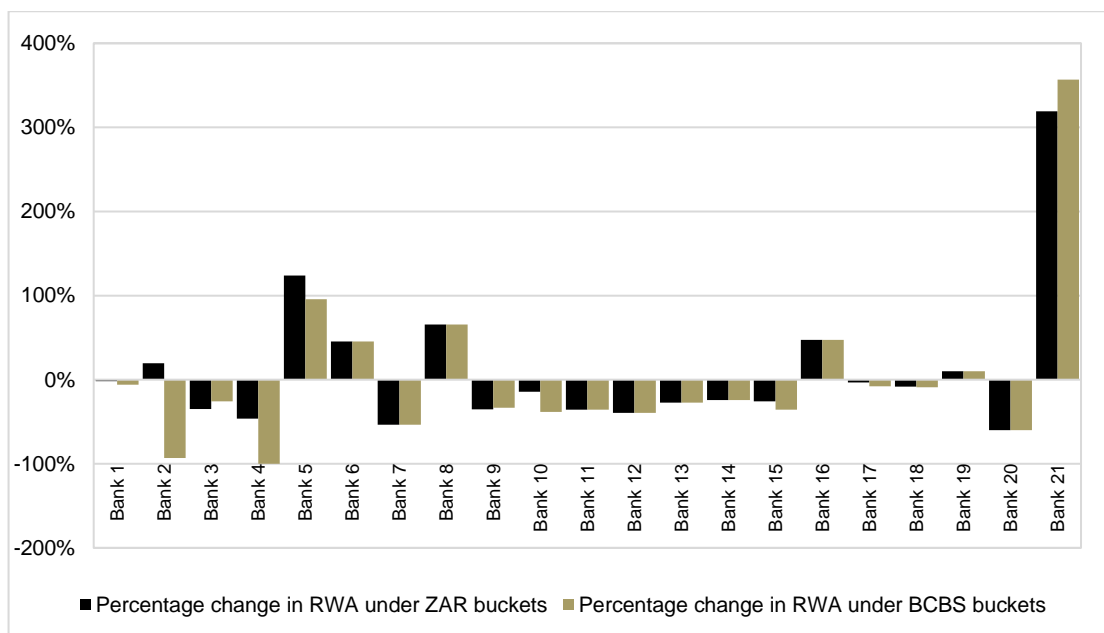
5.31 Across all the D-SIBs which are eligible to use the ILM in the computation of their required capital for operational risk, there is a marginal benefit of using the ILM calculated under the BCBS buckets relative to the ILM calculated in terms of the ZAR buckets.

5.32 The application of ILM by the D-SIBs under the ZAR buckets and BCBS buckets has the same effect of reducing the operational risk capital requirement relative to a scenario when ILM is set at 1. The only difference is that the ILM under the ZAR buckets is more stringent by 100 basis points compared to the effect of ILM under the BCBS buckets.

Assessment of RWA

5.33 As depicted in Figure A12, under the new operational risk framework, fourteen banks will see a reduction in their OR RWA when applying the ZAR buckets in the computation of OR RWA. The reduction ranges between 2% and 60%. This is a capital benefit from the current operational risk framework.

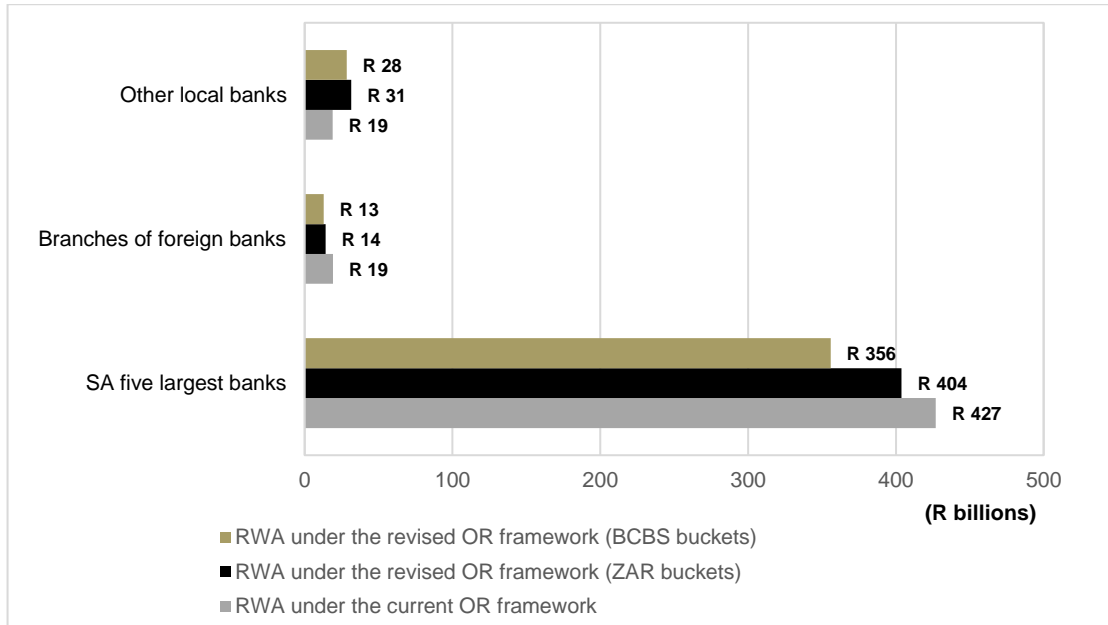
Figure A12: Changes in OR RWA per bank under ZAR versus BCBS buckets



5.34 When applying the BCBS buckets, fifteen banks will have a capital benefit of between 6% and 100% under the new operational risk framework. When combined, OR RWA decreases by 5% when ZAR buckets are applied and by 15% when the BCBS buckets are applied in the computation of RWA. To put it explicitly,

if the BCBS buckets are to be applied in South Africa, on aggregate, banks would have a 15% reduction in OR RWA from their current levels.

Figure A13: Change in OR RWA per categories of banks



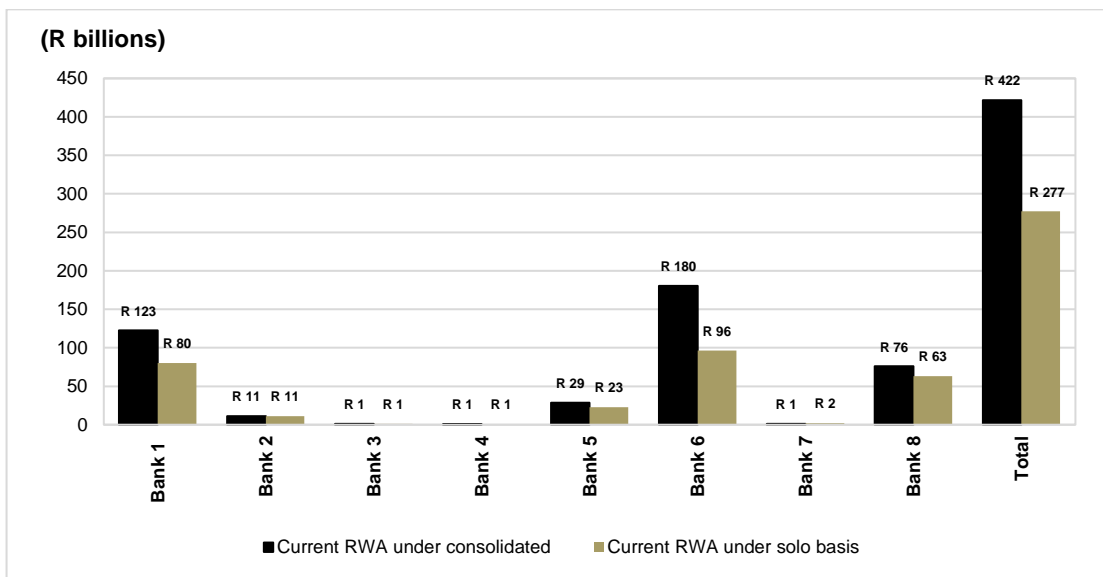
5.35 Across the different categories of banks, except that of the other local banks, the five largest banks as well as the branches of foreign banks expect a decline in OR RWA from the implementation of the new operational risk framework. This will be under both ZAR buckets and BCBS buckets. The only difference is that there will be a higher reduction under the BCBS buckets compared to the ZAR buckets (see Figure A13).

5.36 Under the ZAR buckets, the OR RWA for the five largest banks is expected to decrease by 5% while that of the branches of foreign banks will decrease by 26%. Other local banks are expected to have OR RWA increase by 66%. Under the BCBS buckets, the OR RWA for the five largest banks is expected to decrease by 5% while that of the branches of foreign banks will decrease by 32%. Other local banks will have OR RWA increase by 50% (see Figure A13).

Assessment of OR RWA on a consolidated basis

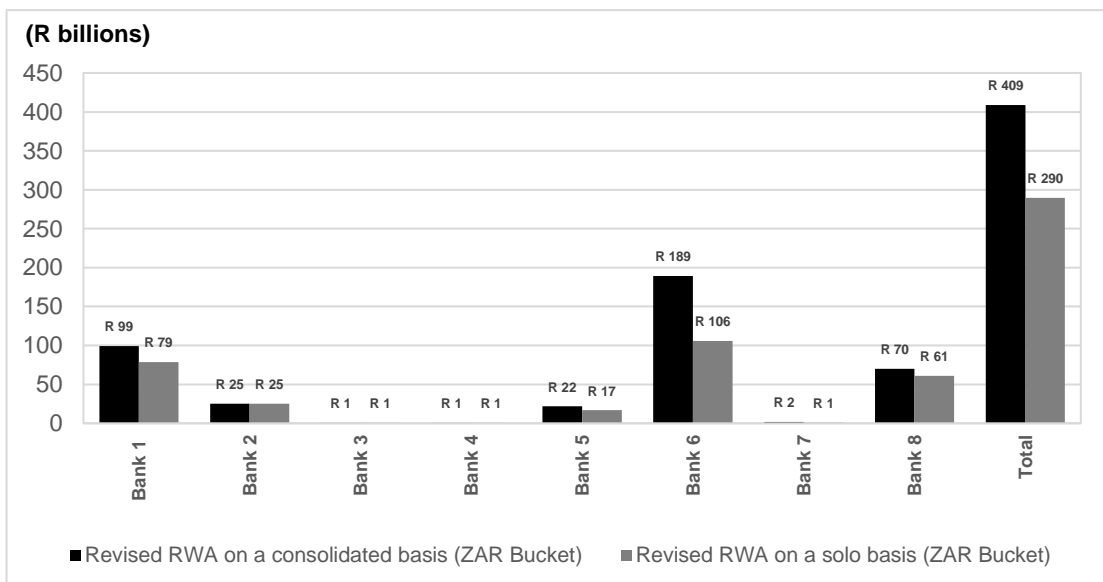
5.37 On aggregate, OR RWA for the eight banks that provided data on both a solo and consolidated basis, increased by 53% on a consolidated basis from the solo levels (see Figure A14). The change in OR RWA varied across the different banks, ranging from 0% to an increase as high as 87%.

Figure A14: Current OR RWA: Solo versus consolidated basis



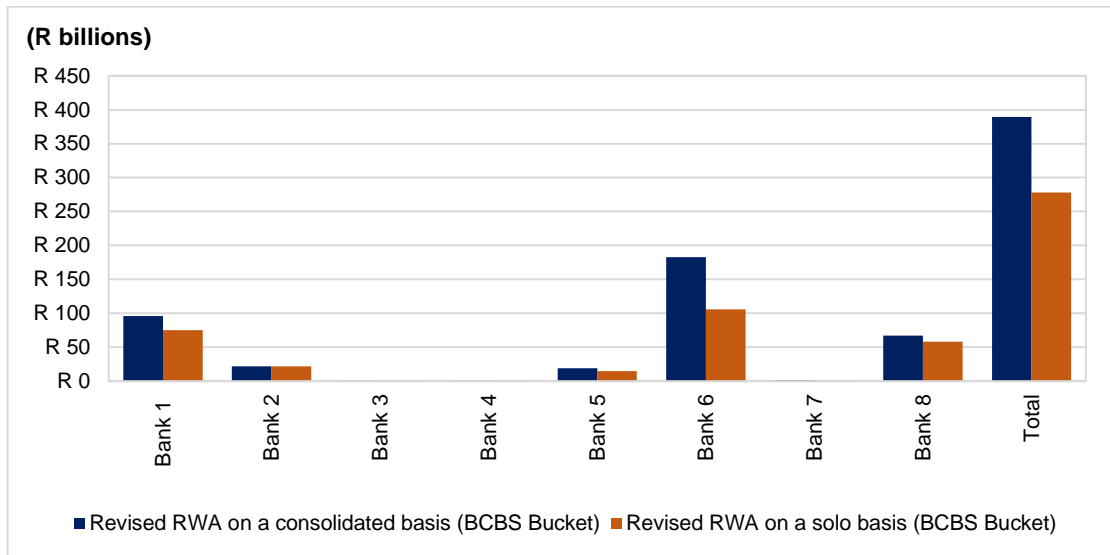
5.38 As depicted in Figure A15, when the ZAR buckets are applied, OR RWA will increase by 41%, from the solo basis level, for the eight banks that were analysed. On a consolidated basis, banks will register an increase in OR RWA ranging between 3% and 117%. OR RWA for two of the banks analysed will remain the same.

Figure A15: Revised OR RWA under ZAR buckets: Solo versus consolidated basis



5.39 When the BCBS buckets are applied, the OR RWA under the revised operational risk framework increases on a consolidated basis by 40%, from the solo levels. Banks will register an increase in OR RWA ranging between 3% and 116% from a solo basis to a consolidated basis (see Figure A16).

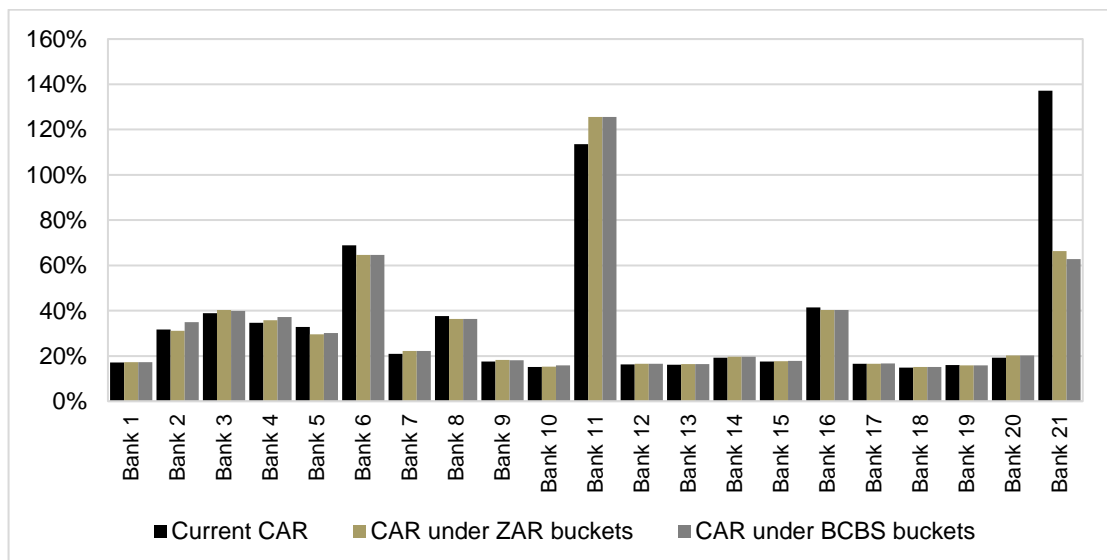
Figure A16: Revised OR RWA under BCBS buckets: Solo versus consolidated basis



Impact on CAR

5.40 When capital is computed using the ZAR buckets, there will be a reduction in CAR ranging between 2% and 12.1% for fourteen of the banks that participated in the study. Four of the five largest banks will experience a reduction in capital. CAR for the other seven banks will increase by between 0.1% and 70.9% under the same approach (see Figure A17).

Figure A17: Impact on CAR

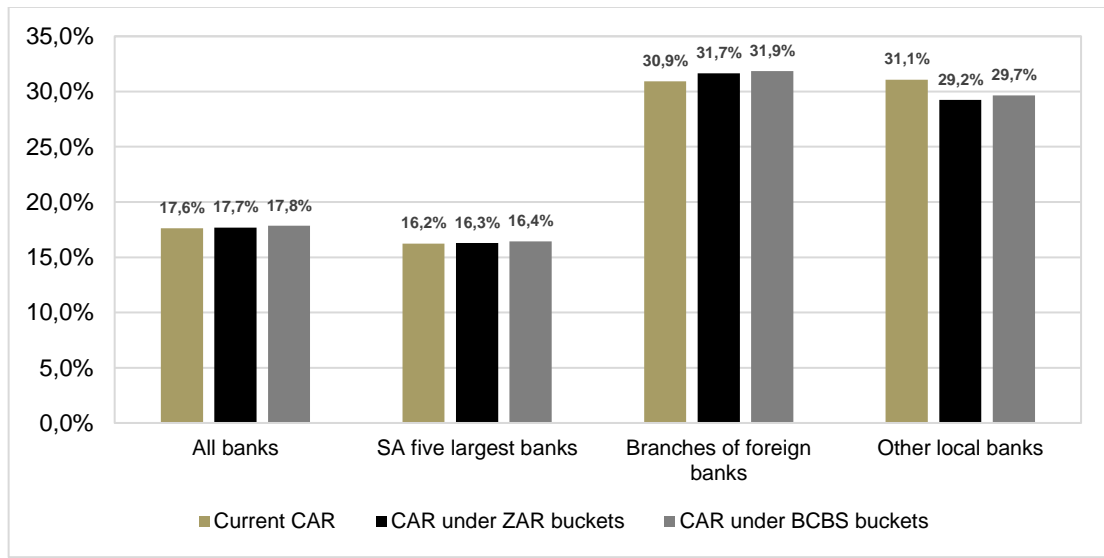


5.41 When the BCBS buckets are applied, fifteen banks will experience a reduction in CAR ranging between 0.07% to 12.10%. Only six banks will see an improvement

in CAR ranging from 0.10% to 74.4% (see Figure A17). Except for one, all the five largest banks will see an increase in CAR.

5.42 On aggregate, as depicted in Figure A18, for the twenty-one banks, CAR will increase by 10 basis points when ZAR buckets are applied in the computation of the operational risk capital.

Figure A18: Impact on CAR per categories of banks



5.43 Under the BCBS buckets, CAR increases by 20 basis points from the current levels. CAR for the five largest banks is expected to improve by 10 basis points under the ZAR buckets and 20 basis points under the BCBS buckets.

5.44 Branches of foreign banks will experience an increase in CAR of 70 and 90 basis points under the ZAR buckets and BCBS buckets, respectively. CAR for the other local banks is expected to decline by 1.8% and 1.4% under the ZAR buckets and BCBS buckets, respectively (see Figure A18).

5.45 Overall, ZAR buckets are more risk-sensitive and demand higher capital requirements compared to the BCBS buckets.

5.46 On aggregate, banks conducting business in South Africa are expected to hold less capital from the current levels from the implementation of the new operational risk framework regardless of whether the ZAR buckets or the BCBS buckets are applied in the computation of capital for operational risk. What is also clear is that the operational risk capital that banks will hold will be much less under the BCBS buckets than it would be under the ZAR buckets.

5.47 The quantum of the required capital at a consolidated level will be 41% higher than at the solo level when ZAR buckets are applied and 40% more when the BCBS buckets are applied.

B. Impact of implementing the revised credit risk framework

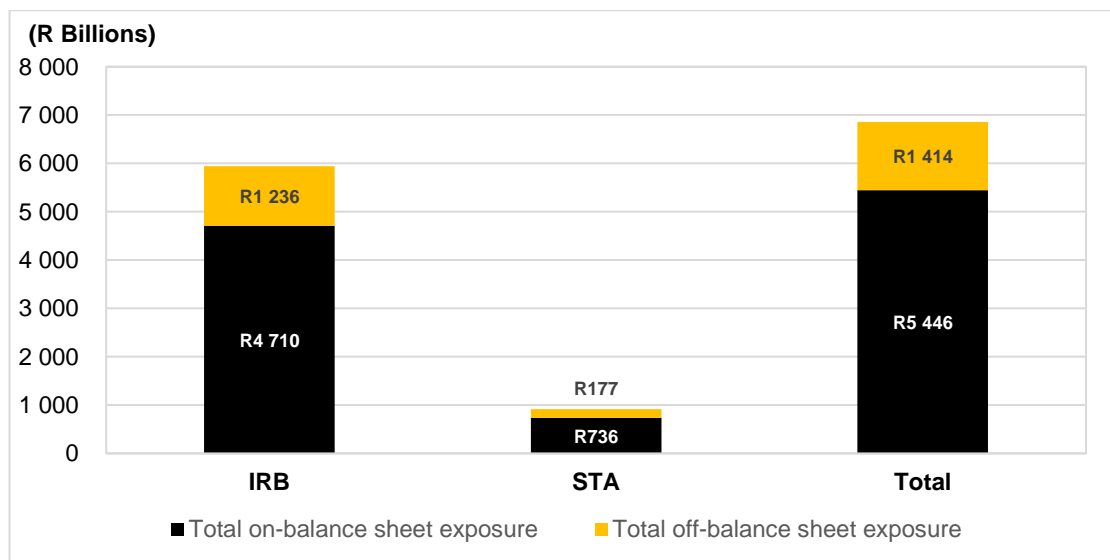
5.48 Twenty-two banks conducting business in South Africa participated in the revised credit risk framework QIS. These included South Africa’s five largest banks as measured by assets. In addition, eight branches of foreign banks and nine other local banks participated in the study.

5.49 The banks that submitted data for the QIS account for 99.04% of the total banking assets as at June 2022 and 98.47% of the total credit risk-weighted assets (CR RWA).

5.50 When compared to the other types of risks affecting banks, credit risk is the largest financial risk. As at June 2022, CR RWA accounted for 71% of the total banking sector RWA (see Figure A1).

Analysis of CR exposures

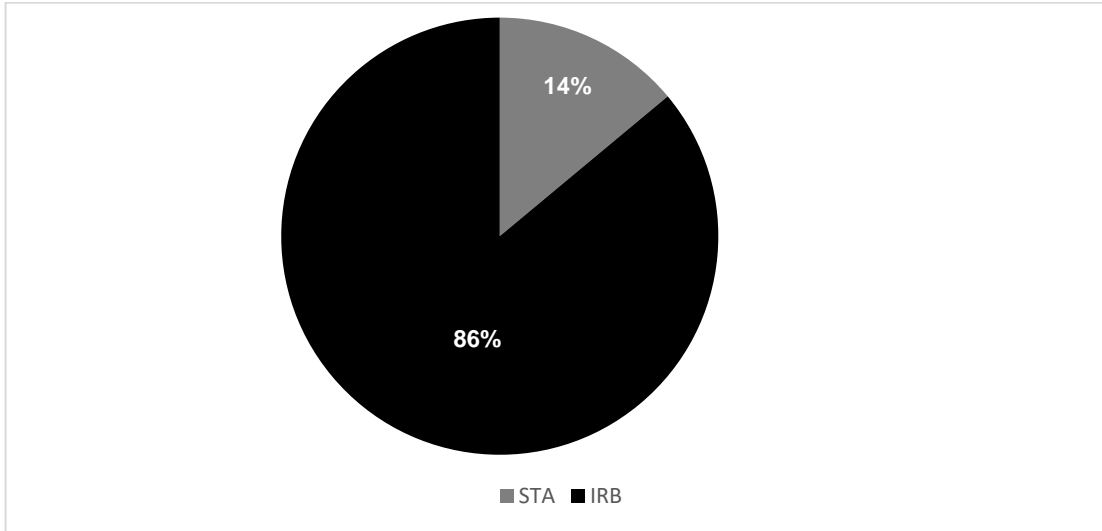
Figure B1: Exposures split by credit risk approach



5.51 As depicted in Figure B1, the total exposures covered by the QIS for the twenty-two banks that submitted data amounted to R6.8 trillion on a solo basis. On-balance sheet exposures account for a significant portion of the total exposures relative to off-balance sheet exposures.

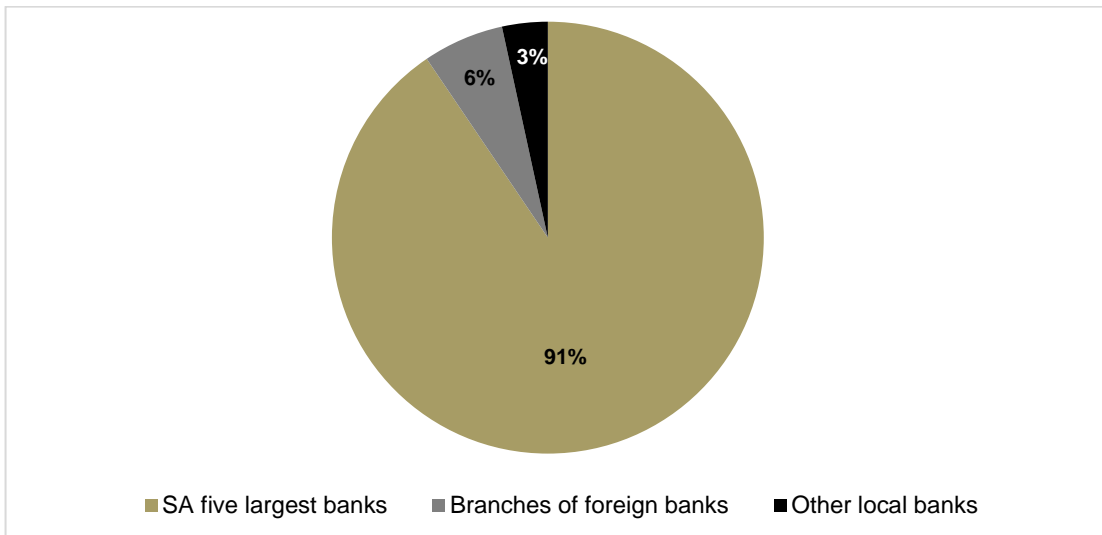
5.52 There are two broad approaches to calculating RWAs for credit risk. These are the STA and the IRB approaches. For the twenty-two banks that participated in the study, 86% of CR exposure is under IRB approaches while 14% is under STA (see Figure B2).

Figure B2: Exposures split by credit risk approach



5.53 All the five largest banks use one of the IRB approaches for the majority of their CR exposures. All branches of foreign banks, as well as other local banks, use the STA approach to calculate CR RWA.

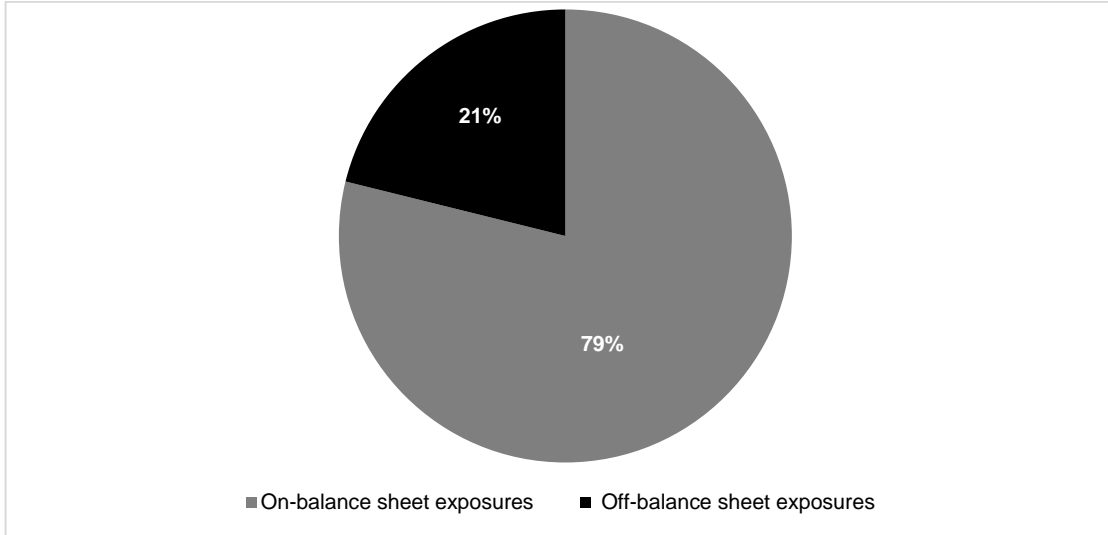
Figure B3: Exposures split by categories of banks



5.54 When the distribution of CR exposures is analysed according to the different categories of banks conducting business in South Africa, the five largest banks

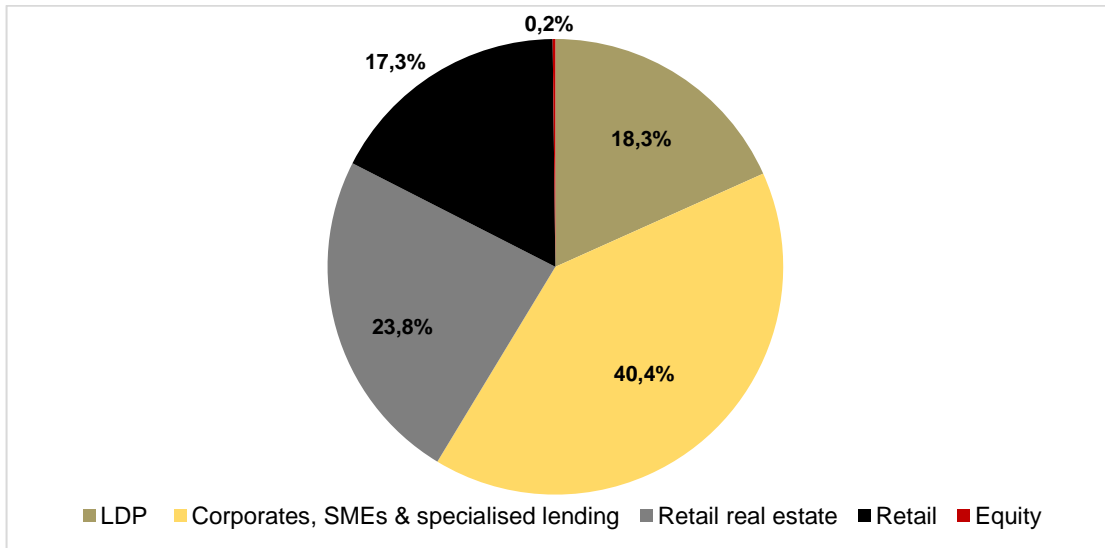
account for 91% of the total exposures. Branches of foreign banks and other local banks account for 6% and 3%, respectively (see Figure B3).

Figure B4: On-balance sheet versus off-balance exposures



5.55 For the twenty-two banks, 79% of the CR exposures are on-balance sheet while 21% of the exposures are off-balance sheet (see Figure B4).

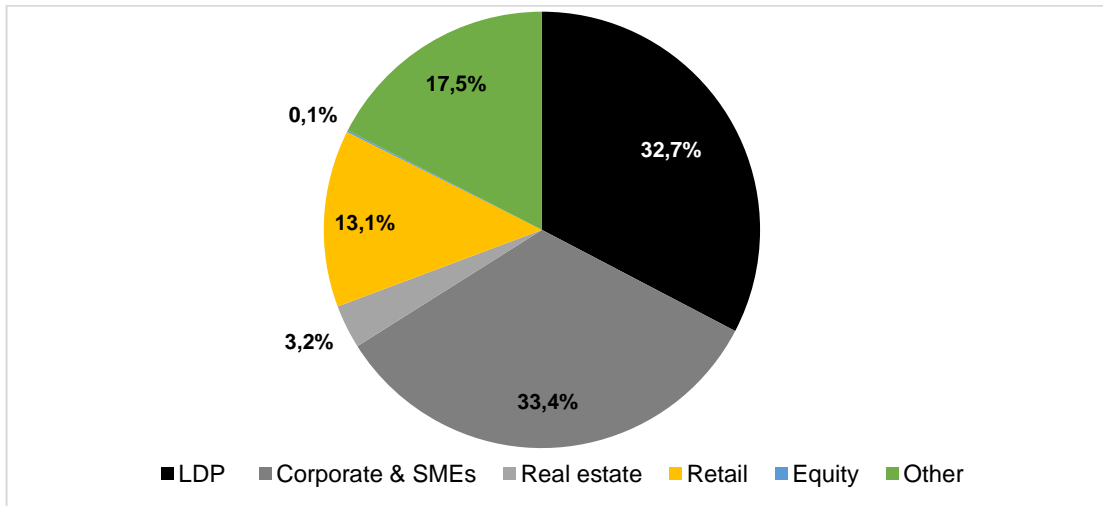
Figure B5: Exposures by asset classes under IRB



5.56 On the split of CR exposures across the different asset classes under the IRB approaches corporates, specialised lending, as well as small and medium-sized enterprises (SME), account for 40% of the total exposures. This is followed by retail

real estate which accounts for 24% and low default portfolios⁴ (LDP) which accounts for 18%. Retail exposures and equity exposures account for 17% and 0.2% respectively (see Figure B5).

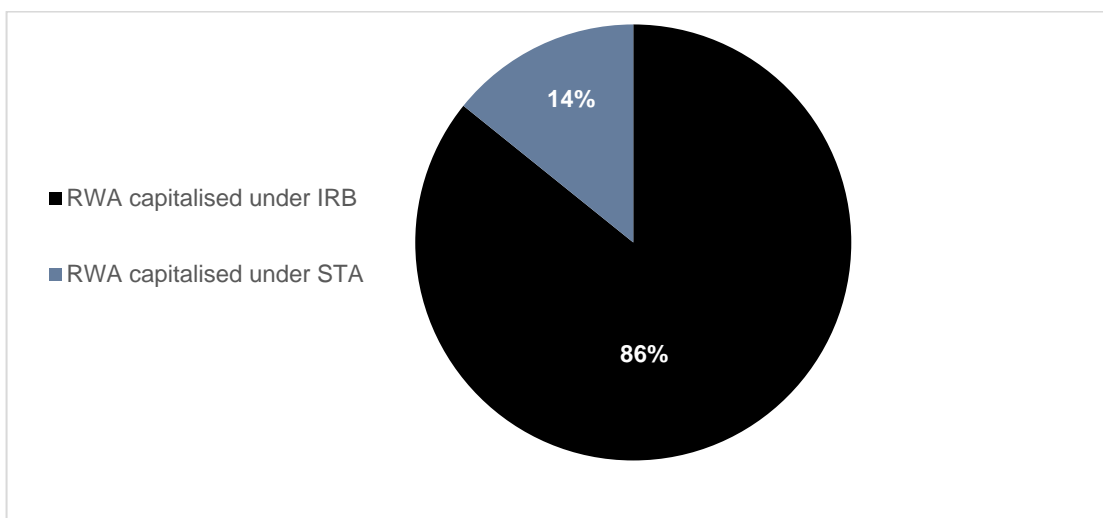
Figure B6: Exposures by asset classes under STA



5.57 Under the STA approach, corporates and SMEs account for 33% of the total CR exposures while LDP accounts for 32.7%. Other exposures, retail exposures and real estate exposures account for 17.5%, 13.1% and 3.2% respectively. Equity exposures account for only 0.1% (see Figure B6).

Analysis of RWA

Figure B7: CR RWA split by approach for capitalisation

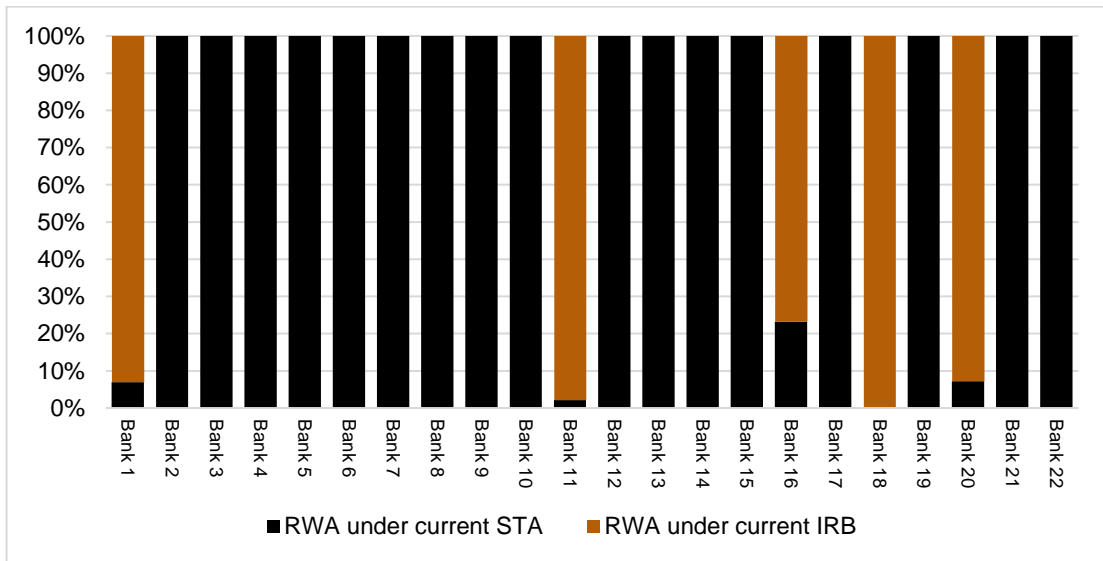


⁴ These are portfolios that have historically experienced low numbers of defaults e.g. portfolios of exposures to sovereigns, banks, insurance companies and highly rated corporates.

5.58 Consistent with the split with regards to the total CR exposures, 86% of total CR RWA is attributable to the IRB approaches, while 14% is attributable to the STA approach (see Figure B7).

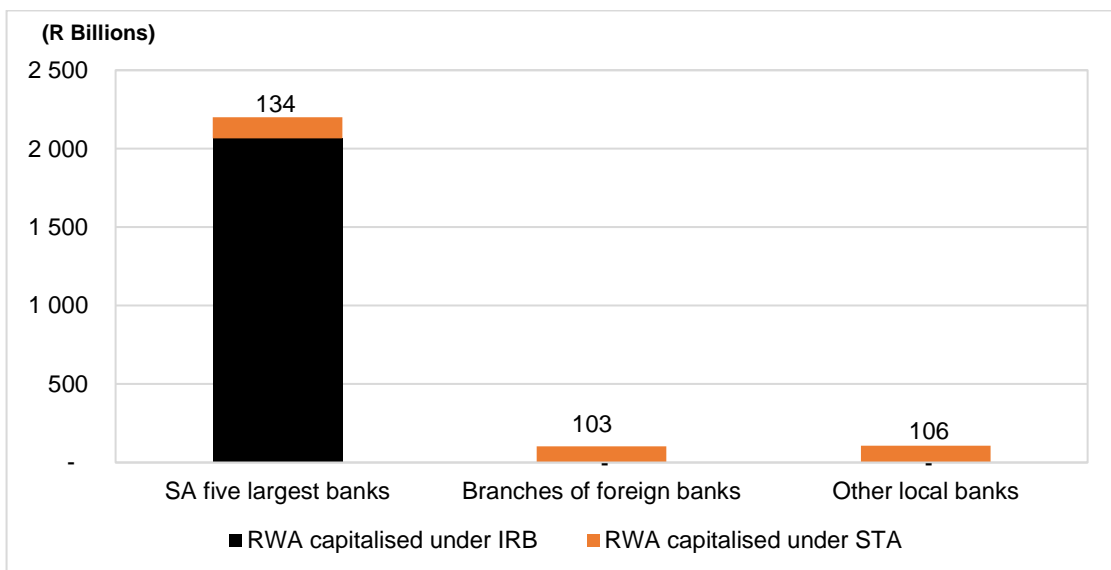
5.59 Again, 86% of the CR RWA under the IRB approaches is attributed to the largest five banks (see Figure B8).

Figure B8: Credit risk approach per bank



5.60 Out of the banks that participated in the credit risk QIS, CR RWA amounting to R2.2 trillion is attributable to the largest five banks while branches of foreign banks and other local banks account for R103 billion and R106 billion of the total CR RWA, respectively (see Figure B9).

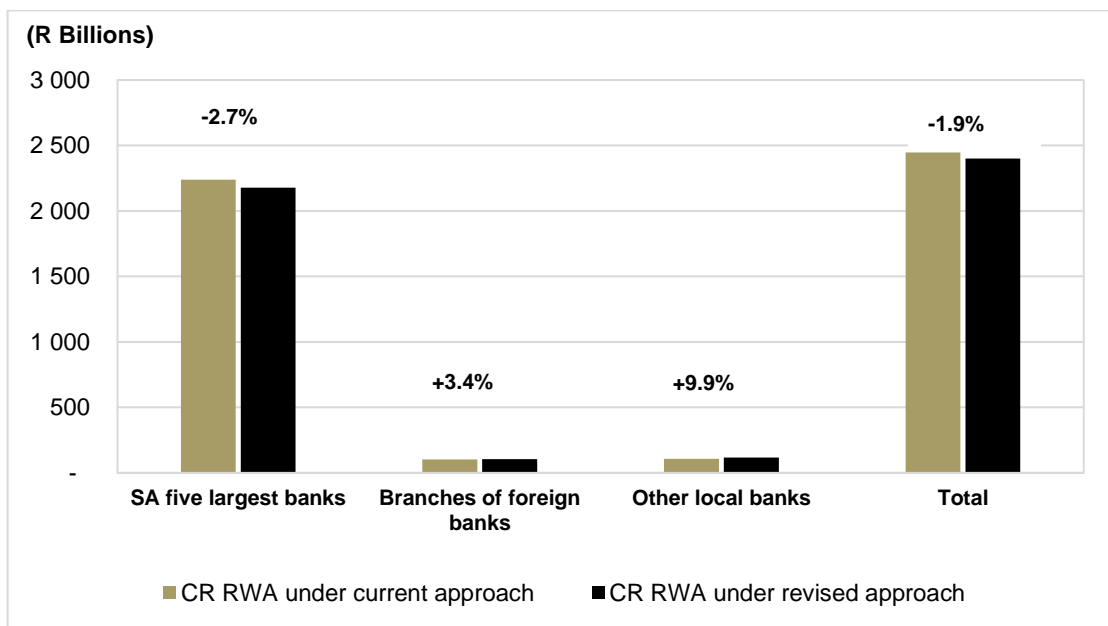
Figure B9: Total CR RWA per categories of banks



Analysis of the expected impact

- 5.61 From the study, it is expected that the implementation of the revised credit risk framework will result in an aggregate capital reduction of 1.9% compared to the current levels.
- 5.62 The five largest banks which account for 91% of the total CR exposures are expected to register a 2.7% reduction in CR RWA and consequently capital held in respect of the credit risk exposures (see Figure B10).

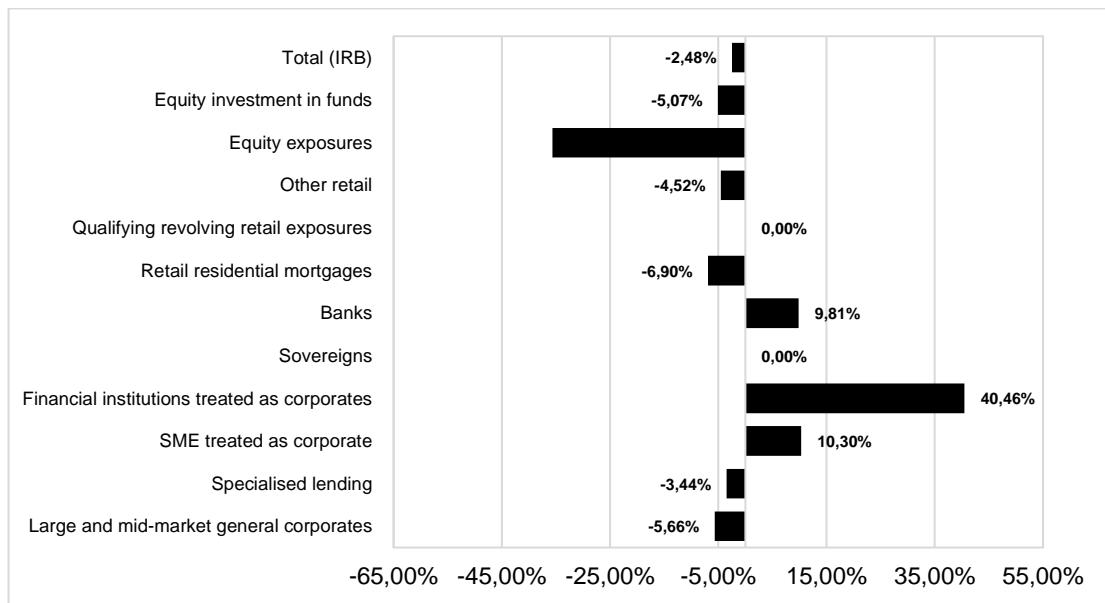
Figure B10: Change in CR RWA



- 5.63 Given that the five largest banks account for a significant portion of the total CR exposures and RWA, the 2.7% reduction in the amount of required capital has a substantial impact on the overall impact of implementing the revised credit risk framework.
- 5.64 The reason for the capital reduction on the five largest banks could be attributed to the removal of the 1.06 scaling factor applied to IRB under the current framework, which is offset, to a large extent, by the migration of some portfolios from the A-IRB approaches to the F-IRB approach.
- 5.65 An assessment of the expected impact of the revised credit risk framework on the different asset classes, corporates and retail real estate, which account for over 60% of the total assets when combined, will experience a reduction in CR RWA as

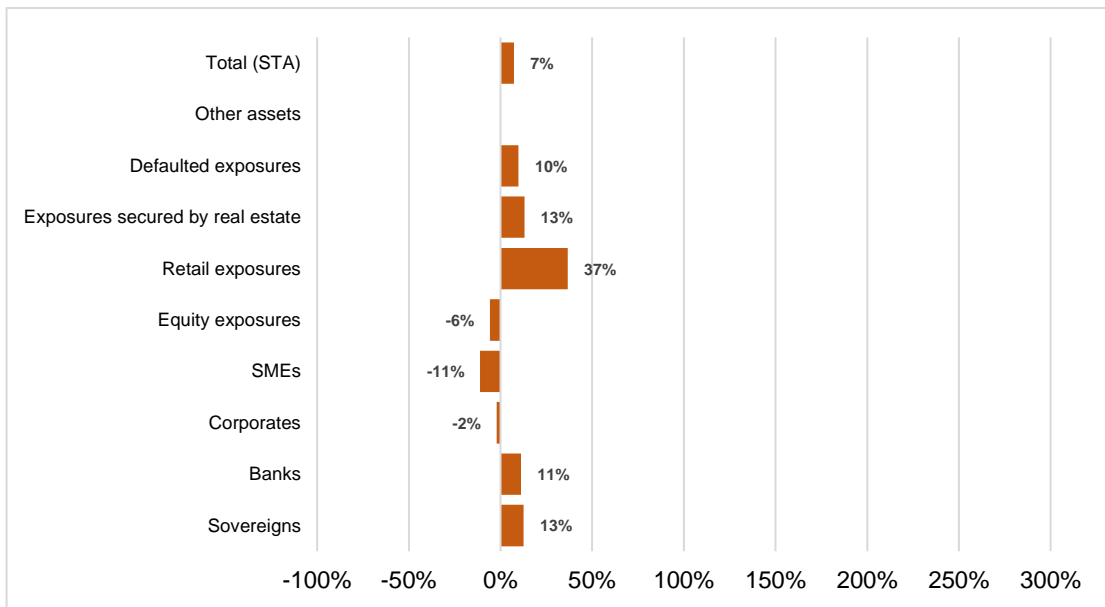
depicted in Figure B11. This could be attributed to the fact that the revised IRB approaches for credit risk remove the use of the A-IRB for exposures to corporates of a certain size as well as for exposures to banks, other financial institutions and equity. The reduction in CR RWA associated with these asset classes contributes to the aggregate reduction in the overall CR RWA for CR exposures attributable to the IRB approaches. Overall, CR RWAs attributable to the IRB approaches are expected to decrease by 2.5% from the current levels.

Figure B11: Percentage change in CR RWA under IRB per asset class



- 5.66 The category of other local banks is negatively impacted. Based on the nine banks under this category that participated in the study, the implementation of the revised credit risk framework will result in a 10% increase in CR RWA and consequently minimum required capital.
- 5.67 The main drivers of the increase are observed in Figure B12, where an increase in CR RWA on retail exposure, banks, sovereign exposure, as well as exposures secured by real estate is observed. This is because the revised STA for credit risk recalibrates some of the exposures to banks, residential real estate exposures, and commercial real estate. The aforementioned assets account for over 80% of the total assets under the STA approach.
- 5.68 CR RWA for the branches of foreign banks will increase by 3.4%. Just like the other smaller local banks, branches of foreign banks use STA to calculate capital for credit risk exposures.

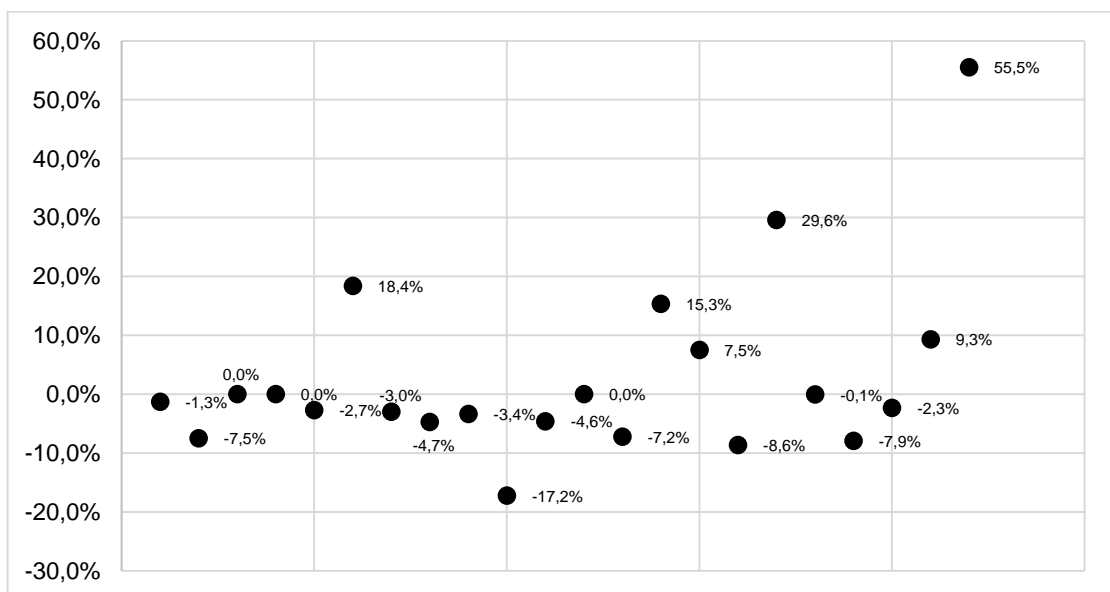
Figure B12: Percentage change in CR RWA under STA per asset class



5.69 Overall, CR RWA under STA will increase by 7% from the current levels (see Figure B12).

5.70 Individual banks will be impacted differently by the revised credit risk framework. On one hand, twelve out of the twenty-two banks that participated in the study expect to record a decline in CR RWA ranging between -0.2% and -17.2% (see Figure B13).

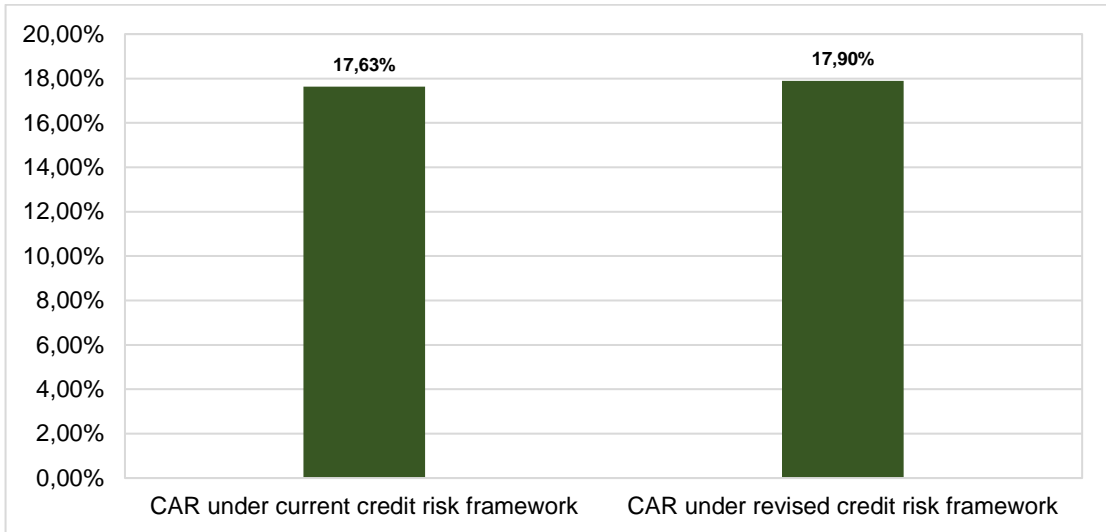
Figure B13: Percentage change in CR RWA per bank



5.71 When combined, the five largest banks anticipate a decrease in CR RWA. On the other hand, seven banks anticipate an increase in CR RWA ranging between 7.5%

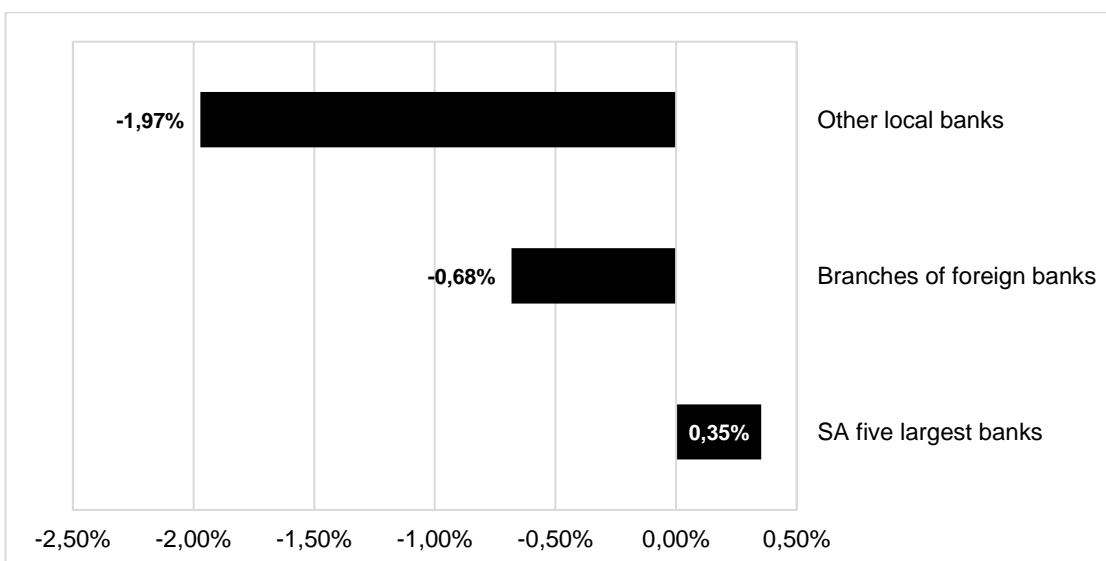
and 55.5%. These banks are either branches of foreign banks or other local banks. For the other three banks, the implementation of the revised credit risk framework would be neutral to their CR RWA (see Figure B13).

Figure B14: Overall change in CAR



5.72 As observed in Figure B14, for the twenty-two banks that participated in the study, CAR is expected to increase by 27 basis points following the implementation of the revised credit risk framework. The five largest banks which account for a significant portion of the total CR exposures have a significant weight to the overall impact on CAR as these expect a decrease in CR RWA of 2.7%.

Figure B15: Change in CAR per categories of banks



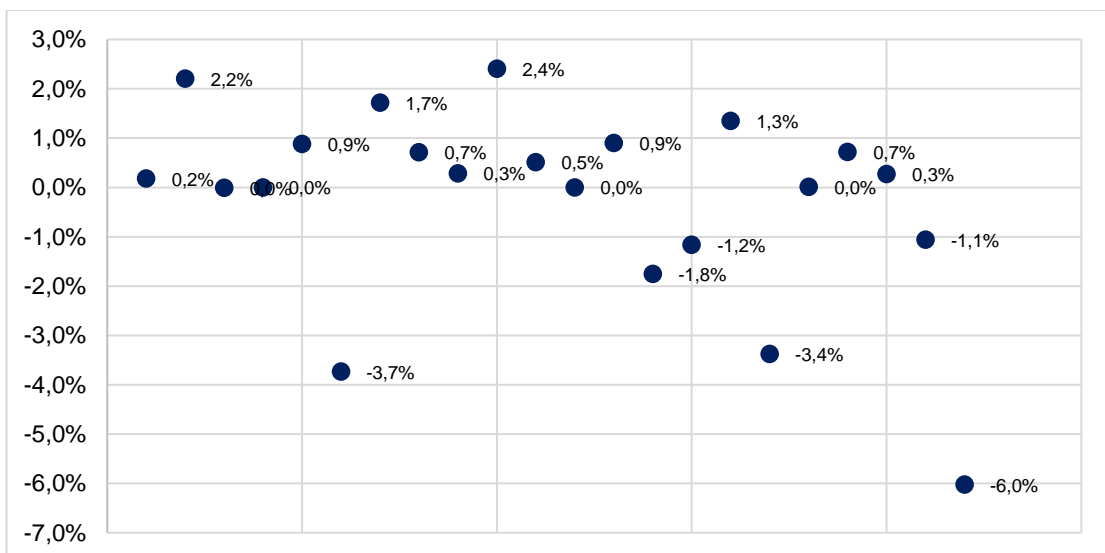
5.73 The five largest banks expect an increase in CAR from the implementation of the revised credit risk framework of 0.35%. In contrast, branches of foreign banks and

other local banks expect a decrease in CAR of 0.68% and 1.97% respectively (see Figure B15).

5.74 Despite the decrease in their CAR, branches of foreign banks and other local banks are sufficiently capitalised and the decrease in CAR observed emanating from the proposed implementation of the revised credit framework will not have any material impact on their overall capital levels.

5.75 At an individual bank level, it is expected that there will be a reduction in CAR for seven banks ranging between 1.1% and 6%. Twelve banks that participated in the study are expected to record an increase in CAR ranging between 0.2% and 2.4%. Data received from three banks indicate that the implementation of the revised credit risk framework would be neutral to their CAR (see Figure B16).

Figure B16: Change in CAR per bank

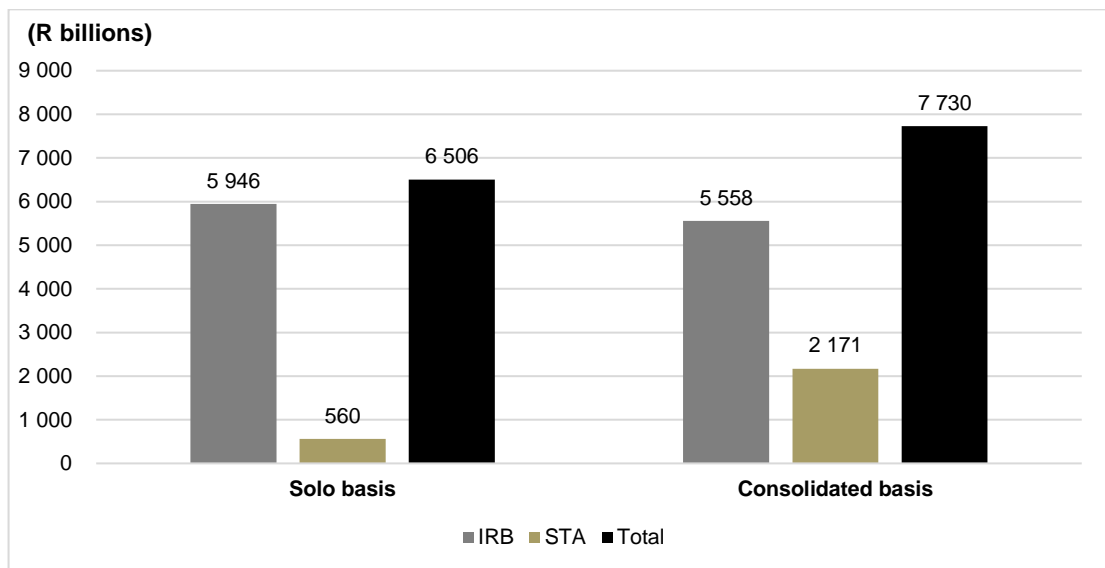


Assessment of credit risk framework on a consolidated basis

5.76 On aggregate, total CR exposures for the six banks that provided data on both a solo and consolidated basis, increased by 20% on a consolidated basis compared to the solo levels (see Figure B17).

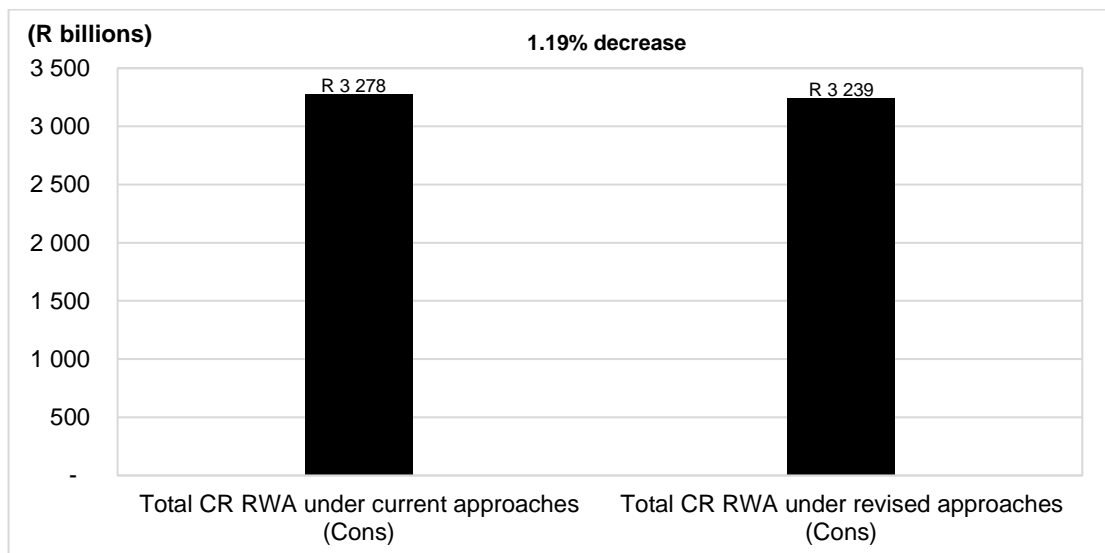
5.77 Total exposures under STA are expected to increase by 345% while total CR exposures under IRB are expected to decrease by 7% on a consolidated basis. The increase in the exposures under STA could be attributed to the African operations.

Figure B17: Total exposures: Solo versus consolidated basis



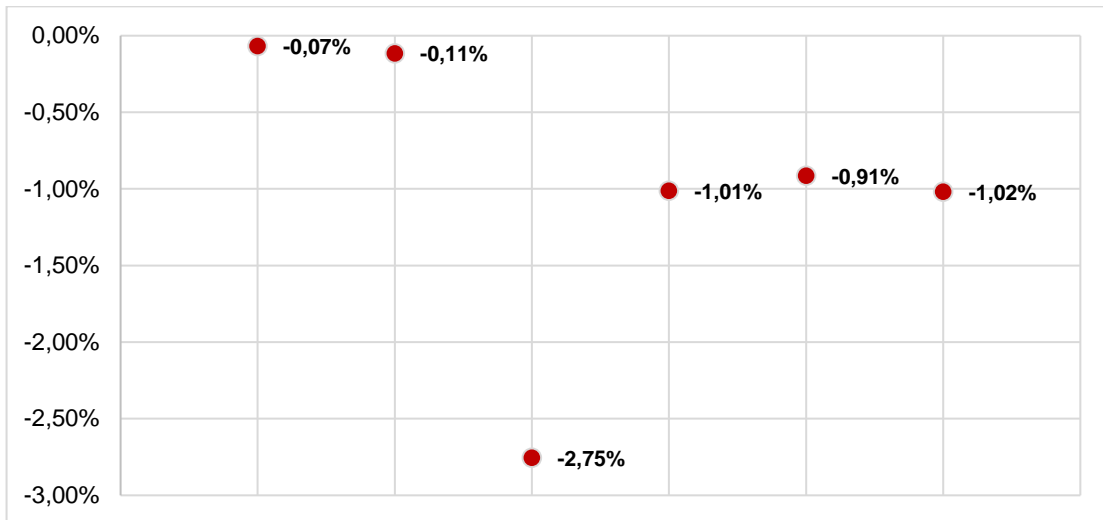
5.78 On aggregate, as depicted in Figure B18, for the six banks that provided data on both a solo and consolidated basis, CR RWA is expected to decrease by 1.19% on a consolidated basis. On a solo basis, it is expected that the CR RWA for the same banks will decrease by only 0.51%.

Figure B18: Change in CR RWA on a consolidated basis



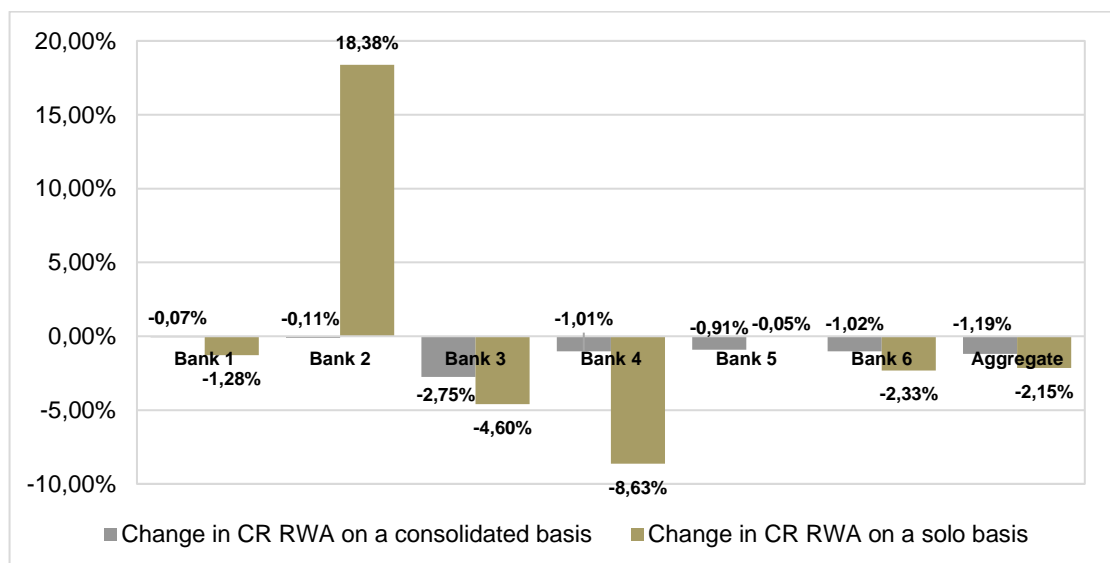
5.79 The six banks are impacted differently by the revised credit risk framework on a consolidated basis. What can be observed from the data received is that when all six banks are combined, it is expected that there will be a decrease in CR RWA on a consolidated basis ranging from 0.07% to 2.75%. The decrease in CR RWA on a consolidated basis is consistent with the overall observation under a solo basis where an aggregate decrease in CR RWA is also observed (see Figure B19).

Figure B19: Change in CR RWA under a consolidated basis



5.80 On a consolidated basis, all six banks will experience a reduction in CR RWA. On a solo basis, two banks will experience an increase in CR RWA. However, on both solo and consolidated basis, the aggregate CR RWA declines by 2.15% and 1.19% respectively (see Figure B20).

Figure B20: Impact on CR RWA: Solo versus consolidated basis



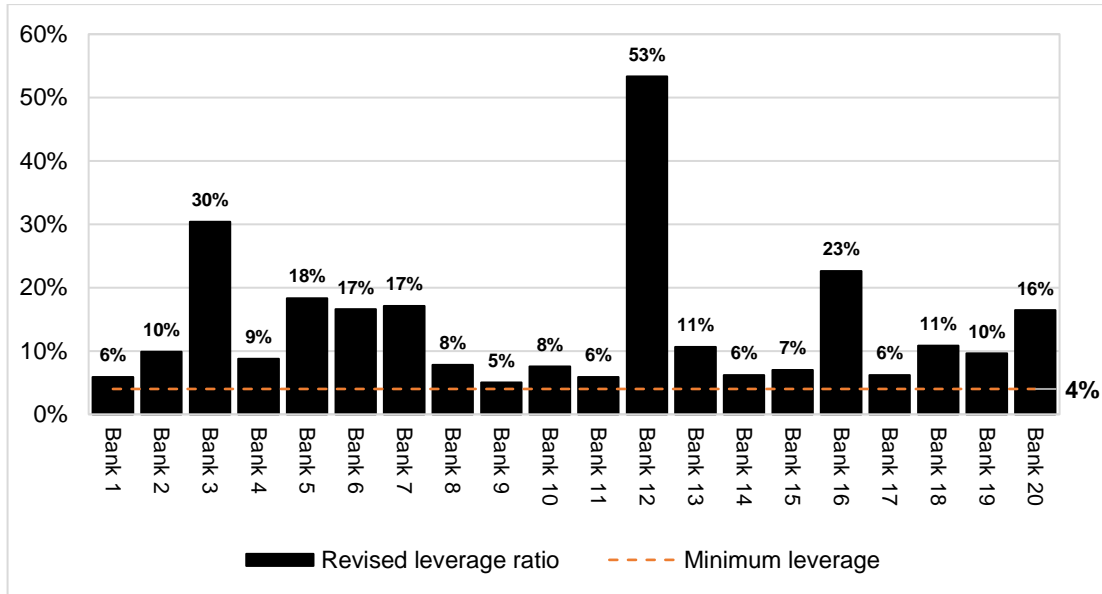
C. Impact of implementing leverage ratio – revised exposure definition

5.81 Leverage is required to be not less than 4%. A leverage ratio acts as a non-risk-based backstop to the risk-based capital rules and limits any excessive build-up in leverage in the banking system.

5.82 Twenty banks provided data on the expected impact of the revised definition of exposure of the leverage ratio framework.

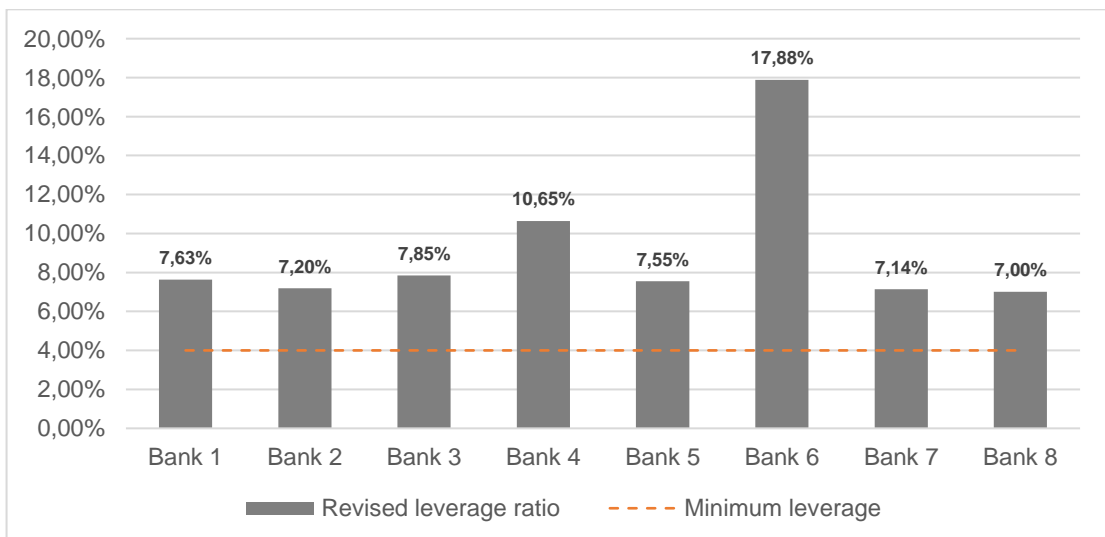
5.83 As depicted in Figure C1, the twenty banks that provided leverage data are all above the minimum leverage ratio of 4%. The lowest leverage recorded on a solo basis is 5% while the highest is 53%.

Figure C1: Leverage ratio post revised leverage ratio framework (solo)



5.84 On a consolidated basis, the eight banks that provided data show the lowest leverage ratio of 7% and a high of 17.8% (see Figure C2). The leverage ratio for the eight banks is above the 4% prudential minimum requirement.

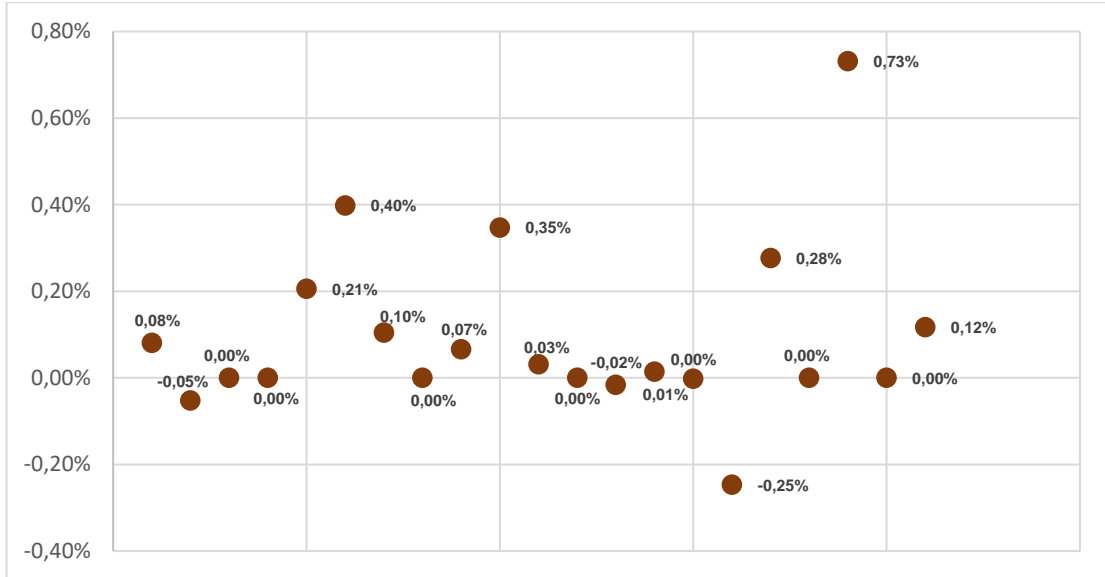
Figure C2: Leverage ratio post revised leverage ratio framework (consolidated)



5.85 The application of the revised exposure definition of the leverage ratio framework will see a marginal reduction in the leverage ratio of three banks ranging between 2 basis points and 25 basis points on a solo basis. For seven banks there is no

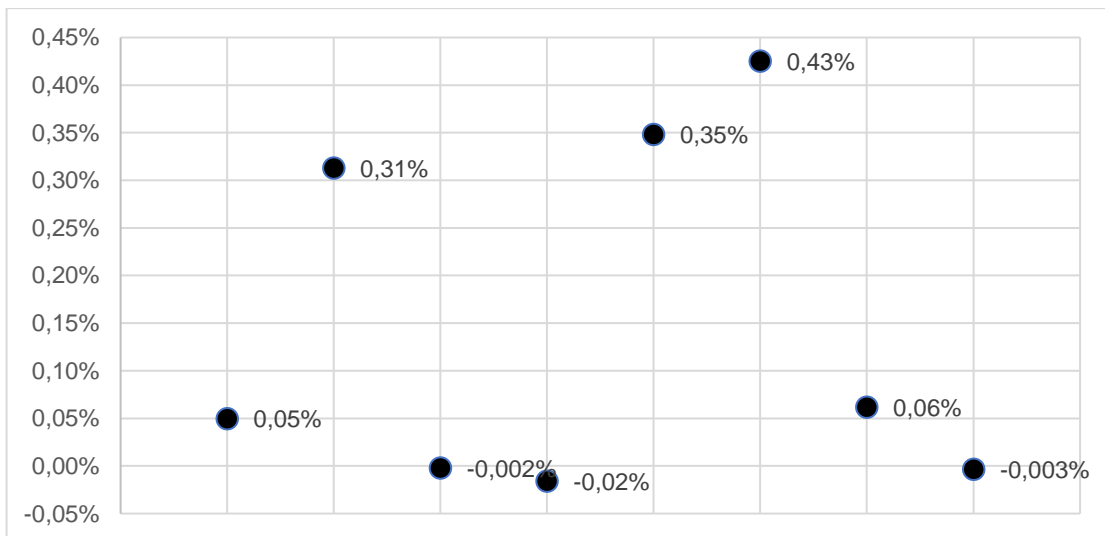
change in the leverage ratio. The remainder of the ten banks recorded an increase in the leverage ratio, ranging between 1 and 73 basis points (see Figure C3).

Figure C3: Impact of revised exposure definition of the leverage ratio (solo)



5.86 On a consolidated basis, three banks recorded a decrease in the leverage ratio ranging between 0.2 and 2 basis points. The remainder of the five banks recorded an increase in leverage ratio ranging between 5 and 43 basis points. The application of the revised exposure definition of the leverage ratio framework does not have any material effect on the leverage ratio for banks conducting business in South Africa (see Figure C4).

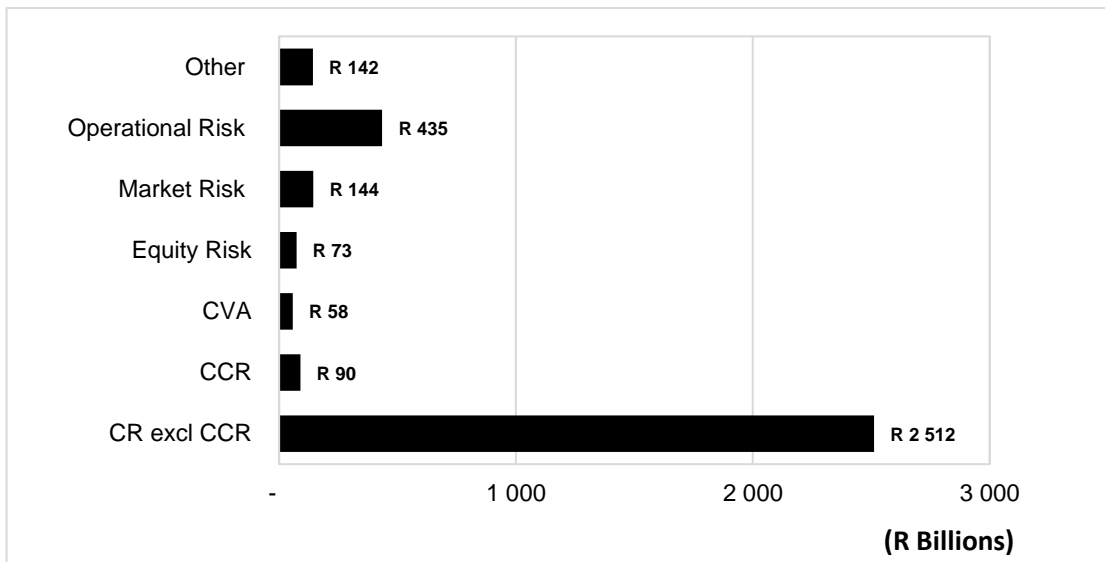
Figure C4: Impact of revised exposure definition of the leverage ratio (consolidated)



D. Impact of implementing output floors

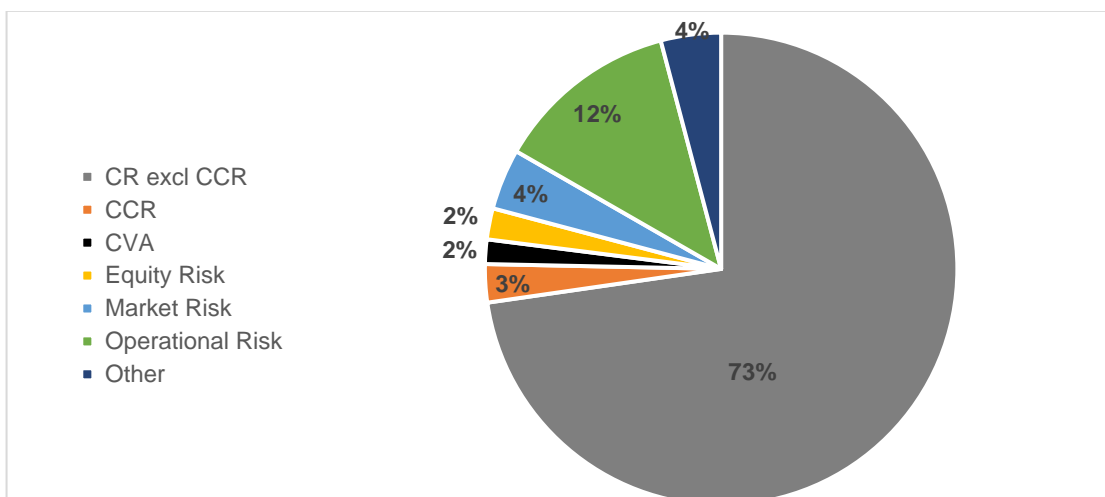
5.87 Nineteen banks submitted data for the output floor impact assessment. The nineteen banks account for 96.52% of the total RWA as at June 2022. The nineteen banks include South Africa's five largest banks as measured by assets.

Figure D1: Total RWA per risk type



5.88 CR RWA accounts for 73% of the total RWA of banks that participated in the study followed by operational risk at 12%. Market risk accounts for 4% of the total RWA each (see Figures D1 and D2).

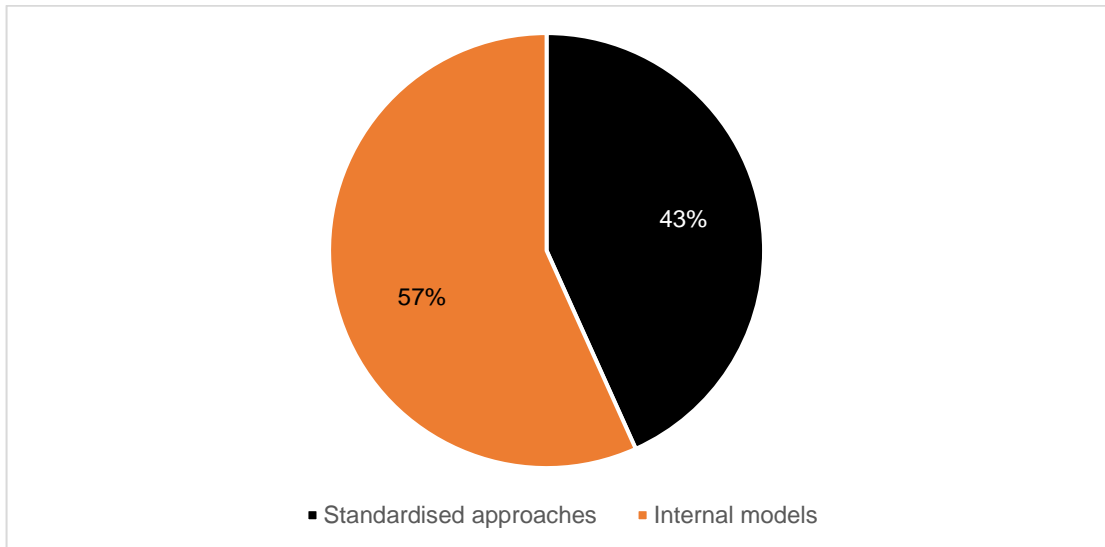
Figure D2: Percentage of RWA per risk type



5.89 On aggregate, 57% of total RWA is calculated in terms of internal models while 43% is calculated in terms of the standardised approaches (see Figure D3). The impact of the output floor will be influenced by the extent to which banks use

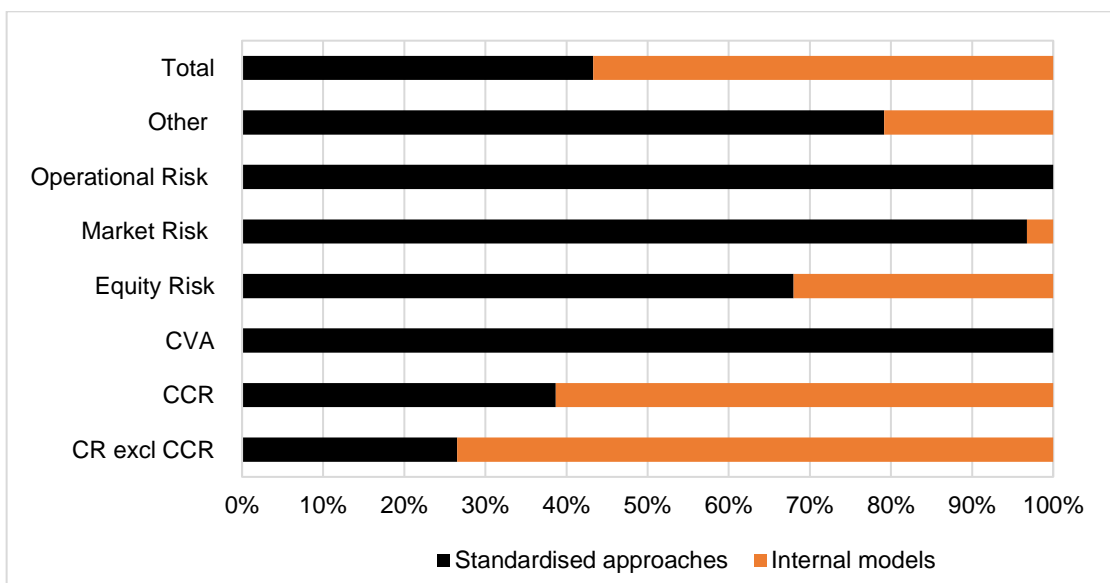
internal models versus standardised approaches. The output floor framework seeks to limit the amount of capital benefit a bank can obtain from the use of internal models, relative to using the standardised approaches.

Figure D3: RWA per approach



5.90 The BCBS has introduced limitations on the estimates banks make when they use their internal models for regulatory capital purposes. Banks that do not use internal models will not be impacted by the output floors. The same is true for certain frameworks where the BCBS has done away with the use of the internal models to improve the reliability and comparability of RWA as well as prevent model abuse by introducing standardised approaches with enhanced sensitivities.

Figure D4: RWA per approach and risk type



5.91 With regards to the credit risk framework, 73% of total CR RWA is calculated in terms of the IRB approaches while 27% is calculated in terms of the STA. MR RWA calculated in terms of the standardised approach accounts for 97% while MR RWA calculated in terms of internal models accounts for 3%. OR RWA, as well as CVA RWA, are both 100% calculated in terms of the standardised approaches (see Figure D4).

5.92 Internal models are expected to provide a more accurate risk measurement than the standardised approaches, however, incentives exist to minimise risk weights when internal models are used to set minimum capital requirements. Figure D5 depicts the impact of internal models on RWA. Without the use of models, RWA for the nineteen banks that were analysed would have been 33% higher under the revised frameworks. The benefit of using models is that it reduces RWA by 33% and consequently the required amount of capital and reserve funds.

Figure D5: Impact of models on RWA (Solo basis)

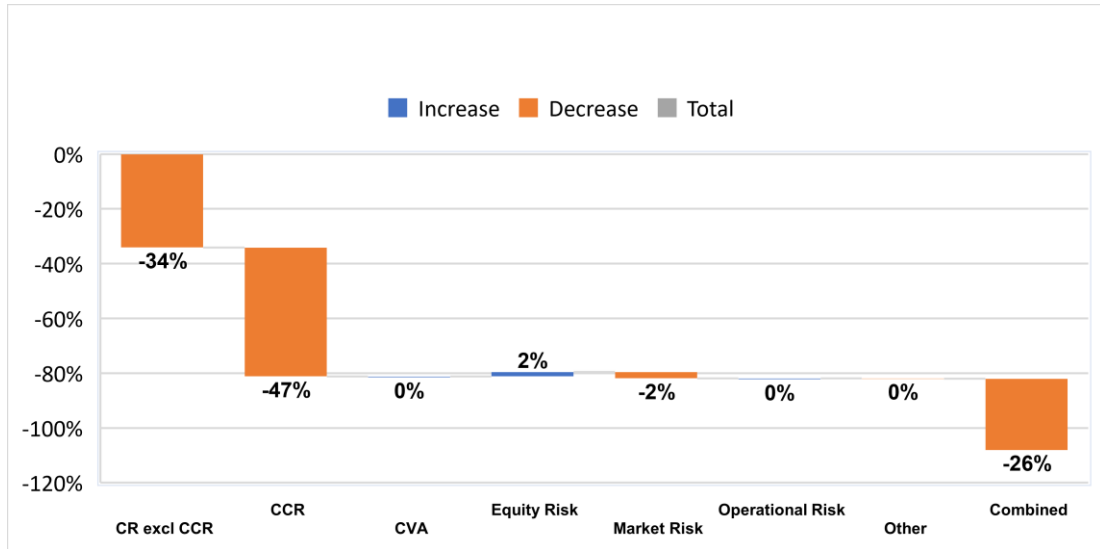


5.93 On a solo basis, CR RWA and CCR RWA will be reduced by 43% and 56% respectively from the use of internal models under the revised frameworks. Market risk has a slight benefit of a 3% reduction in RWA. This could be attributed to the fact that only 3% of MR RWA is calculated in terms of internal models unlike under credit risk where 73% of CR RWA is calculated in terms of internal models.

5.94 On a consolidated basis, CR RWA and CCR RWA will be reduced by 34% and 47% respectively from the use of internal models under the revised frameworks.

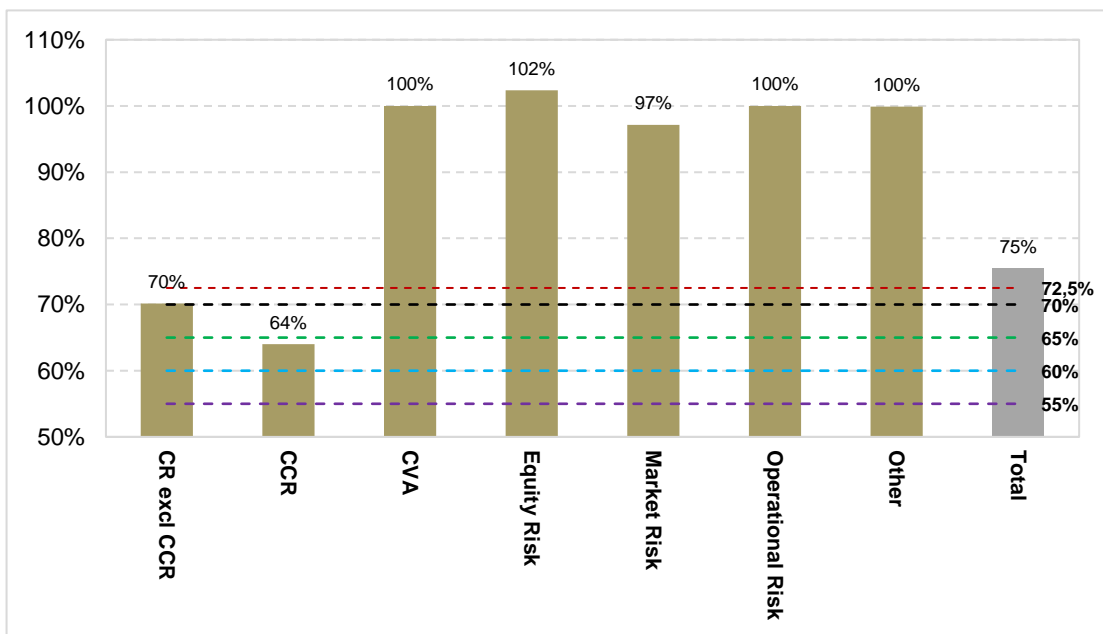
Market risk RWA will also see a reduction in MR RWA of 2%. In summary, there is an aggregate benefit of using internal models as this reduces overall RWA by 26% on a consolidated basis for the nine banks that provided data on a consolidated basis (see Figure D6).

Figure D6: Impact of models on RWA (Consolidated basis)



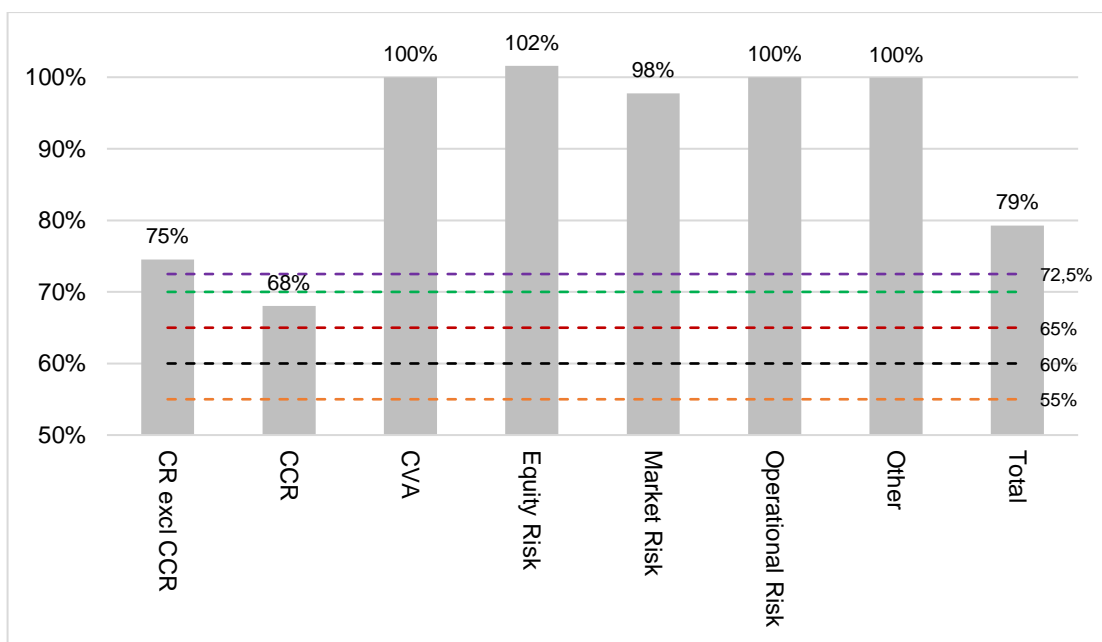
5.95 As depicted in Figure D7, at an aggregate level, assuming that there are no fundamental changes in the composition of the banks' balance sheets, the output floor framework is not expected to have material adverse effects on the South African banks in the first 3 years following its implementation.

Table D7: RWA by internal models as a % of RWA by SA (solo basis)



- 5.96 When the output floor framework is implemented in January 2024, RWAs generated by internal models cannot, in the aggregate, fall below 55% of the RWA computed by SA. This limits the benefit a bank can gain from using internal models by 45%. Once the phasing-in of output floors is completed, in 2028, the benefit of using internal models will be limited to 27.5%, as an output floor of 72.5% will apply.
- 5.97 In the case of the nineteen banks that were analysed, the implementation of output floors is expected to start affecting the South African banks from 2026 onwards. In 2026, CCR RWA calculated with internal models as a percentage of CCR RWA computed using SA will fall short of the 65% output threshold by 1%. In 2027, the gap is expected to widen to 6% and 8.5% in 2028. This means that CCR RWA will increase as a result of the implementation of the output floors.
- 5.98 In 2027, CR RWA generated through the use of internal models will be 70% of the CR RWA computed using STA. This is expected to be aligned with the 70% output floor threshold for 2027 without the need for banks to hold any additional capital for credit risk. However, in 2028, banks will be required to hold an additional 2.5% in additional capital related to credit risk flowing from the implementation of the 72.5% output floor.
- 5.99 The 2.5% additional capital translates to R8 billion in additional CR capital and 1.35% of total capital as at June 2022.

Table D8: RWA by internal models as a percentage of RWA by standardised approaches (consolidated)

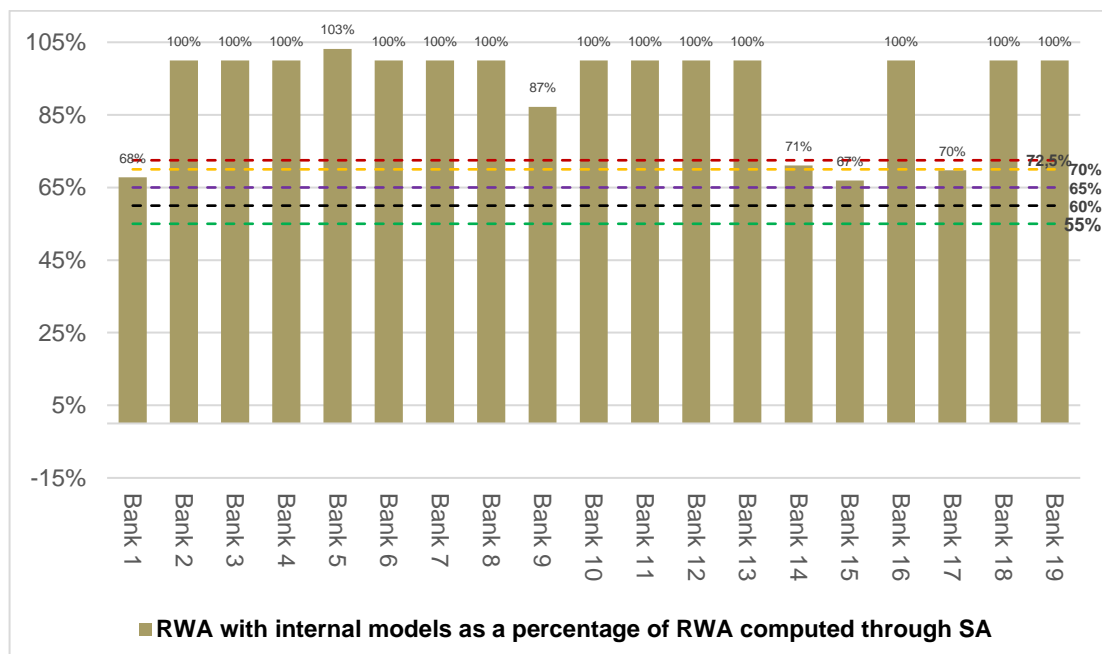


5.100 On aggregate, for all the risk types, the RWA generated by the use of internal models will be 75% of the RWA computed in terms of the standardised approaches. This is above the 72.5% output floor threshold. In this case, there will be no requirement for banks to hold additional capital given that the use of internal models is already limited relative to the envisaged output floor threshold of 72.5%.

5.101 The picture is similar on a consolidated basis. Aggregate RWA generated by the use of internal models will be 79% of the RWA computed in terms of the standardised approaches. This is above the 55% threshold that will come into effect in 2024, as well as the 72.5% output floor threshold to be implemented in 2028 (see Figure D8). On aggregate, banks will not be required to hold additional capital.

5.102 On a bank-by-bank solo basis, from 2027, four banks will be expected to hold additional capital flowing from the application of the output floor. The additional capital will range from 2% to 5.5% in total capital (see Figure D9). The four banks are all part of the five largest banks category.

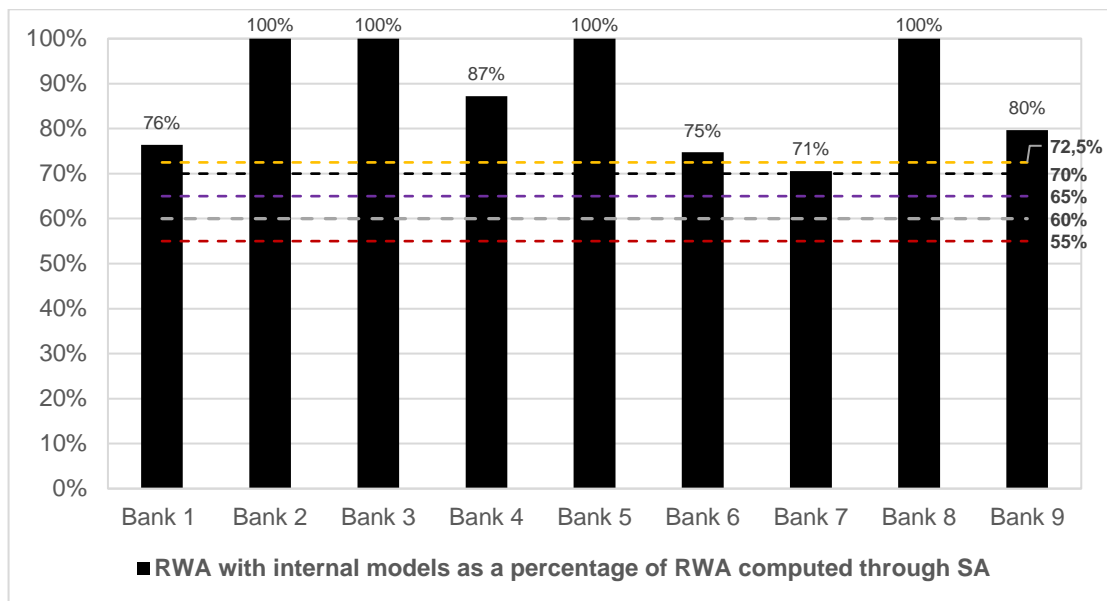
Table D9: RWA with internal models as a % of RWA computed by standardised approaches (solo basis)



5.103 When looking at the individual banks that submitted data on a consolidated basis, only one bank expects to be impacted by the output floor framework from 2027 onwards. This bank will be required to hold additional capital of 1.5% resulting from the implementation of the output floor of 72.5% in 2028 (see Figure D10). The other

four banks have RWA calculated by models as a percentage of RWA calculated by standardised approaches way above the minimum output floor threshold. The remainder of the other four banks do not use internal models hence the output floor framework will be neutral to their RWA.

Table D10: RWA by internal models as a % of RWA by standardised approaches (consolidated basis)



5.104 The operation risk framework as well as the CVA are output floor neutral since their respective approaches for calculating RWA falls under the standardised approach in the revised framework.

5.105 Globally, it is anticipated that large international banks will be constrained by the output floor given the reliance on internally modelled capital requirements.

E. Combined impact, including market risk and CVA frameworks

5.106 As summarised in Table E1, the implementation of the revised market risk framework is expected to lead to an increase in RWA of 3.6% with the application of national discretion on the treatment of sovereign bonds. If no discretion is allowed on the sovereign bonds, there will be a significant increase in RWA of 125%.

5.107 The implementation of the operational risk framework is expected to lead to a reduction in the amount of capital and reserve funds required to be held for operational risk. If the proposed ZAR buckets are implemented, RWA will only decline by 3.4% whereas if the BCBS buckets are implemented, the reduction in

RWA would be four-fold. This means that on aggregate banks conducting business in South Africa will hold significantly less capital for operational risk than they currently do.

Summary of impact by risk area

Table E1: Aggregate impact of the Basel III post-crisis reforms

Risk Area	Market Risk		Operational Risk		Credit risk	CVA	Leverage
	Δ in RWA (Discretion)	Δ in RWA (No discretion)	Δ in RWA (ZAR buckets)	Δ in RWA (BCBS buckets)	Δ in RWA	Δ in RWA	Δ in RWA
	+3.6%	+125%	-3.4%	-14.6%	-1.9%	+1.2%	+0.1%
Sample size	14		21		22	15	20
% of total banking assets	95%		98%		99%	77%	98%

5.108 CR RWA is expected to decrease by 1.9% following the implementation of the revised credit risk framework. Credit risk constitutes a significant portion of the risks faced by the banks and carries a significant weight when calculating the overall impact of the proposed reforms on the banking sector.

5.109 The implementation of the revised CVA framework is expected to increase CVA RWA by 1.18% from the current levels.

5.110 The revised exposure definition of the leverage ratio is expected to lead to a decrease in the leverage ratio from the current levels by 10 basis points.

Summary of the cumulative impact

5.111 Table E2 provides a cumulative impact of all the proposed reforms on the eleven banks that submitted data on all the different reform areas. These banks account for 73% of the total banking assets as at June 2022. The assessment in Table E2 also includes the impact of the market risk and CVA frameworks which are also covered in greater detail in a separate report.

5.112 As depicted in Table E2, on aggregate, under a scenario that assumes the implementation of the ZAR buckets and also allows for⁵ national discretion⁶ on sovereign bonds rating, RWA is expected to decrease by 1.8% following the implementation of all the Basel III post-crisis reforms envisaged to be implemented in South Africa with effect from 1 July 2025.

Table E2: Aggregate impact of the Basel III post-crisis reforms

Bank	Change in RWA with ZAR buckets and discretion	Change in RWA with ZAR buckets but with no discretion considered	Change in RWA with BCBS buckets and discretion	Change in RWA with BCBS buckets but with no discretion considered
Bank 1	-0.4%	6.9%	-7.6%	6.9%
Bank 2	-1.6%	-0.6%	-6.5%	-1.2%
Bank 3	-0.7%	8.1%	-5.1%	7.6%
Bank 5	-18.0%	-15.0%	-23.4%	-15.0%
Bank 6	-9.9%	-9.8%	-12.7%	-10.7%
Bank 7	27.8%	161.5%	12.5%	161.5%
Bank 8	33.9%	33.9%	33.4%	33.9%
Bank 9	2.3%	2.3%	2.3%	2.3%
Bank 10	3.7%	3.7%	2.7%	3.7%
Bank 11	-6.4%	-6.4%	-11.0%	-10.9%
Δ in RWA	-1.8%	4.6%	-7.1%	4.1%
Impact on capital adequacy ratio				
Δ in CAR	+0.32%	-0.77%	+0.40%	-0.70%

5.113 If no discretion is allowed on the treatment of sovereign bonds, RWA will increase by 4.6% under the same ZAR buckets scenario.

5.114 Where BCBS buckets are applied and national discretion is allowed on the treatment of sovereign bonds, the combined RWA across all the risk types is expected to decrease by 7.1%. RWA is expected to increase by 4.1% under the same scenario but where no discretion is considered in the treatment of the sovereign bonds.

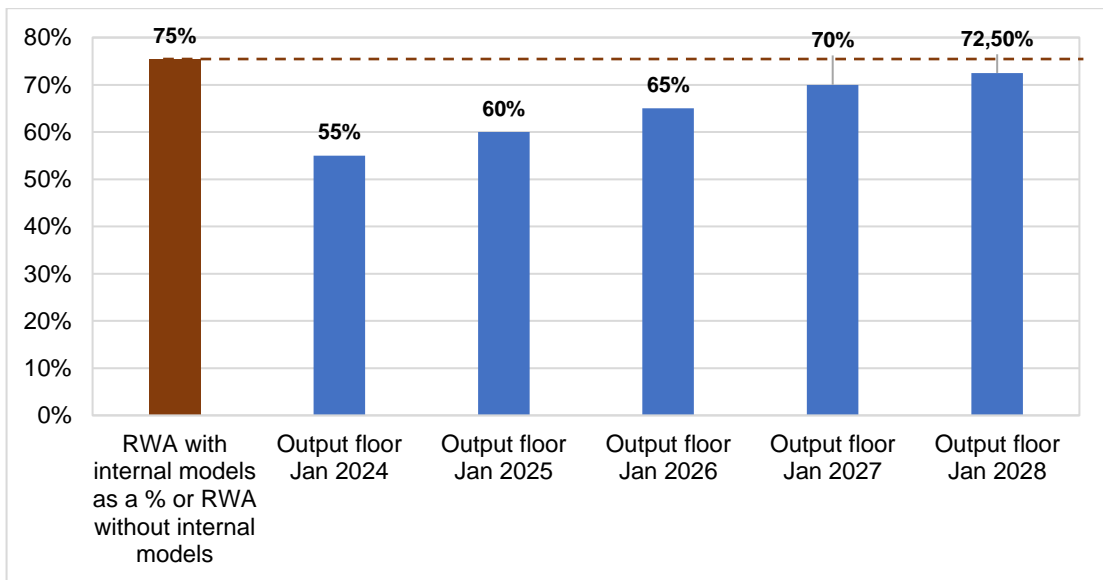
⁵ The risk weight applicable to local sovereign risk exposures under the DRC is 15% (based on the current BB rating of the Republic of South Africa). National discretion is allowed in the treatment of sovereign bonds to a lower risk weight. Currently, the rating is 0%. This results in a material increase in capital requirements for instruments that under the current regulatory framework do not attract a capital charge in respect of default risk.

5.115 Under the different assumptions, the change in CAR ranges from an increase of 40 and a decrease of 77 basis points (see Table E2).

Summary of aggregate output floor impact

5.116 For the nineteen banks that submitted data on the impact of the output floor, RWA computed with the application of internal models as a percentage of RWA computed without the use of internal models was 75%. Assuming no change to the current bank balance sheets, on aggregate, banks will not be required to hold additional capital emanating from the output floor framework. This is on an aggregate; however, different banks are expected to be impacted differently as the largest banks are expected to be impacted from 2026 onwards (see Figure E1).

Figure E1: Aggregate impact of the output floor



6 Statement of intended operation – Implementation and evaluation

6.1 The Basel frameworks covered in this report, including the revised market risk and CVA frameworks are due to be implemented in South Africa through proposed amendments to the Regulations relating to Banks as well as prudential standards. These instruments apply to all banks conducting business in South Africa. The envisaged commencement date for the aforementioned frameworks in South Africa is 1 July 2025.

6.2 The QIS undertaken by the PA was aimed at assessing the impact of the proposed regulatory reforms and understanding the impact of the reforms before they are implemented in South Africa.

- 6.3 As the frameworks are implemented in South Africa, the PA will monitor, assess, and evaluate the effects of the proposed reforms continuously as part of its regulatory and supervisory responsibilities to mitigate any unintended consequences of implementing the respective amended frameworks.

7 Conclusion

- 7.1 This report takes into account all the responses that were received from the QIS. The analysis and findings of the QIS do not take into account any behavioural responses to the regulatory frameworks by banks, such as changes in capital and portfolio composition, strategy as well as other management actions. The report covers the expected impact of implementing the proposed frameworks in South Africa.