

The changing nature of the financial system: implications for resilience and long-term growth in emerging market economies (EMEs)

South African Reserve Bank

EME financial systems: what has changed?

1. How have EME financial systems changed in recent years? How is the relative importance of bank intermediation and capital markets shifting? How important are non-bank financial intermediaries (NBFIs) in EMEs and what is driving their expansion? What are the major changes in the domestic and foreign investor base? How did the Covid-19 pandemic shape these developments?

The period since the Great Financial Crisis (GFC) has seen major changes to the global financial system and the process of financial intermediation. Some of these changes were driven by policy measures to address shortcomings and vulnerabilities, such as the global reference rate reform process. Others resulted from the unprecedented actions by central banks in response to major crises including the GFC and the Covid-19 pandemic. These included the use of central bank balance sheets to support systemically important markets when policy rates were already close to their nominal zero lower bounds, with the boost in liquidity prompting several central banks to switch their monetary policy implementation frameworks towards ones based on ample liquidity.

Governments likewise responded to successive crises by ramping up fiscal support, which led to significant increases in sovereign debt funding. A major consequence of this has been an increase in the exposure of financial sectors to sovereign debt. Yet other changes were prompted by various ongoing disruptions, including climate change, the proliferation of digital assets and developments in artificial intelligence. EMEs have found themselves caught up in these changes in addition to being confronted by their own unique challenges.

South Africa's financial system is well developed and generally perceived to be on par with more advanced economies, with well regulated capital markets that are deep and liquid. The banking sector is its largest financial sector, followed by insurance companies, pension funds, collective investment schemes and state-owned financial institutions. It has unique idiosyncrasies that policymakers must manage. Its financial system is highly diversified, but sectors like banking, and to a lesser extent insurance, are concentrated with significant barriers to entry. There is also a high level of interconnectedness between banks and insurance companies. Whilst the proportion of citizens with access to bank accounts is high, active usage of banking services is low and skewed towards a small, affluent portion of the population.

Deteriorating fiscal finances since the GFC have led to successive sovereign credit rating downgrades, with three major credit rating agencies currently rating South African sovereign debt as speculative. The fiscal slippage has been driven by a combination of lacklustre revenue growth in the face of a stagnant economy, rampant current spending growth and the national government bailing out underperforming state-owned enterprises (SOEs). The rating downgrades have resulted in the reduction of South Africa's weight in major global bond indices such as the FTSE World Government Bond Index (WGBI). This has diminished its attractiveness as a destination for foreign portfolio flows.

The Financial Action Task Force (FATF), a global financial crimes watchdog, greylisted South Africa in February 2023 for not fully complying with international standards with respect to the prevention of money laundering, terrorist financing and proliferation financing. Although the greylisting announcement did not cause major market disruptions, the event has further lessened the attractiveness of South Africa as an investment destination. Rising global inflation has also led to synchronised global monetary tightening since early 2022, resulting in tighter financial conditions and a reduction in the relative attractiveness of emerging markets as investment destinations.

For South Africa, the net result of these factors has been a decrease in foreign ownership of its sovereign debt and a consequent increase in the exposure of its financial sector to it, especially its NBFIs. Currently, foreign holdings have remained stable in 2023 at around 25.6%, while holdings by local participants, ie banks, insurers, pension funds and other NBFIs, have also stabilised at around 20.5%, 6.4%, 23.6% and 21.7% respectively. The resilience of the NBFI sector has thus become a key focus in the monitoring of financial stability risk.

Bank intermediation remains critical for the financing of long-term growth in South Africa. It has been supported by the availability of funding in the form of both deposits and debt capital market instruments. The non-government debt capital market is dominated by instruments issued by financial institutions (mostly banks), with issuance by SOEs declining on a relative basis as their financial health dramatically deteriorated over the past decade. The corporate debt capital market has been growing steadily since it effectively started just over two decades ago, although the Covid-19 pandemic interrupted the positive trend. A major impediment to capital market development has been the country's tepid growth since the GFC. With limited growth opportunities, most of the demand for funding has been met by the banking sector. However, the development of the debt capital market has allowed corporates to diversify their funding sources and opened up an opportunity for direct participation by NBFIs.

EMEs' share of global NBFI sector assets has increased over time, but remains small compared to global NBFI assets. The share of financial assets held by the NBFI sector has increased at a faster pace in EMEs than advanced economies (AEs) over the last decade, driven by large increases in the assets held by NBFI sectors in China, India, Saudi Arabia and Brazil. In South Africa, the assets of the NBFI sector saw compound annual growth of 8.4% from 2011 to 2022, compared to 7.1% for bank assets over the same period. The share of NBFI assets to total financial assets rose from 63.2% in 2011 to 65.1% in 2022. Banks' share of assets declined from 36.0% to 32.4% over the same period.

One consequence of the Covid-19 pandemic has been an acceleration in the digital transformation processes in South Africa's banking and other financial services. A major obstacle to the South African economy currently is rolling blackouts or loadshedding, as the state-owned power utility Eskom struggles to meet demand. Mismanagement and a dearth of timely investment has meant that the utility continues to rely on an ageing fleet of coal-fired power stations. The private sector has responded by ramping up investment in alternative energy sources.

2. How is lending by state-owned banks and development banks evolving? Which sectors are being financed? Did the pandemic affect the lending by these institutions and what is the outlook?

South Africa has development finance institutions (DFIs), government programmes and a loan guarantee scheme as part of the government's lending institutions, as well as the Postbank. The Postbank provides limited services and only acts as a government-to-person payments institution, mainly through SASSA (South African Social Security Agency) transactional cards. A ZAR 200 billion Covid-19 loan guarantee scheme was significantly underutilised and was discontinued in June 2021. In addition, there are currently 52 government programmes targeted at financing micro, small and medium-sized enterprises (MSMEs) through DFIs.

In 2019/20, the annual budgeted finance for MSMEs was ZAR 18 billion. The bulk of this is in the form of debt, amounting to 0.36% of GDP and 2.8% of outstanding business lending to small and medium-sized enterprises (SMEs). Equity finance is the least used instrument after debt finance, grants and blended products offered. Most of the finance is primarily offered by the Small Enterprise Finance Agency (SEFA) and the Industrial Development Corporation (IDC). SEFA finances MSMEs through banks and NBFIs while the IDC directly provides debt finance to MSMEs.

In August 2023, the National Treasury launched the Energy Bounce Back programme targeted at SMEs. Micro and informal businesses can also draw from the scheme, which is structured to generate 1000MW in additional generation capacity and will be facilitated by both banks and non-banks, including DFIs.

3. How has the sectoral allocation of credit changed over time? Have there been major shifts in credit allocation between households and non-financial firms or within the non-financial corporate sector?

There is roughly an equal distribution of credit extension between private sector companies and households, although an allocation shift from households to corporates has been noted over the past 10 years. When analysing credit allocation by economic sector, the distribution has been relatively stable over time although the allocation of credit to the government sector has been increasing gradually from 2019, with the allocation to the financial intermediation and real estate sectors decreasing somewhat.

The allocation of finance and long-term growth

4. What are the implications of recent shifts in the importance of bank intermediation and capital markets for financing long-run growth?

The development of the South African debt capital market and the growth of private funding have not yet significantly displaced the importance of continued intermediation by private commercial banks. However, over the past decade local professional investors have built an increasingly sophisticated internal credit risk assessment system. The greater availability of credit skills outside of the banking sector has encouraged investor participation in both the non-government listed debt and alternative credit markets. The implications for financing long-run growth are positive, as the diversification of available funding sources allows private financing to support the development of economic infrastructure. The inadequate provision and maintenance of critical infrastructure (electricity, water and transport) by financially constrained public sector entities is a significant impediment to the improvement of long-run growth in South Africa.

5. How has the various markets' (equity/bond/bank loans) ability to promote growth evolved over time? How efficient are they in financing high-growth firms? Are there concerns about financing zombie firms?

South Africa's equity and public debt capital markets are effective in channelling capital to established productive firms that have listed equity or debt instruments. However, the equity market has suffered a persistent trend of delistings, with the number of firms listed on the Johannesburg Stock Exchange (JSE) decreasing to approximately 350, from over 700 during the past two decades. Whilst delisting has been a global phenomenon in recent years, idiosyncratic factors have made South African companies more susceptible. These include the challenging domestic growth environment, major bottlenecks in key network industries like electricity and transport raising the cost of doing business, a steady outflow of foreign equity portfolio flows, poor returns on capital, and private equity funds buying "cheap" listed companies.

The private equity market has grown considerably and can provide capital to large and medium-sized firms, as well as high-growth companies, but equity funding for small enterprises is limited and typically provided by DFIs. Debt capital market funding is available to firms with high-grade credit ratings (local currency, national scale), with primary market issuance growing again after the Covid-19 issuance dip.

Debt capital is channelled to firms, including SMEs, through a well developed banking system. Structural impediments, such as a restrictive regulatory framework, have recently been partially addressed, which has immediately led to positive responses from the private sector. Large increases in fixed investment into renewable energy generation have already occurred and this is expected to continue given the imperative to shift away from the coal-based electricity production that currently dominates. Capital, both equity and debt, is provided by a variety of private sector investors, predominantly through unlisted funding vehicles as well as some pension

funds and a few specialised investment funds. Bank loans are used extensively in the construction phase of project finance transactions, with projects typically refinanced once operational. The rapid growth in the issuance of green and sustainability-linked bonds over the last three years supports the efforts of businesses to build operational resilience and reduce their carbon footprint.

There has been a sustained increase in public debt funding, with gross national government debt increasing from 48.5% of GDP in the 2017/18 fiscal year to 74.7% projected in the current 2023/24 fiscal year and a peak of 77.7% in the 2025/26 fiscal year.¹ Recent increases have been driven by a combination of revenue shortfalls, due to weak growth and lower commodity prices, and expenditure overruns. The overruns have been fuelled by a combination of ongoing Covid-related fiscal support measures, wage bill growth, bailouts to distressed public sector companies and rising debt service costs.

Increased public debt funding risks crowding out private sector access to loan funding, whilst the sovereign's sub-investment grade rating pushes up the cost of debt to the broader economy. Significant portfolio exposure to public debt also risks adversely impacting the creditworthiness of debt holders.

Local investors' increased public debt exposure and more speculative foreign exposure raise financial stability concerns with respect to liquidity and volatility. Whilst local banks' exposure to sovereign debt has increased, exposure of NBFIs has increased by even larger amounts.²

Financing of zombie firms is not a significant concern for the banking sector, though it weighs on fiscal finances. Whilst the Covid-19 pandemic worsened the financial positions of firms that were already struggling, banks have maintained prudent risk management and corporate governance practices in identifying, monitoring and reporting on non-performing loans.

6. How important is foreign capital for long-term growth? Does the composition of investment by type of investor and currency matter?

Consensus views 20–30 years ago were that allowing foreign capital inflows would enhance long-term growth in EMEs.³ The argument, made among others by Stanley Fischer in 1997, was that open capital markets increased the pool of investable funds and facilitated a more efficient allocation of savings towards more productive uses.⁴ Benefits would be strongest for low-saving EMEs that typically run current account deficits. Foreign capital inflows would also encourage more competition in the domestic financial sector and foster more policy discipline (amid fears that foreign investors would otherwise "pull out").

¹ See National Treasury, *Medium-Term Budget Policy Statement*, November 2023.

² See South African Reserve Bank, *Financial Stability Review*, May 2023.

³ See L Kganyago, "The contribution of capital flows to sustainable growth in emerging markets", IMF 2023 Michel Camdessus Central Banking Lecture, 11 July 2023.

⁴ See S Fischer, "Capital account liberalization and the role of the IMF", speech at an IMF Seminar, 19 September 1997.

Foreign direct investment (FDI) was generally seen as the preferred type of inflow, due to its lesser volatility and role in transferring technology and helping local firms to adapt to international best practice. FDI statistics, however, typically fail to distinguish between "greenfield" and M&A investment, even though the impact of the latter on domestic capital formation, productivity and skills development may be significantly lower. Separately, most EMEs tried to boost the share of local currency inflows, to reduce external vulnerability by transferring foreign exchange (FX) risk to lenders.

Academic literature has become more critical of the benefits from capital inflows in the last couple of decades, and this has been backed by evidence that fewer EMEs converged towards AE income levels in the 2010s than in the previous decade – this, even as capital continued to flow to EMEs and interest rates were at unusually low levels. Some economists have pointed out that, not only did some countries (China and the "Asian tigers") converge without the assistance of capital inflows, but there is also evidence of a negative correlation between growth and capital openness.⁵

That said, South Africa is capital-scarce, with insufficient savings to fund investment. It requires foreign capital to finance its current account deficit, and a lack of foreign capital risks exacerbating currency volatility and adversely impacting long-term growth. The currency denomination of the investments is not of primary importance, but rand-denominated foreign capital investments are preferable as these investments do not expose the domestic party to currency risk.

7. How have changes in the sectoral allocation of credit affected the economy's growth potential?

We observe some changes in credit allocation between households and firms post-GFC in South Africa, but these changes have not been the drivers of the decline in the country's growth potential. Rather, numerous negative supply side shocks have worsened growth potential.

Credit extended to households declined from around 36% of total credit in 2008 to around 28% in 2023, partly reflecting more cautious lending following the crisis and high household leveraging at the time of the GFC. The leveraging was driven by strong gains in house prices, growth in per capita incomes and greater financial inclusion from the late 1990s to the GFC.⁶ As a share of disposable income, household debt increased from 46.8% over the middle quarters of 2002 to a peak of 78.1% in the first quarter of 2008, before easing to a low of 60.3% in the second quarter of 2018 and sitting at 62.3% in the fourth quarter of 2023.

Meanwhile, on the firms' side, there have been less significant changes to credit allocation, with the most notable being increases of 5.4%, 4.9% and 1.9% to the

⁵ See, for example, D Rodrik and A Subramanian, "Why did financial globalization disappoint?", *IMF Staff Papers*, vol 56, no 1, 2009, pp 112–38.

⁶ For research on South African household wealth, consumption and credit conditions, see J Aron and J Muelbauer (2011), "Wealth, credit conditions and consumption in South Africa", paper prepared for the Special IARIW-SSA conference on measuring national income, wealth, poverty, and inequality in African countries, Cape Town, South Africa, 28 September–1 October 2011.

community services, real estate and electricity sectors, respectively.⁷ South Africa's potential growth has fallen over the same period to levels far below comparable EMEs, from 3.6% in 2008 to 0.14% in 2023.

The drop in potential growth can be explained by the changes to the production function – which estimates the level of potential output commensurate with the quantities of productive factors (such as labour and capital) and how efficiently (productively) these are combined in the production process, while inflation is at target.⁸ South Africa has abundant labour supply but there is a shortage in the levels of skills required to optimise productivity. In turn, this limits investment in new production processes, dampening credit demand by the corporate sector.

Several negative supply shocks have also weighed on potential growth over the last 15 years. These include a sharp rise in government debt which has crowded out private investment;⁹ shrinkage of the export-oriented manufacturing sector; a worsening business climate on the back of economic policy uncertainty and declining competitiveness;¹⁰ labour market inefficiencies and the loss of skilled labour through migration; collapsing state capacity, with loadshedding probably the most significant productive capacity shock in the last five years; and ongoing special exclusion.^{11,12,13}

8. How important is lending by state-owned and/or development banks from the perspective of long-term growth and employment? Are there concerns about lending to the public sector and to SOEs crowding out lending to the private sector over the long term? How has the pandemic affected these trends?

Development banks have a crucial role to play in the economy, particularly in an EME such as South Africa. The primary role of development banks is to provide access to credit in spaces which commercial banks deem "too risky". In South Africa, the objectives of DFIs such as the Development Bank of Southern Africa (DBSA), the IDC and the National Empowerment Fund (NEF) are to invest in projects that are both financially viable and meet additional objectives such as regional integration, improved standards of living, employment creation and sustainable economic growth. SOEs and development banks provide funding to public sector projects,

⁷ Other sectors experienced changes of between 0 and 1.2%, negligible for the purposes of this discussion.

⁸ See T Janse van Rensburg and K Morema, "Reflections on load-shedding and potential GDP", *Occasional Bulletin of Economic Notes*, 23/01, South African Reserve Bank, June 2023.

⁹ See R Hausmann, F Sturzenegger, P Goldstein, F Muci and D Barrios, "Macroeconomic risks after a decade of microeconomic turbulence: South Africa 2007–2020", *SA-Tied Working Papers*, no 206, Helsinki: UNU-WIDER, February 2022.

¹⁰ See F Faure, "South Africa: what's behind the growth slowdown?", *Eco Conjuncture*, April 2017.

¹¹ Loadshedding is estimated to have undermined growth by between 0.7 and 3.3 percentage points during this period.

¹² See T Janse van Rensburg and K Morema (2023), op cit.

¹³ See R Hausmann et al, "Growth through inclusion in South Africa", *CID Faculty Working Papers*, no 434, November 2023.

economic sectors (like SMEs and emergent industries such as digitisation, artificial intelligence and fintech) or groups (like women or black entrepreneurs) that are not well serviced by the mainstream financial sector.

Crowding-out of private investment by public borrowers (government and SOEs) can occur either via quantities (scarce savings are absorbed by high public deficits) or prices (public borrowing raises the whole spectrum of interest rates and makes it prohibitive for private firms to finance capital expenditure). Even when capital markets are open and the availability of funding is in theory not an issue, the sovereign credit rating “caps” the rating of other issuers and renders any external funding costly and volatile.

In South Africa, public debt declined in the 2000s relative to the assets of the banking sector, the life insurance industry and pension funds, a move that subsequently reversed in the 2010s and beyond the pandemic. As a result, public sector bonds comprise a rising share of bank assets, while their share of life insurers' and pension funds' holdings has stabilised after an earlier drop. This has coincided with weaker growth in bank credit to the private sector, and weaker equity issuance over the last 10–15 years compared with the earlier decade. The pre-pandemic composition of banks' exposures to SOEs as a percentage of total gross credit extended was at 2% and this has since halved.

South Africa has failed to benefit from capital market openness over the last decade, as: (1) foreign equity portfolio inflows dwindled relative to bond inflows amid an environment of low growth and poorer corporate performance; and (2) the public sector continues to absorb the bulk of bond inflows. Furthermore, the share of non-resident holdings of government bonds has declined, forcing local institutions to absorb an even greater share of new debt. Banks have reduced their exposure to government bonds from the peak reached in the pandemic, although smaller, non-systemic banks have increased their exposure to sovereign debt significantly. Non-banks have continued to increase their exposure gradually.

The Liquidity Coverage Ratios (LCRs) of non-systemic banks are much higher than the sector's LCR, suggesting that these banks are better able to meet their short-term obligations with their large holdings of high-quality liquid assets (HQLA) (which consist mainly of government debt). Non-systemic banks, however, need to be well hedged to meet any emerging vulnerabilities such as changes in the sovereign's credit rating as well as increasing bond yields.

9. How important is digital innovation (eg fintech or big tech platforms, machine learning) for reducing credit constraints, including for SMEs? How important is digital innovation for reducing informality? What promising projects and/or developments are ongoing in your jurisdiction?

Digital innovation is important for addressing the challenges faced by MSMEs in accessing finance, particularly in EMEs where traditional financial institutions and credit infrastructures do not always cater to or serve their needs. Traditional credit assessment methodologies, for example, can be enhanced and complemented with

alternative sources of data and innovative data analytics methods like machine learning to promote credit access.

In South Africa, the consumer credit information and information-sharing landscape is well developed but entirely individual consumer-focused. In stark contrast, there is no credit information-sharing infrastructure designed for businesses. This presents an opportunity for digital innovation, which could improve MSME data-gathering, -sharing and analysis.

Digital innovation could also reduce the frictions experienced during the credit life cycle from application to disbursement and loan management, where innovative lenders can provide online and app-based platforms for MSMEs to submit their applications and manage their loans. This would remove several obstacles, such as needing to close shop and travel long distances to lender branches, having to submit physical copies of application forms and required documents, or relying on copies of statements delivered via post or email.

Lastly, one of the major constraints to MSME finance in South Africa is information asymmetry, and informality is a key driver of this challenge. MSMEs are often unable to provide a reliable form of identification, proof of address or adequate proof of income, which hinders lenders' ability to assess their credit eligibility. According to the 2020 FinScope MSME survey by FinMark Trust, 58% of MSMEs in South Africa are informal, 95% of MSMEs use cash to receive payments from clients, and only 54% use digital payment channels. Increased access to digital payments could make MSMEs more visible to lenders as they would have more data on their cash flow management.

Bridging the digital divide can stimulate economic growth, enable MSMEs to access the formal economy and pave the way for wider adoption of digital financial services. There are several public and private sector initiatives to support the MSME finance landscape:

Public sector:

- **IFWG:** The Intergovernmental Fintech Working Group (IFWG) was established in 2016 to understand the growing role of fintech and innovation in the financial sector and explore how regulators can proactively assess emerging risks and opportunities.
- **Ministry of Finance:** The National Treasury is finalising the Financial Inclusion Policy Framework and Strategy to increase financial access and usage for vulnerable groups and MSMEs.
- **Finfind:** Finfind, an online access to finance platform, was launched by the Minister of Small Business Development in 2015 to provide an online platform that educates and assists MSMEs, helps them to access finance and facilitates increased deal flow for MSME funders. Finfind gathers data from MSMEs looking for finance and automatically links them with available matching finance products stored in its funder database.
- **NCR and IFC:** The International Finance Corporation (IFC) is supporting the National Credit Regulator (NCR) and key stakeholders to strengthen and expand credit information-sharing by supporting the onboarding of small credit providers to share information with private credit bureaus and by piloting, testing

and promoting the adoption and usage of alternative data scores for MSME creditworthiness assessments.

Private sector:

- **PayShap:** PayShap, a real-time rapid payment platform, was launched in March 2023, driven by BankservAfrica and the Payments Association of South Africa (PASA). The platform facilitates the real-time clearance of low-value transactions to a maximum value of ZAR 3,000. At this initial phase, only banks have access to the platform, with eight banks currently participating.
- South Africa also has a small but growing fintech credit sector with local fintech companies raising capital and launching innovative credit solutions. These include Lula, Merchant Capital, Fundrr, Bridgement, Pollen Finance and Zande Africa.
- Covid-19 has also led to an acceleration of digitisation among financial institutions in South Africa.

Excessive finance, resilience and long-run growth

10. At what point or under what circumstances does finance become "excessive", eg by generating higher volatility of output growth and/or becoming a drag on long-term growth? What channels are relevant?

There is no "one size fits all" financial sector for EMEs relative to the size of their economies. The structure of economic output, the importance of external trade and the country's role (or not) as a regional financial hub all influence the optimal size of the sector. For example, economies rich in extractive resources (like South Africa) typically are more capital-intensive with a larger financial sector.

The size of the financial sector may become excessive if credit becomes not only too large relative to the economy's capacity to invest profitably (thus creating excess leverage and diminishing returns on investment) but also too volatile. In the latter case, the economy will experience boom and bust cycles that result in inefficient allocation of capital, an unusually high level of corporate failures and (potentially) unemployment hysteresis. Over time, this would weaken potential growth.

Different channels can be at work: frequently, the mix of cheap funding and limited opportunities in productive investments will generate credit-fuelled asset price bubbles (in equities or real estate) or unsustainable household leveraging. Abundant and cheap financing can also sustain unprofitable "zombie" companies for too long, undermining productivity growth. Finally, it can enable the financing of poorly governed or ill disciplined public entities, allowing them to delay growth-enhancing reform or, at worst, funding corrupt practices.¹⁴

¹⁴ See, for instance, D Acemoglu, "The great debt cleanup", Project Syndicate, www.project-syndicate.org, 23 June 2020.

11. When does exposure to international finance increase macroeconomic volatility and reduce long-run growth? What economic channels and institutional factors are relevant? (See eg recent evidence by Abhijit Banerjee and Atif Mian [here](#).)

If the recipient country faces an “investment constraint” rather than a savings constraint, excess inflows (driven by push factors such as the global financial cycle) will no longer fund productive investments.¹⁵ Rather, they may be recycled into a domestic credit bubble – with potential FX asset-liability mismatches – or sustain excess government debt build-up, or force FX appreciation that is unwarranted by fundamentals (as some EMEs faced in the early 2010s).

Banerjee and Mian (2023)¹⁶ highlight how a country’s exposure to the global financial cycle can generate the type of volatility that is most damaging for growth prospects. Their analysis builds on the findings of Mian et al (2020),¹⁷ who identified the existence of a household credit channel (besides a productive investment channel) in the impact of foreign capital on a recipient economy. They found that a higher supply of credit will amplify the business cycle and trigger increases in the relative price of non-tradables. Typically, negative links between credit cycles and growth are worse when the FX regime is less flexible, and the share of FX borrowing is higher.

The depth of domestic capital markets (and hence their ability to recycle foreign flows into productive investments) will influence the “investment constraint”. So will factors such as regulatory quality, the strength of institutions, the existence of rent extraction and the availability of skilled labour to implement imported technologies. South Africa’s example highlights how the deterioration of governance indicators in the 2010s coincided with a less productive use of capital inflows. Admittedly, even pre-GFC literature that encouraged open capital markets flagged the necessity of improved governance, regulation and transparency to ensure benefits from external finance.¹⁸ However, critics such as Rodrik and Subramanian (*op cit*) claim that such improvements are only possible in the longer term; that is, not as fast as the capital inflow cycle.

12. Is there an optimal financial structure that minimises output volatility and maximises long-run growth? How have recent changes in the structure of financial intermediation affected your

¹⁵ See Rodrik and Subramanian (*op cit*).

¹⁶ See A Banerjee and A Mian, “Global finance and growth”, presentation to the SARB’s Biennial Conference, 30 August 2023.

¹⁷ See A Mian, A Sufi and E Verner, “How does credit supply expansion affect the real economy? The productive capacity and household demand channels”, *The Journal of Finance*, vol 75, no 2, April 2020, pp 949–94.

¹⁸ See, for instance, OECD, “Getting the most out of international capital flows”, *OECD Economic Outlook*, vol 2011, no 1, May, Chapter 6.

economy's ability to withstand domestic and external shocks as well as support growth?

As EMEs typically are at different stages of economic development, businesses will vary in terms of size, risk and financing needs. Various studies have found that bank-based structures are likely to be better at promoting growth during early stages of development, and that they usually gradually give way to capital markets, ie the economies become more market-oriented as they develop.¹⁹ Economic development thus increases the demand for the services provided by securities markets relative to services provided by banks only.²⁰

Controlling for factors underlying growth, studies have also found that countries with larger banks and more active equity markets grow faster over subsequent decades. Industries and companies which rely on foreign financing also grow faster in countries with a well developed financial system.²¹

However, results do not imply that financial sophistication is always exogenous to economic growth. For instance, technological innovation can affect financial systems. Equally, politics and legal systems can influence financial and economic development. In some cases, the latter can cause a country's financial structure to deviate from its optimal course, resulting in efficiency and welfare losses.²²

Output volatility can be minimised when institutions are able to intermediate funds in an uninterrupted manner, keeping confidence in the financial system intact. However, volatility in financial assets like currencies or bonds is not necessarily a threat to financial stability or long-term growth, as it reflects a response to changing conditions and provides signals to intermediaries to allow for the efficient allocation of capital. Where volatility is unwarranted is when it unduly affects the solvency, liquidity positions or collateral values of financial intermediaries or their clients (as was the case during the Covid-19 crisis). This can happen if asset valuations persistently deviate from fundamentals and result in excess leveraging or risk-taking.

Prior to the pandemic, the South African Reserve Bank (SARB), in tandem with the global community, had responded to the 2007–08 financial crisis by focusing on four core areas of reform, namely: building more resilient financial institutions; ending too-big-to-fail; making derivatives markets safer; and enhancing the resilience of non-bank financial intermediation.

South African financial markets are relatively sophisticated, allowing for hedging and risk transfer, which also helps limit the vulnerability of market participants to volatility. However, a notable financial stability risk is the interconnectedness between

¹⁹ See R Cull, A Demirguc-Kunt and J Yifu Lin, "Financial structure and economic development: a reassessment", *The World Bank Economic Review*, vol 27, no 3, 2013, pp 470–75.

²⁰ There can be exceptions though – mining-based economies can see equity markets grow at an early stage of development, as was the case in South Africa and Australia in the late 19th century.

²¹ See R Levine, "Financial development and economic growth: views and agenda", *Journal of Economic Literature*, vol 35, no 2, June 1997, pp 688–726.

²² South Africa is an example of a country which is a recipient of capital inflows and has a sophisticated financial system, yet because of other constraints, this system has not helped deliver strong growth in the last decade and a half.

the financial sector and government, with the former holding a large amount of sovereign debt.²³

South Africa has a floating exchange rate and low levels of (sovereign) FX debt. With a well entrenched inflation targeting regime, the currency can fluctuate to absorb shocks without de-anchoring inflation expectations or generating financial stability problems by damaging public or private sector balance sheets.

Policy measures

13. What structural policy measures are needed in your jurisdiction to support the allocation of finance for long-term growth, including by further developing capital markets? In which markets is there most scope for development? What is the role of the central bank?

An important structural factor in encouraging economic development is deep and liquid markets. This allows for increased risk and capital pooling essential to augmenting the country's productive capacity. South Africa generally enjoys deep and liquid markets. Another structural factor that impacts development is the degree of concentration within the broader financial sector and subsectors. Reducing concentration positively impacts efficient financial intermediation. South Africa has a high degree of financial sector concentration.

A country should also increase the capacity of corporates, especially SMEs, to access bank funding and tap into its capital markets. There are a number of initiatives, both public and private, aimed at extending such access, including through the use of digital innovation.

14. How can central banks and other authorities best encourage digital innovations to finance long-term growth while mitigating emerging risks?

Central banks and other authorities can best encourage digital innovation by creating an enabling risk-based policy and regulatory environment. This could include introducing tiered licensing regimes, enabling data-sharing between financial institutions through customer consent, and developing licensing frameworks and standards for new business models that do not currently fit within existing frameworks. This may also include the use of regulatory sandboxes, which provide a limited and controlled environment to assess these new solutions and better understand their regulatory implications.

²³ To elaborate, domestic banks are a large holder of sovereign debt, and a deterioration in investor sentiment about public debt may increase sovereign risk premia and depress the value of banks' sovereign exposure. Conversely, distress in the banking sector may result in rising funding costs for government. Another two channels of the so-called "nexus" are the safety net and macroeconomic channels. See South African Reserve Bank, *Financial Stability Focus*, December 2020.

15. What policy actions could further enhance the depth and diversity of the financial system and thus improve the efficient allocation of capital?

South Africa enjoys an efficient financial intermediation system due to the combination of a strong regulatory environment, a healthy banking sector, well developed capital markets, diverse financial products, robust risk management practices and a strong monetary policy framework. It is also making significant investments in fintech.

The regulatory environment is well developed and stable. Financial institutions are regulated by bodies including the SARB and the Financial Sector Conduct Authority (FSCA). These institutions also aid in maintaining transparency and trust in the financial system. South Africa's monetary policy conduct has also maintained a degree of stability attractive to investors and lenders, which has contributed to the efficient allocation of capital and resources.

The banking sector is robust, with a mix of domestic and international banks contributing to efficient financial intermediation. The stock market benefits from well developed exchanges such as the JSE, which provide platforms for companies to raise capital by issuing shares and bonds. South Africa's financial sector offers a diverse range of financial products and services catering to the needs of both individuals and businesses. These include insurance, pension funds, asset management and more, ensuring that various financial needs are met. Effective risk management practices (ie risk-based approaches) within financial institutions help identify and mitigate risks, ensuring the soundness of the system. Investment in fintech is making it easier for people to access financial services, expanding inclusion and improving the efficiency of financial intermediation.