TOPICAL BRIEFING

TB/01/2025

Financial Stability Department

SOUTH AFRICAN RESERVE BANK

File ref. no.: 9/2/3

April 2025

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The evolution of Portfolio Flows in South Africa

Abstract

Note: Although this Topical Briefing Note may be read as a standalone document, a later Topical Briefing titled "The Relationship between Portfolio Flows and Asset Prices in South Africa" provides useful context on the dynamics and drivers of portfolio flows in South Africa. It is available at https://www.resbank.co.za/en/home/what-we-do/financial-stability.

Portfolio flows play a crucial role in supporting economic growth and providing funding. However, they also pose risks, particularly in the form of sudden outflows or large inflows of capital that can lead to financial instability. This paper examines the push and pull factors that drive portfolio flows, drawing on key literature on capital movements. It highlights the importance of understanding these drivers and the challenges presented by increasing global financial integration. By analysing the evolution of portfolio flows in South Africa within the broader emerging market (EM) landscape, this paper identifies key factors influencing capital movements and their impact on financial stability. It explores significant events, including the 2008-2009 Global Financial Crisis (GFC), the taper tantrum, and Covid-19 pandemic, illustrating how South Africa's portfolio flows have been shaped by external shocks and global market dynamics.

Introduction

The evolution of portfolio flows in South Africa mirrors the broader trends observed in emerging markets (EMs), where capital movement has become increasingly volatile and complex due to global financial integration. As one of the most volatile and fastest-growing components of capital flows, portfolio flows have grown in importance for EMs. Indeed, international portfolio flows are vital for supporting economic growth and providing access to crucial funding, especially for a country like South Africa, with a structural current account deficit. However, they also introduce significant risks, particularly in the context of sudden outflows or “sudden stops” that have the potential to destabilise economies or large inflows of capital (i.e. “surges”) that can increase an economy’s vulnerability to pressures from currency appreciation and boom-bust cycles (Ahmed & Zlate, 2013).

This paper is concerned with the dynamics of portfolio flows in South Africa, particularly since the GFC. We focus specifically on portfolio flows, given their contribution to the size and volatility of capital flows. This analysis aims to provide insight into the dynamics of South Africa’s portfolio flows, highlighting key drivers and patterns over time. Additionally, it assesses the impact of historical events, such as the GFC, taper tantrum[1] and the onset of the Covid-19 pandemic, to highlight periods of heightened volatility and their effects on South Africa’s debt and equity markets. A thorough understanding of these evolving patterns is crucial to ensure appropriate macroprudential policy responses. This research serves as a foundation for developing focused strategies that will enhance the South Africa financial system’s resilience against large and volatile capital flows while optimising the benefits that come from growing integration with global capital markets.

Literature review

International capital flows play a crucial role in the global economy, offering various benefits to recipient countries while also posing risks due to their unpredictability (Eguren-Martin et al., 2021). Fluctuations in these flows can have profound economic

[1] The "taper tantrum" is a term used to describe a market reaction that occurred between 2012 until the end mid-year 2014, when the US Federal Reserve hinted at reducing (or "tapering") its bond-buying program. The term "taper tantrum" originates from the notion that markets exhibited a "tantrum-like" reaction to the Fed's decision to reduce its bond-buying programme.

consequences, such as amplifying economic cycles, heightening financial system vulnerabilities, and intensifying macroeconomic instability.

The integration of EMs into the global financial system brings several benefits, including access to deeper capital markets, lower costs of capital, and accelerated growth potential. However, deeper financial integration also increases the exposure of EMs to international spillovers and volatility in asset prices. Therefore, understanding the dynamics of capital flows is crucial, as different types of flows have different drivers and potential implications for financial stability. Capital flows comprise of various elements such as bank loans, portfolio debt, portfolio equity, and foreign direct investments (FDI) (Koepke, 2019). Since these components have different drivers, the appropriate policy response to surges or stops in any of them and its potential effectiveness will vary. For instance, de Villiers et al. (2024) explore the effectiveness of macroprudential policies, capital controls and foreign exchange interventions in managing extreme capital flow episodes, highlighting how different tools impact various flow types differently. Portfolio flows, specifically, have proven to be one of the most volatile components of capital flows and have undergone the most considerable transformation since the GFC (Koepke, 2019). Therefore, most analyses on the macroeconomic stability implications of capital flows focus specifically on portfolio flows (Shahrier et al., 2023).

Literature suggests that volatility in portfolio flows has increased significantly in recent years, particularly since the GFC. Following the GFC, a confluence of factors led to a substantial increase in portfolio flows into EMs. The crisis prompted DMs to adopt unprecedented monetary easing measures, such as low interest rates and quantitative easing. These policies pushed investors to seek higher yields, thereby driving portfolio inflows in EMs. However, the influx of foreign capital in EMs not only led to significant shifts in market dynamics but also introduced significant vulnerabilities. In the years following the GFC, global investors increased their exposure to EMs, leading to the accumulation of larger investment positions. Investor exposures to EMs were also highly concentrated among a small group of economies that received the majority of global capital flows during this time (International Monetary Fund (IMF), 2014). While this surge in capital provided essential liquidity for many economies, it also paved the way for rapid capital flight during times of uncertainty. The convergence of investor positions amplified the impact of market shocks when these positions were unwound, as seen during events like the taper tantrum and the onset of the Covid-19 pandemic.

The literature on capital flows distinguishes between gross and net capital flows. Forbes and Warnock (2012) clarify that gross inflows represent the net of foreign purchases and sales of domestic assets, while gross outflows represent the net of domestic residents' purchases and sales of foreign assets. Net capital inflows are then defined as the net of gross inflows and gross outflows. Obstfeld (2012) emphasises that while a country's net international position as reflected by the current account balance remains important as a source of vulnerability to shocks, the gross financial position has implications for the transmission of global shocks across countries as it better captures the economy's exposure to the global economy.

To analyse the drivers of capital flows, the literature makes use of the "push-pull" framework proposed by Calvo et al. (1993) and further by Fernandez-Arias (1996). Push factors refer to global influences that are outside the control of domestic policymakers, such as global economic growth, interest rates, and investor risk appetite (Koepke, 2019). However, the impact of these factors can vary depending on the income level of the recipient country, the type of capital flow (such as bank loans, portfolio debt, portfolio equity or FDI), the specific period of analysis, and the economic conditions, including periods of crisis, or post-crisis periods. In contrast, pull factors are domestic characteristics that can be shaped by domestic policies, such as economic growth, macroeconomic stability, and the degree of financial openness. These are specific characteristics of a country that make it appealing to investors and can be equally crucial in attracting capital flows (Lopez & Stracca, 2021). Together, these push and pull factors determine the volume and volatility of capital flows. The "push-pull" theory has become a dominant framework for analysing the determinants of flows particularly for EMs (see, for example, Koepke (2019); Rey (2013); Gossel & Biekpe (2017)), and is in line with Rey's (2015) theory of a global financial cycle that drives international capital flows.

The ability to influence pull factors allows policymakers to implement targeted measures that can effectively moderate the impact of capital flows on the macro-financial conditions of the recipient economy. By enhancing economic fundamentals, strengthening institutions, and promoting financial stability, countries can create a more resilient framework that attracts sustainable capital flows and reduce the length and depth of sudden stops. Conversely, if global push factors dominate, domestic macroeconomic policies may have limited impact, potentially necessitating more stringent measures such as capital controls (Lo Duca, 2012). The significance of external factors underscores the vulnerability of small, open economies such as South Africa to global shocks, reinforcing the importance of building resilience through proactive domestic strategies.

Determining which of these drivers – push or pull factors – are more significant in influencing capital flows can be challenging, as their relative importance often shifts over time. For instance, global risk sentiment can change during periods of heightened uncertainty due to deteriorating global economic conditions. Conversely, improving risk appetite may also be driven by positive local economic developments, particularly in the case of equity portfolio flows (Koepke, 2019; Forbes & Warnock, 2012; Ahmed & Zlate, 2014). Moreover, periods of abundant global liquidity, such as those caused by US monetary policy, can reduce risk premia and weaken the correlation between capital flows and macroeconomic conditions (Rey, 2015).

Empirical evidence suggests that push factors tend to have a stronger and more consistent influence on capital flows than pull factors (Fratzscher, 2012; Koepke, 2019). The significance of pull factors is often less conclusive and varies depending on specific time periods, the countries considered, and the factors examined. For example, at the height of the GFC, global liquidity constraints and risk shocks were key in reducing net portfolio inflows (Forbes & Warnock, 2012), while in the recovery phase, domestic factors like institutional quality and economic fundamentals became more influential (Fratzscher, 2012; Koepke, 2019). Similarly, the Covid-19 pandemic resulted in significant capital outflows from EMs as investors sought refuge in DMs (IMF, 2020). This heightened global risk aversion resulted in reduced inflows to EMs, and in many cases, net outflows. Studies suggest that global factors generally account for the largest share of variations in capital inflows, while domestic factors play a relatively smaller role (Rey, 2015; Miranda-Agrippino & Rey, 2020).

Academic research on the topic has also examined several drivers influencing the direction and volume of capital flows. For example, Ahmed and Zlate (2013) highlight the significance of growth and interest rate differentials between EMs and DMs in explaining net capital inflows during the period 2002 to 2012. Other scholars distinguish between domestic and external drivers of capital flows. In the case of the capital surge experienced by Latin American economies in the early 1990s, Calvo et al. (1993) argue that common global factors can drive capital flows for different countries with varying macroeconomic conditions. Fernandez-Arias (1996) builds on this finding regarding the significance of external or “push” factors for developing-country capital flows and develops an analytical model that distinguishes between push factors and pull drivers of capital flows. In line with Calvo et al. (1993), this study finds that the capital inflows experienced by most developing countries in the early 1990s were largely driven by push factors, while pull factors played a less significant role. Moreover, the paper shows that even endogenous factors such as a country’s creditworthiness which might drive capital flows are influenced by external conditions such as international interest rates, compounding the impact of push factors.

While external factors have been shown to have a significant role in driving capital flows, domestic fundamentals also have a crucial impact on EMs. In their analysis of EM reactions to US monetary tightening and easing cycles, Aizenman et al. (2024) find that domestic fundamentals such as the current account balance and inflation are significant determinants of market resilience to US monetary policy tightening. Similarly, Cerutti et al. (2019) show that while common factors specifically affect bank, bond portfolio and equity flows in EMs, these economies exhibit varying sensitivity to global conditions. Beyond macroeconomic and institutional fundamentals, the composition of a country’s investor base is also found to affect its sensitivity to push factors, with countries more reliant on global mutual funds, such as South Africa, exhibiting more sensitivity to global conditions than less-exposed peers.

Besides the drivers of capital flows, another point of interest is the impact of capital flows on asset prices and other financial market variables. Edison et al. (2004) find that capital flows became increasingly significant in explaining exchange rate movements of DMs with the respect to the US Dollar relative to current account transactions in the 1990s. Capital inflows can also contribute to increases in house prices (Tillmann, 2012), while capital inflows related to mechanical bond index rebalancing have been associated with higher returns in emerging-market local government bond markets and exchange rate appreciations (Pandolfi & Williams, 2019).

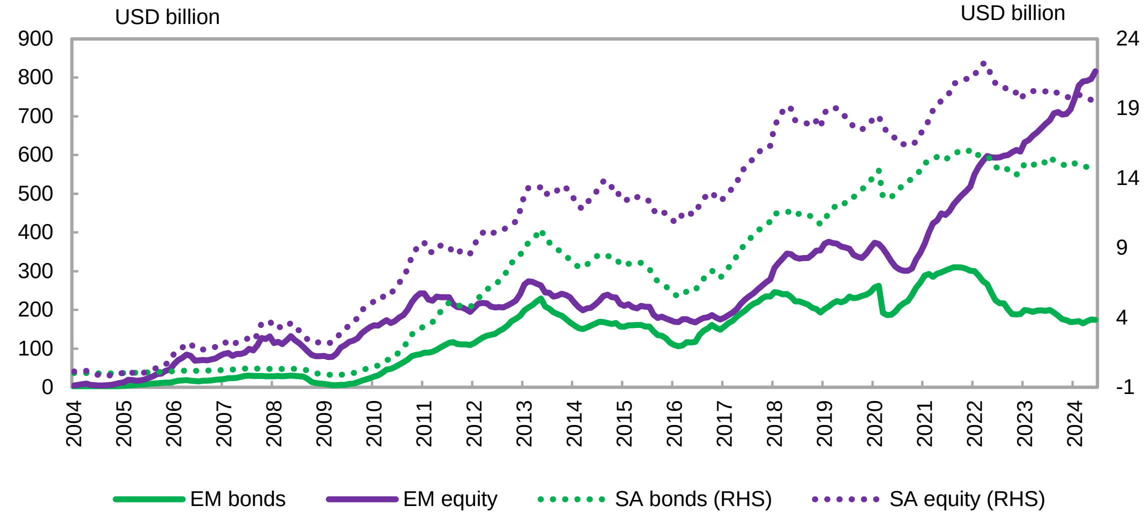
Historical overview of portfolio flows in South Africa

South Africa's portfolio flows have experienced considerable fluctuations over time, influenced by a combination of global and domestic influences. Like many EMs, South Africa has faced episodes of volatility in portfolio flows, particularly during significant global risk-off events. Notable episodes include the GFC, taper tantrum, it’s exclusion from World Government Bond Index (WGBI) and the Covid-19 pandemic in 2020, all of which led to market uncertainty and capital outflows.

To gain a clearer view of the evolution of South Africa’s portfolio flows, it is useful to examine gross flows, which provide a more detailed perspective than net flows. Forbes and Warnock (2012) highlight the importance of distinguishing between transactional data and gross flows. While traditional analyses often focus on net flows - balancing foreign investments in South African assets against domestic investments abroad - gross flows provide a more detailed view of the underlying dynamics. By separately examining gross inflows (foreign purchases of South African assets) and gross outflows (South African purchases of foreign assets), we can better understand the behaviours and motivations of foreign and domestic investors separately.

Figure 1 below provides a historical perspective on the cumulative flows of bond and equity funds in South Africa and other EMs from 2004 to 2024. The shifts and co-movements between South Africa and broader EMs, highlights the extent to which global factors influence portfolio flows into South Africa. Periods of significant inflows, such as those after the GFC, reflect similar trends in other EMs. Similarly, instances of outflows, like those seen during the taper tantrum and the Covid-19 pandemic, similarly reflect trends in other EMs. These patterns highlight South Africa’s vulnerability to external shocks and heightened risk of sudden reversals in capital flows. As noted by Volz (2012), sudden reversals of capital flows can lead to financial instability and exchange rate pressures in EMs.

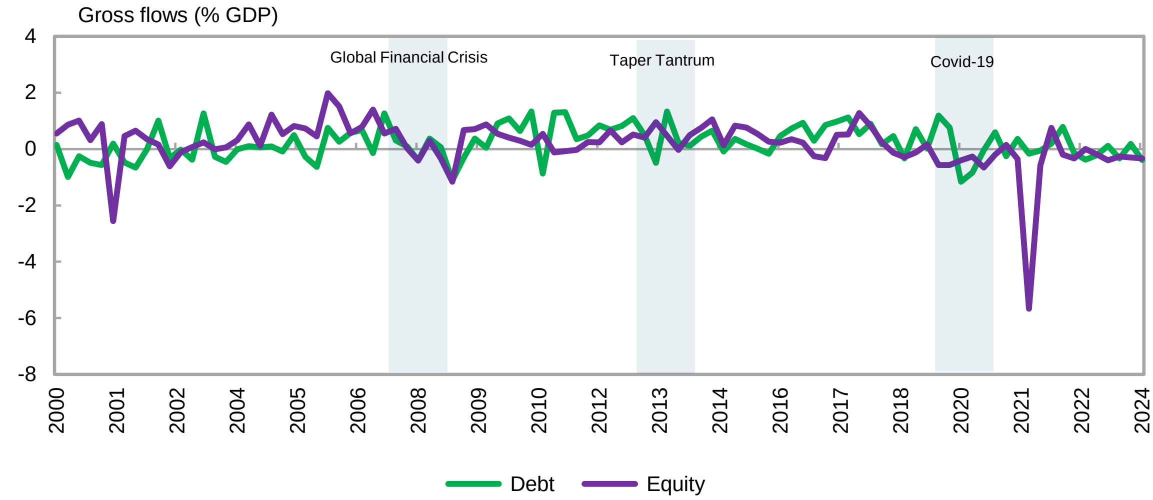
Figure 1: Emerging market and South Africa's bond and equity fund flows



Source: EPFR

An analysis of South Africa's portfolio flows can be enriched by examining their share of Gross Domestic Product (GDP) over time. Figure 2 illustrates the long-term trend of gross debt and equity flows as a percentage of GDP, highlighting significant structural changes. Between 2000 until about 2015, South Africa saw a steady increase in gross debt and equity flows supported by high commodity prices, favourable global liquidity conditions, and the country's inclusion in major global bond indices. However, a marked divergence was observed beginning in 2018. Although debt inflows continued to increase and remained steady, equity flows began to stagnate and eventually decline as foreign investors reduced their investments in South Africa equities, influenced by domestic economic challenges, political uncertainty, and external factors such as global market conditions. This trend underscores the shift in South Africa's capital structure towards a greater reliance on foreign debt to finance fiscal needs, which has heightened the country's vulnerability to external shocks and fluctuations in global interest rates, complicating efforts to manage the country's fiscal position.

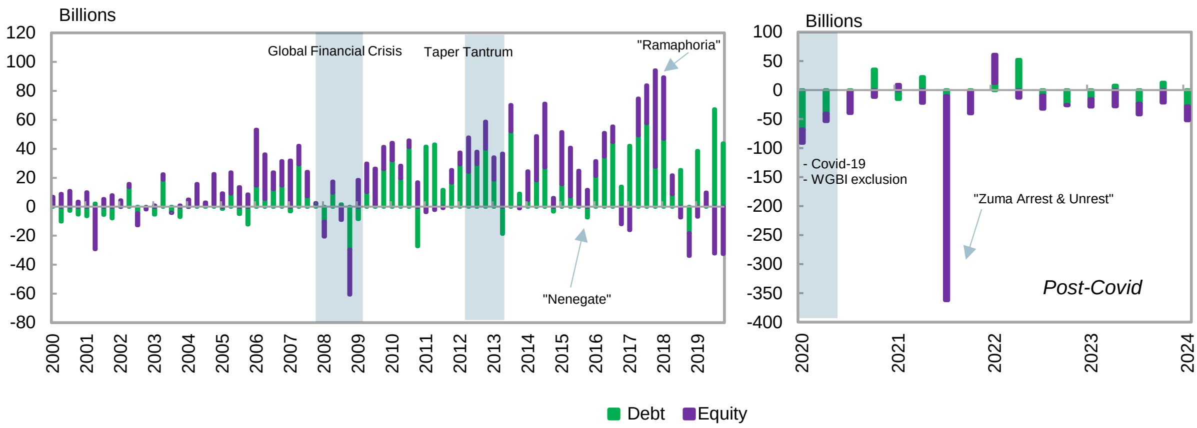
Figure 2: Cumulative gross debt and equity flows in South Africa as percentage of GDP



Source: South African Reserve Bank

While long-term trends provide structural insights, South Africa's portfolio flows have also been shaped by specific global and domestic influences. Figure 3 below presents a historical overview of these flows, using quarterly data on gross flows into debt and equity markets. The trends reveal how responsive South Africa's financial markets are to external shocks and fluctuations in global investor sentiment, as well as the effects of domestic economic and political conditions.

Figure 3: Gross debt and equity flows in South Africa



Source: South African Reserve Bank

South African Reserve Bank

During the GFC, South Africa faced significant outflows from both its debt and equity markets, mirroring the trends observed across many EMs. The outflows during this period were primarily driven by a global flight to safety, as investors sought to reduce risk exposure in the face of heightened financial instability.

However, the early 2010s marked a more favourable period, largely due to South Africa's inclusion in major fixed-income indices such as the WGBI. This inclusion drew significant bond inflows as foreign investors sought to invest in the country's debt markets to align their portfolios to indices they were tracking. South African bonds were positioned as an appealing option because of this inclusion, improving liquidity. Since then, the majority of bond inflows have consistently been directed toward South African government bonds (SAGBs), primarily purchased by non-residents due to the relatively attractive yields offered compared to other EMs. However, this positive momentum faced a slight setback in late 2012 when all three major rating agencies downgraded South Africa's long-term foreign currency credit rating. The impact of this downgrade was further compounded by the taper tantrum, which triggered significant outflows from South Africa, reflecting the broader trend of capital flight from EMs. However, following this shock, South Africa saw a modest rebound in inflows as global conditions stabilised and non-resident investors started to gravitate back towards riskier assets, including SAGBs.

At the onset of the Covid-19 pandemic in the first quarter of 2020, South Africa's bond market recorded outflows amounting to ZAR 67.5 billion compared with a 5-year average inflow of ZAR 26 billion. Similarly, equities saw outflows of ZAR 23.1 billion, in contrast to the 5-year average inflow of ZAR 10.1 billion. The initial shock was severe, with significant capital leaving the country. However, as major central banks coordinated efforts to provide liquidity and implemented accommodative policies, risk sentiment gradually improved resulting in a partial return of capital, particularly into SAGBs.

The situation in 2020 worsened further when Moody's Investors Service (Moody's) became the last of the three major credit rating agencies to classify South Africa's sovereign debt as sub-investment grade in March 2020.[2] This downgrade resulted in

2 S&P Global Ratings was the first agency to lower South Africa's credit rating, downgrading its foreign currency debt to BB+

South Africa's exclusion from the WGBI in April 2020, significantly dampening foreign appetite for domestic bonds, leading to significant portfolio outflows. Additionally, outflows in 2020 were exacerbated by the inclusion of China in the JPMorgan Global Bond Index-EM (GBI-EM) index family for the first time, further complicating South Africa's position in global bond markets (Richardson & Singh, 2020). As these developments demonstrate, inclusion in global indices can exacerbate market volatility, as the investor base tends to become more heavily weighted toward leveraged and speculative funds, such as hedge funds, which are particularly sensitive to market fluctuations.

In addition to these external shocks, the impact of political and idiosyncratic challenges on South Africa's financial markets cannot be underestimated. Notable events such as the sudden firing of Finance Minister Nhlanhla Nene in late 2015, which led to political turmoil known as "Nenegate," and the civil unrest in July 2021 following the imprisonment of former President Jacob Zuma, led to widespread upheaval and disruptions to business operations. These events highlighted how vulnerable South Africa's financial markets are to domestic political dynamics and had significant and immediate impact on investor confidence. Uncertainty about governance and policy direction can cause investor sentiment to shift quickly, which can lead to portfolio withdrawals and heightened market volatility.

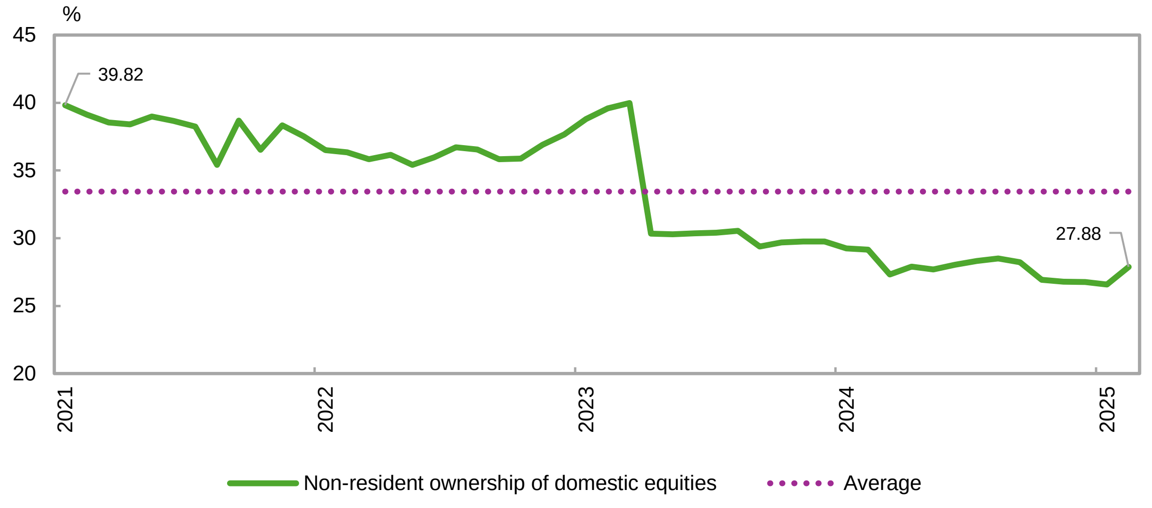
Notable drivers of changes in South African portfolio flows

A significant concern in South Africa's portfolio flows in recent years has been the steady decline in non-resident ownership of domestic equities. According to data from Strate, non-residents held 39.82% of South Africa's equities in January 2021. However, by January 2025, this share had decreased to 26.59% (Figure 4). A significant factor contributing to the equity outflows is the weakening demand from China, which is not only a primary export destination for many EMs, including South Africa, but also a major driver of global commodity prices. As South Africa remains an export-led economy, particularly in commodities, a large share of the Johannesburg

(sub-investment grade) on 3 April 2017. Just shortly after, on 7 April 2017, Fitch Ratings also downgraded both the foreign and local currency ratings to BB+ (sub-investment grade). The last downgrade took place on 27 March 2020, when Moody's Investors Service reduced South Africa's sovereign credit rating to Ba1 (sub-investment grade), signaling the country's total descent into sub-investment grade status.

Stock Exchange (JSE) market capitalisation is constituted of commodity-related stocks.

Figure 4: Percentage ownership of domestic equities by non-residents

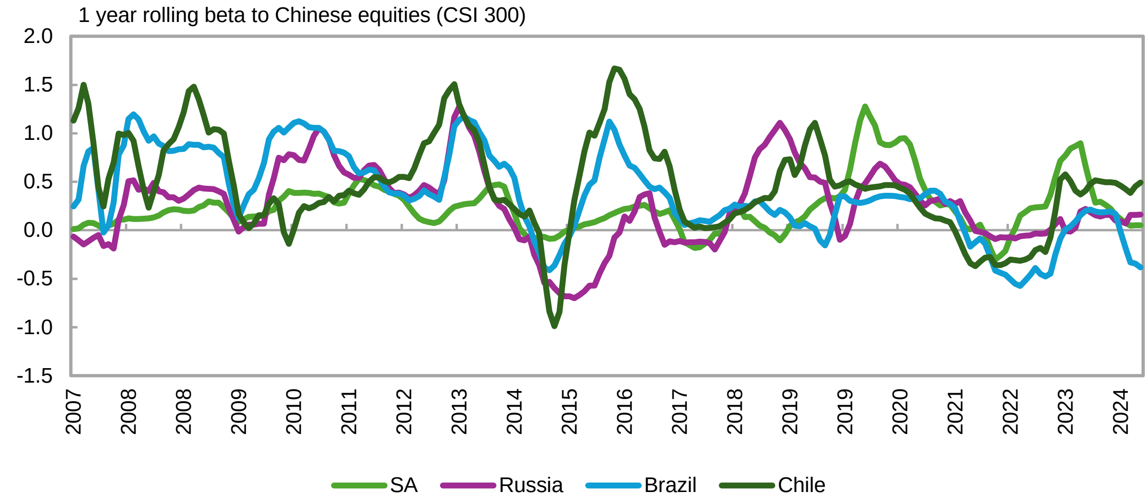


Source: Strate

The decline in Chinese demand has put downward pressure on commodity-related stocks, adversely affecting the stock market performance of EMs heavily reliant on commodities. This dependency is demonstrated in Figure 5, which shows the estimated one-year rolling betas of selected commodity-linked EM stock markets relative to the Chinese stock market, represented by China Securities Index 300.[3] These rolling betas reflect how much these EM stock markets fluctuate in tandem with changes in the Chinese equity market. During periods of economic growth in China such as the stimulus-driven expansion after 2008 and the infrastructure investment recovery from 2016 to 2018, rolling betas were generally positive. Over time, South Africa's beta became increasingly correlated with China's, reflecting the growing significance of the Chinese economy for South Africa.

[3] CSI 300 Index: This stock market index is commonly regarded as a benchmark for the domestic stock market in China. It monitors the performance of the top 300 Chinese stocks listed on the Shenzhen Stock Exchange (SZSE) and Shanghai Stock Exchange (SSE). It is a significant indicator of the general state of the Chinese economy since it encompasses a wide range of industries, such as consumer goods, energy, technology, and finance.

Figure 5: 1-year rolling beta of selected EM commodity-related stocks to Chinese equity market



Source: Bloomberg Finance LP

However, Chinese equity markets are not always a good indicator of actual demand patterns or economic activity. Market regulations, government intervention and investor sentiment are some examples of structural factors that frequently cause China's stock market movements to deviate from more general economic fundamentals. As a result, even though commodity-linked EM stocks have historically exhibited some correlation with Chinese stock trends, changes in actual demand, especially in industrial production and construction, might not always be mirrored in changes in the equity market.

Additionally, the increased delisting or offshore listing of stocks also presents a significant concern for South Africa, underscoring the persistent outflows from the domestic equity market. The lacklustre economic performance in China has also been transmitted through the valuations of JSE-listed companies, particularly those in sectors such as mining and technology, which are sensitive to changes in demand from this key trading partner. The most notable example is Naspers and Prosus, which together account for approximately 20% of the total market capitalisation of the JSE. Naspers currently owns approximately 70% of Prosus, which in turn owns approximately a 29% stake in the Hong Kong-listed Tencent.

There are similarities between South Africa's portfolio flows and those of other EMs in terms of their responsiveness to changes in global monetary policy and global risk sentiment. Due to its relatively high liquidity and accessibility, South Africa frequently experiences more noticeable fluctuations, which makes it both a popular destination for investors and more vulnerable during times of global uncertainty. This is likely a reflection of the country's strong ties to the international financial system and susceptibility to external shocks (Fratzscher et al, 2013; Rey, 2015). While external factors have an impact on flows, investor confidence and capital movement are also impacted by South Africa's political stability, economic performance, and credit ratings.

Conclusion

The evolution of portfolio flows in South Africa underscores the intricate interplay between global and domestic factors that shape capital movement. While international “push” factors, such as global economic conditions and advanced economy monetary policies often exert a dominant influence, domestic “pull” factors also play a crucial role in attracting and sustaining these flows. Episodes of volatility, particularly those during significant global events like the GFC, taper tantrum and the Covid-19 pandemic, highlight the vulnerabilities EMs face due to their reliance on external financing.

As South Africa continues to integrate into the global financial landscape, it is essential for policymakers to craft strategies that enhance the country’s resilience to external shocks. Ultimately, ongoing research and vigilant monitoring of portfolio flow dynamics will provide essential insights that can aid in formulating effective policy measures. Only by understanding these trends can South Africa successfully navigate the complexities of global capital markets, ensuring that the benefits of portfolio flows are maximised while mitigating associated risks.

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