

# SPECIAL ISSUE ARTICLE OPEN ACCESS

# Basel III and South African Banking: Assessing the Effects

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#### 1 | Introduction

This special issue of the South African Journal of Economics (SAJE) showcases pioneering research on the impact of Basel III regulatory reforms in South Africa. These reforms, developed in the aftermath of the 2007-2009 financial crisis, were crafted by the Basel Committee on Banking Supervision to make banks less likely to collapse under the pressure of the next financial storm and prevent systemic crises that could jeopardise the global economy. At its core, Basel III represents a comprehensive overhaul of the international regulatory landscape that seeks to address the catastrophic market failures exposed by the global financial crisis, introducing more stringent capital and liquidity requirements while bolstering bank supervision and risk management protocols. Besides strengthening bank-specific risk profiles and funding sources, the new framework also introduced an innovative set of macroprudential rules that regulate banks' capital, assets and liquidity on the broad economy's cycle and banks' interconnectedness.

The South African experience with the biggest financial turmoil in the history of modern capitalism was markedly different from that of many advanced economies. Its banking sector remained largely unaffected by the direct exposure to toxic assets like mortgage-backed securities. South African banks, including the big five (Standard Bank, Absa, FirstRand, Nedbank and Capitec), were not heavily involved in high-risk derivatives or subprime mortgage lending; thus, they did not suffer the same scale of losses as their global counterparts in the United States and Europe. This stability was partly due to the conservative banking practices that were in place, as well as strict regulatory oversight by the South African Reserve Bank (SARB). Nevertheless, the country was not immune to the global downturn, particularly through trade and investment channels,

resulting in a sharp credit contraction, a drop in equity prices and currency value, which further led to a reduction in investment and slower economic growth.

Against this backdrop, South Africa engaged actively with international regulatory bodies, including the Financial Stability Board and the G20, to align national reforms with Basel III standards. Setting a benchmark for other nations on the African continent, Basel III regulations were gradually phased in over a 6-year transition period starting in January 2013, although with some specific modifications to better suit local market conditions. The SARB adopted a nuanced strategy, focusing exclusively on bank-based measures. While imposing capital requirements more stringent than the global recommendations, it maintained flexibility in other areas. For instance, the countercyclical capital buffer has remained at zero, reflecting subdued credit growth, and banks were granted leeway in meeting liquidity requirements through a broader range of qualifying assets. This balanced approach allowed South Africa to uphold the spirit of Basel III while adapting to its unique economic landscape. Notably, the SARB demonstrated agility during the COVID-19 pandemic, temporarily relaxing certain prudential measures to support financial stability and economic resilience.

Understanding the effect of bank regulation requires the academic community to pose and answer a series of key questions: To what extent have Basel III reforms enhanced the overall stability of the global financial system, especially during periods of financial stress (e.g., the COVID-19 pandemic, commodity price volatility and geopolitical tensions)? Have the capital and liquidity requirements under Basel III impacted the profitability of banks? And does this effect depend on bank characteristics? How has Basel III affected competition in the banking sector, especially between large, systemically important banks

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and smaller, niche or non-bank institutions? Have the Basel III reforms led to changes in financial intermediation and business models? How was the credit market shaped by the new set of rules? Did the latter alter the distribution of lending and financial inclusion? How does Basel III impact economic growth? Are there any trade-offs between financial stability and economic growth, particularly regarding access to credit and investment flows?

The list of questions is extensive and continues to expand. However, empirical research examining the effects of Basel III and prudential regulation has emerged only recently, primarily focusing on high-income Western economies. In South Africa, despite the extent of regulatory coverage and the size of the financial sector, a consistent attempt to identify how the regulatory changes stemmed from the Basel agreements have affected the banking sector and, through it, the real economy was missing until today. The objective of this special issue is to fill this gap and provide the reader with the first systematic overview on the achievements and challenges emerged out of the latest decades of prudential regulation in South Africa.

The papers featured in this special issue represent the culmination of a collaborative research initiative supported by the SARB. This institutional backing enabled researchers to access important data and convene for a series of workshops. The latter were a fertile environment for intellectual exchange, allowing researchers to refine their methodologies and sharpen their analyses. This support has not only enhanced the quality and depth of the research presented but also strengthened the link between academic inquiry and practical policy formulation.

# 2 | This Volume's Paper Contributions

This introductory essay is followed by a selection of original research papers written by experts in the field of banking, financial markets and monetary policy. Although the invited contributions take distinct angles and adopt a variety of alternative methodological approaches, taken together, they synthetise our current knowledge of South Africa's banking sector and, particularly, the intended and unintended consequences of regulatory changes.

A key analytical feature of the empirical studies collected in this volume is the single country focus. Single-country studies allow researchers to delve deeply into the specific institutions and dynamics of one economy, often obscured in cross-country comparisons. This consistency allows not only for more precise analysis of economic phenomena in each context but also for access to more detailed and comparable data. Notably, a great deal of the research published herein was possible because of the exceptional granularity of publicly available banking sector data, collected by the SARB over a 30-year period, which would be challenging to obtain for multiple countries. Perhaps most importantly, findings from single-country studies can be directly applicable to policymaking within that country.

Besides producing a new array of empirical evidence, this volume's contribution is methodological too. An interesting example is given by those papers concerned with identifying the effect of a given independent variable or policy shock. The paper by Sibande and Milne, for example, builds on existing scholarship that distinguishes capital changes to isolate the policy-induced ones from those attributed to changes in portfolio risk. Instead, both the paper by Merrino, Lesame and Chondrogiannis (2024) and by Sibande et al. (2024) borrow a relatively recent technique developed in the literature for monetary policy studies and identify policy shocks through the narrative method. In addition, virtually all papers are preoccupied with tackling issues of reverse causality between dependent and independent variables, typical in this strand of literature, and therefore engage with several robustness checks and econometric exercises to improve the reliability of the estimates.

Let us now turn attention to the research contributions of this special issue. The first part of this collection of articles focuses on the lending implications of tighter bank regulation. In 'The impact of Basel III implementation on bank lending in South Africa', Xolani Sibande and Alistair Milne examine whether minimum capital requirements affect the volume of bank lending. Their paper estimates panel fixed effects and local projections using monthly balance sheet data in the period 2023–2019 for the four largest South African banks—which, given the sector's high concentration, account for over 90% of banks' total assets. The authors further distinguish between types of borrower and loans but find a significant effect—small and negative only on secured credit for non-financial firms. One reason for lending not to be impacted by minimum equity, the paper supposes, is that large banks operate with large buffers in any case. Neryvia Pillay and Konstantin Makrelov investigate whether bank's capital holdings above minimum requirements—usually raised in response to growing economic and financial risks—affect credit supply. By gaining access to a unique, non-publicly available database of banks' balance sheets, the authors of this study derive a measure of excess capital for each bank in the sample and then show that it significantly reduces bank lending, especially for smaller banks. Pillay and Makrelov's result is markedly different from Sibande and Milne's: Does it imply that the bank capital-lending negative relationship is driven by voluntary capital buffers and small banks drive?

Serena Merrino, Keagile Lesame and Ilias Chondrogiannis propose an alternative perspective to evaluate the policy effectiveness, which focuses on the distribution, rather than the volume, of lending. By employing yet another methodological approach and an extremely rich set of data—namely, firm-level tax administrative data and households' borrowing by income bracket—this paper finds that tighter regulation reduced household debt, especially if poor, to the benefit of firms, especially if large. Their findings reveal a mixed policy effectiveness: If the policy-induced reduction in consumer loans is beneficial to financial stability, the authors also point at suboptimal ways in which finance is being reallocated across borrowing firms.

The other paper in the series with a focus on corporate finance was produced by Tesfaye Lemma, Michael Machokoto and Tendai Gwatidzo. This research analyses data from 432 non-financial firms listed on the Johannesburg Stock Exchange from 2011–2015. It uses a difference-in-differences methodology to compare 'constrained' vs. 'unconstrained' firms before and after Basel III implementation; the authors find that constrained

firms (i.e., younger and smaller) reduced their debt exposure and maturity relatively more, echoing the results of the previous study.

In the next article, Sibande and co-authors go a step further into the assessment of an alleged stability-inclusion policy trade-off. Their approach is based on identifying the effect of both macroprudential and financially inclusive policy actions on lending rates and volumes for different customer segments, exploiting the disaggregation level of bank balance sheets. Their model reveals that financial inclusion initiatives do not offset, but they rather overlap, macroprudential measures: In other words, regulatory changes that aim at improving financial access for marginal customers are instead increasing the cost and lowering the volume of unsecured loans.

Tendai Gwatidzo and Witness Simbanegawi also examine financial inclusion, but their focus lies on the role that competition plays in expanding the outreach of financial service providers. They adopt a pseudo-panel method that relies, among others, on survey data from the World Bank and document that the increased degree of bank competition observed in South Africa over the period 2011–2017 adversely affected financial inclusion. They conclude that in South Africa, larger banks are better positioned for investing into monitoring and information collection that reduce asymmetries, enabling them to develop tailored products for marginal market segments.

The last part of this issue consists of two contributions that explore the dynamics of bank performance in South Africa. Tendai Gwatidzo's paper examines how bank profitability has been influenced by the post-crisis regulatory wave. His results depend on the measure: Notably, he identifies enhanced market discipline and activity restrictions (e.g., investment banking) as beneficial to bank performance. Finally, the concluding article-authored by John O. S. Wilson, Linh Nguyen, Anna Sobiech and Lechedzani Kgari-builds a taxonomy of South African banks' business models using clustering algorithms based on balance sheet composition and analyse the evolution of the sector from 1993 to 2022. The research finds that bank business models in South Africa exhibit relative stability over time. Although the paper does not provide explicit conclusions about the overall impact on financial stability, these findings suggest that the evolution of bank business models in South Africa has likely contributed to a relatively stable financial system. The moderate pace of change, diversity of models and stability of many banks' strategies all point towards a banking sector that adapts to changing conditions without frequent drastic shifts that could threaten stability.

### 3 | Looking Ahead

South Africa's timely and full compliance to Basel's reforms has granted the research community sufficient time to collate information and produce new evidence on the banking sector and regulatory overhaul, as well as its unforeseen consequences and heterogeneous effects. By doing so, the research herein also offers practical and targeted insights for policymakers that take explicit account of the nation's economic objectives and the

trade-off between the costs of financial instability and the costs of undesired effects.

While acknowledging the importance of evidence-based assessments of the current policy calibration, it is also crucial to recognise that informed decision-making processes can only be supported through a constant pursuit of up-to-date analysis. The ever-changing nature of the financial landscape urges continuous research efforts to navigate market developments safely. During the time this body of research was produced, for example, the failure of Silicon Valley Bank prompted the US Federal Reserve's endgame proposal for more draconian bank capitalisation and, thus, reignited the dissent over the optimal level of regulation.

In South Africa, further research advancements are currently constrained by limitations in microeconomic data availability. We believe that two areas need particular attention: non-bank financial institutions, which are growing in size and scope, and borrowers, whose heterogeneous features offer a rich pool of information to study market dynamics. A crucial step towards addressing this gap would be the development of a centralised credit registry, which would provide researchers with detailed, loan-level information, enabling more nuanced analyses of lending patterns, risk profiles, and the transmission of shocks—as realised in many countries already, such as Spain and Italy but also Colombia and Brazil.

One last thought. By releasing this special issue, our intention is not only to shed light on the functioning of South Africa's banking sector under Basel III but also to spur further dialogue between the academic community, policymakers and civil society. It is only by continuous discussion and questioning that we can prepare for the arduous task of designing a regulatory environment fit for the future. The evolution of the South African economy, and the well-being of its people, depends on the ways financial agents will shape and adapt to the challenges of the future: The green transition, the physical risk of weather extremes, the disruptions and losses caused by wars and geopolitical tensions are only some of the possible forces that will impact our lives. We hope therefore to provide an opportunity to reflect broadly on the role that financial institutions and regulators can play in preserving economic prosperity and social cohesion despite an uncertain future.

#### **Conflicts of Interest**

The authors declare no conflicts of interest.

## **Data Availability Statement**

Data sharing is not applicable to this article as no new data were created or analysed in this study.