

Financialisation and liberalisation: South Africa's new forms of external vulnerabilities

Gilad Isaacs

University of the Witwatersrand, Johannesburg, South Africa

Annina Kaltenbrunner

University of Leeds, Leeds, United Kingdom

Corresponding Author:

Gilad Isaacs, University of the Witwatersrand, 1 Jan Smuts Avenue, Braamfontein, Johannesburg, 2000

Email: gilad.isaacs@wits.ac.za

Abstract

Since the late 1990s, shifts in the nature of the global financial integration of developing and emerging countries have exposed them to new forms of external vulnerability. This article explores such in the South African case. The article shows a precipitous growth in the magnitude of South African assets held and traded by international investors – increasingly institutional investors and ‘other’ financial institutions, such as hedge funds and complex investment vehicles. The composition of these assets, and the motivation for trading, has also altered, shifting towards a complex set of rand-denominated, short-term assets in equity, bond and derivative markets traded for capital gains. Given this, the article contends that it is the portfolio considerations of such investors, rather than economic ‘fundamentals’, that have come to determine key economic prices, including the exchange rate, causing volatility, large swings and sudden adjustments. This, it is argued, places monetary policy in a predicament. In the context of liberalised capital accounts, together with the prioritisation of inflation targeting, open-market interventions are ineffective at managing exchange rate movements and volatility, and often reinforce both the patterns of trading and subsequent vulnerabilities while carrying their own costs. In these respects, the nature of South Africa’s global financial integrations has exposed it to new forms of external vulnerability, with both these developments, and associated monetary policies, deepening the financialisation of the South African economy.

Keywords

Financialisation, South Africa, external vulnerability, liberalisation, capital flows, currency trading, exchange rate, monetary policy

Introduction

The end of apartheid in 1994 ushered in South Africa's reintegration into the global economy. Financial liberalisation, at a time when the financialisation of the global economy was accelerating, gave rise to particular patterns of global financial integration contributing towards the financialisation of the South African economy. The international dimensions of this financialisation have exposed South Africa to new forms of external vulnerability (NFEV) constituted by the risk of large capital flow gyrations and domestic asset price movements independent of domestic economic conditions. The policy responses aimed at dealing with these adverse consequences, rather than mitigating them, have reinforced South Africa's financialisation and NFEV. This article discusses the mutually reinforcing interaction between South Africa's novel patterns of global financial integration, NFEV, the responses of South African policy makers to these NFEV and the financialisation of the South African economy.

A growing body of literature explores South Africa's financialisation but, barring important work on capital flight and corporate internationalisation and restructuring, pays insufficient attention to the new forms of South Africa's integration into global financial markets, and the relationship between these, and the country's sustained external vulnerability and financialisation (Ashman *et al.* 2011, 2013, Ashman and Fine 2013, Bond 2013, Newman 2014, Rodrigues Teles Sampaio 2014, Karwowski 2015, 2016, Isaacs 2015, Mohamed 2008; the latter two authors are exceptions). Other literature has interrogated the nature of capital flows in South Africa (for instance Aron *et al.* 2010) and sought to estimate the relationship between financial liberalisation and domestic price movements and volatility (particularly the exchange rate) (for instance Kantor 2013, Mpofu 2016) and the subsequent impact on trade, growth and employment (for example Mpofu 2013, Schaling and Kabundi 2014, Stats SA 2016). However, little of this work understands the trends observed in terms of the systemic changes in the relations between economic actors and financial markets, captured by the phenomenon of financialisation. Similarly, this literature does not sufficiently explore the relationship between changes in financial integration and either NFEV or domestic processes of financialisation. At the same time, a recent literature has argued that the financialisation processes of developing and emerging countries (DECs) are intimately linked to their integration into the global economy (Lapavitsas 2009, Paineira 2010, Correa *et al.* 2012, Powell 2013, Kaltenbrunner and Paineira 2017). This literature has shown that this integration has changed over recent years, which has had important implications for DECs' external vulnerability, domestic asset price movements and financialisation processes. We contribute to this latter literature by providing a detailed, and comparative, case study of the South African economy, one of the world's major DECs.

Financialisation is understood here as the increasing imposition of the imperatives and logic of financial markets and interests over ever-more facets of economic, social and political life as part of a structural transformation of mature capitalism. This transformation includes both quantitative and qualitative changes in the way economic agents relate to financial markets. Financialisation has strong international dimensions, whereby the extent

and manner in which countries (particularly DECs) have been integrated into international financial markets means these markets, and the actors operating in them, strongly influence the economic trajectory of those countries. Two consequences are the emergence of NFEV and the deepening of financialisation in the domestic economy. The literature on these phenomena is discussed in Section 2.

In Section 3, the article then explores the international dimensions of financialisation in South Africa. In line with what has been observed in other DECs, critical changes in South Africa's international financial integration pointed to are the quantitative increase in capital flows and the international trading of South African assets. Moreover, the nature of these assets has changed, being increasingly rand denominated, short-term, and traded for capital gains rather than productive investment, often by institutional and speculative international investors. While similar phenomena have been observed in other DECs, notable in South Africa's changing international financial integration is the large role international investors play in the equity market, high levels of carry trade, and the strong offshore component of financial operations. Section 4 shows that these patterns of global financial integration gave rise to NFEV, in the form of large and often sudden asset price and exchange rate movements largely independent of domestic economic conditions, and deepened the financialisation of the domestic economy. In Section 5, we explore how these international dimensions of South Africa's financialisation, and subsequent NFEV, are reinforced by macroeconomic policy decisions, including those aimed at managing South Africa's financial integration, showing the limits of attempting to manage financialisation, within market-centric policy frameworks. Section 6 concludes.

Financialisation and new forms of external vulnerability

Financialisation is a development in mature capitalism with origins at the capitalist core. It refers to the intensive and extensive expansion of finance into multiple fields of economic, political and social life (Fine 2013). This has drawn, more deeply, all economic actors – including non-financial corporations, states and households – into the ambit of international capital markets, thus entailing the intensification of the dominance of the logic of financial markets. Financialisation has been a key element in the restructuring of capitalist accumulation, and hence social and economic reproduction, under neoliberalism. This has altered the inter- and intra-social and economic relationships between sections of capital, states and households (Lapavistas 2014). The internationalisation of finance – and of commerce and production, which required new financial mechanisms to facilitate production, trade and sales – has been a critical driving factor of financialisation.

In comparison to the scholarship on financialisation in the capitalist core, comparatively less literature has analysed financialisation in DECs (for a review of the literature see Bonizzi 2013, Kaltenbrunner and Karacimen 2016, Karwowski and Stockhammer 2016). Despite this, it has become clear that financialisation is playing an increasingly critical role in shaping the evolution of DEC economies. Greater global financial integration – growing steadily from the late 1970s but accelerating precipitously and taking on new dimensions after the 1997/8 East Asian financial crisis – has facilitated the spread of financialisation to DECs as well as helped to shape its distinctive forms (Pauly 2003, Paineira 2009,

Vasudevan 2009, Kaltenbrunner and Karacimen 2016). Financialisation in DEC countries has occurred on the basis of both the interest of domestic actors and the imposition of global market imperatives, and is variegated across countries based on differences between national economies and the terms upon which they are globally integrated (Doucette and Seo 2011, Ashman and Fine 2013, Kaltenbrunner and Karacimen 2016). While beneficial to certain domestic actors – particularly those that have internationalised and become global market players – the international dimensions of financialisation have included NFEV and instability, which, variegation notwithstanding, bear commonalities across countries.

In line with our general definition of financialisation, its international aspect is characterised by the powerful role that international financial markets play in restructuring political, economic and social life. As highlighted by the literature, changing patterns of global financial integration, in the context of global financialisation, have resulted in quantitative and qualitative changes in the way (DEC) actors relate to international financial markets (see, for example, BIS 2007, Gallagher 2012, Akyüz 2013, 2014a, Tyson and McKinley 2014, Kaltenbrunner and Paineira 2015). Quantitatively, non-resident exposure to DEC assets has surged to unprecedented levels over the last decade; between 2002 and 2014, for instance, (nominal) private capital inflows to DEC countries grew almost tenfold from \$128bn to \$1,203bn (IMF 2016). Qualitatively, the literature has pointed to three significant changes. First, in line with their growth in developed economies, international institutional investors and ‘other’ financial institutions, such as hedge funds and complex investment vehicles, have become increasingly important players in DEC countries. Second, these parties have been investing in an ever more complex set of (often short-term) assets in equity, bond and derivative markets, with returns reliant on capital gains rather than dividends or interest payments (Ertürk 2005, Akyüz 2017). These assets are seen as tradable rather than investment assets, with their turnover rising significantly.¹ Third, the assets held by these foreign investors are increasingly denominated in DEC currencies, indicating an apparent move away from DEC countries’ ‘original sin’, that is their inability to borrow in domestic currency (BIS 2007, Miyajima *et al.* 2012). Whereas emerging market foreign-currency debt almost doubled between 2000 and 2013 (from \$576bn to \$1.0tn), local currency debt grew sevenfold (\$716bn to \$5.2tn) (Klingebiel 2014, p. 3); at the same time, trading in DEC currencies (as the most liquid domestic currency assets) surged approximately fourfold (in absolute terms) between 2001 and 2013 and assumed a larger portion of total global foreign exchange turnover (Ehlers and Packer 2013).

As argued by Kaltenbrunner and Paineira (2015), these changes in DEC countries’ international financial integration have given rise to NFEV, that is large and sudden capital and domestic asset price movements largely independent of domestic economic conditions. In first generation financial crises models, conceived in the midst of DEC countries’ external debt crises of the 1980s, their vulnerability to capital and exchange rate movements were attributed to misaligned domestic fundamentals, such as the fiscal balance, the current account and inflation (Krugman 1979). These ‘macroeconomic fundamentals’² were argued to be insignificant in the second wave of large DEC crisis in the mid and late 1990s, such as the East Asian, Russian and Brazilian crises. Here, large capital and exchange rate movements were found to be caused by DEC agents’ foreign currency debt, both in the private and the

public sector, relative to available foreign exchange reserves; frequently referred to as DECs' 'original sin', that is their inability to borrow in domestic currencies (Chang and Velasco 1998, Radelet and Sachs 1998, Sarno and Taylor 1999, Zettelmeyer and Jeanne 2002). These vulnerabilities, and/or the expectations about the instabilities they could cause, led to investor runs and large capital outflows and consequent exchange rate movements. In both instances of 'traditional' external vulnerabilities, that is misalignment of macroeconomic fundamentals and DECs' 'original sin', inappropriate government action, including inappropriate exchange rate values, were found to be the culprits of such investor runs.

The subsequent recommendations by neoclassical economists and policy makers, including within international organisations such as the IMF and the World Bank, were to: (a) develop domestic financial markets, ideally through accelerated capital account liberalisation and with the increased participation of foreign investors who would provide liquidity; and (b) change the monetary regime from one explicitly concerned with the exchange rate to one of inflation targeting and a floating exchange rate. At the same time, market liberalisation and privatisation should reduce the distorting influence of DEC governments. These measures, the argument went, should, once and for all, insulate DECs from the vagaries of international capital flows and make financial liberalisation a beneficial driver of economic development.

This, as shown by Kaltenbrunner and Paineira and several others (see, for example, Akyüz 2017), has not been the case. Despite sound macroeconomic fundamentals and a substantial reduction in their 'original sin', DECs have remained very, if not more, vulnerable to large foreign capital in and outflows and domestic asset and exchange rate movements largely independent of domestic economic conditions. Indeed, the measures touted to overcome these – capital account liberalisation, inflation targeting, floating exchange rates and so on – have spurred NFEV. While these NFEV, the authors argue, may manifest, at times, in seemingly similar ways to traditional vulnerabilities (for example, exchange rate swings), they are premised upon the qualitative and quantitative changes in DECs' financial integration listed above.

This has occurred for three reasons. First, given the large exposure of foreign investors in domestic currency assets, any portfolio (re-)allocation of large international investors can have substantial implications for domestic asset prices unrelated to what is happening in the local economy. This can, for example, be seen in the manner in which the exchange rates of leading (financialised) DEC economies (including South Africa) have moved in tandem with one another, despite very different economic structures and situations. Second, the preponderance of complex assets whose returns have been based on capital gains has given rise to destabilising feedback trading, where large investors in thin financial markets both expect and cause domestic asset price movements (see, for example, Ertürk 2006 for the equity market). Third, and related to this, the denomination of these assets in local currency, particularly when funded on foreign markets, has meant that the exchange rate has become both a risk faced by international investors and a crucial element of international returns, contributing to domestic capital gains. This in turn has resulted in

both large exchange rate swings, due to destabilising feedback trading, and higher volatility as foreign investors became exposed to the exchange rate risk.³

The traditional neoclassical models referred to above cannot account for these NFEV.⁴ More recent models have pointed to the higher sensitivity of DEC's to global financial super cycles transmitted through investors' risk appetite and/or the balance sheets of global banks (see Bonizzi 2017, Guichard 2017 for a review of this more recent literature). However, despite acknowledging the driving role of international market conditions for global capital flows, this literature remains largely based on a 'real' view of cross-border capital flows, which are seen to close savings gaps rather than a monetary phenomenon in their own right (Bonizzi 2017). Moreover, financial markets continue to be considered inherently stable and efficient subject to temporary exogenous shocks, frictions and market imperfections (see, for example, Gallagher 2012 on this point).

Critical accounts (post-Keynesian, Kaleckian, Minskian and Marxist) have highlighted the endogenous nature of financial fragilities and the inherent risks of international capital flows, positioning capital flow volatility not as the consequence of misguided policies and misaligned 'fundamentals' but as an endogenous outcome of a hierarchical and structured capitalist system and the uneven terms upon which DEC's are integrated (for example Grabel 1996, Arestis 2001, Arestis and Glickman 2002, Palma 2012, Kaltenbrunner 2015, Kaltenbrunner and Paineira 2015). Moreover, capital flows are seen as an inherently monetary phenomenon rather than driven by the need to close savings-investment gaps, that is current account deficits (Bonizzi 2017).

Many DEC's have responded to NFEV with a common set of policy interventions. Central to these have been the soaring of foreign exchange reserves and the concomitant expansion of domestic debt, as excess liquidity (resulting from reserve accumulation and foreign capital inflows) has been sterilised through the sale of public debt securities to the private sector.⁵ In the context of inflation-targeting regimes, interest rates have been raised to suppress the potentially inflationary consequences of the excess liquidity created by the foreign exchange interventions and capital inflows. In some instances, high interest rates have been used to maintain capital inflows in order to balance the current account which deteriorates (in part) due to sustained currency appreciations in the face of large capital inflows. Finally, capital account liberalisation, and the provision of liquidity to international investors, has been prioritised to provide investors ease of entry and exit (see, for example, Correa and Vidal 2012 in Latin America).

Some authors have noted that these policy responses, and the (related) existing monetary policy frameworks of capital account liberalisation and inflation targeting, can reinforce the patterns of global financial integration and the NFEV that arise, and buttress financialisation. For example, Paineira (2012) shows that Brazilian banks have used the large stock of sterilisation bonds to further expand their balance sheets and attract capital flows. The associated expansion of domestic debt, and fall in average maturity of banks' balance sheets, contributed towards the changing patterns of domestic credit allocation and the financialisation of the domestic economy.

Finally, it is important to note that these policy measures are not only technical responses to changing external circumstances but also pursued in the interests of particular domestic financial elites and sections of international finance capital as part of the financialisation of the global economy. Marois (2011, p. 18) refers to this as the “internationalization of the state’s financial apparatus” and argues that states have come to manage “their own domestic capitalist order in such a way that they also contribute to protecting the international capitalist order”, while insulating “the state’s financial apparatus from domestic politics according to international norms”. Such dynamics, as shall be highlighted in the South African case, strongly contribute towards the financialisation of the domestic economy. It is clear, therefore, that both the international and domestic dimensions of financialisation, NFEV, and policy decisions are related and mutually reinforcing phenomena which will be explored in the next sections.

South Africa’s changing patterns of international financial integration

In South Africa, global financial integration is not a new phenomenon. In the first half of the 20th century gains from domestic economic activity flowed to the stock market in London (Jones 1992) while in the post-war period South African banks internationalised, domestic markets deepened and large South African capital, and state-owned enterprises, made substantial use of international funding (Jones 1992, Singleton and Verhoef 2010). Global integration did not cease with anti-apartheid economic sanctions in the 1970s and 1980s as corporations sought ways to circumvent these and offshore markets expanded (Farrell and Todani 2004). In the 1980s, financial liberalisation, most prominently advocated for by the de Kock Commission, was halted by the strengthening of exchange controls as a response to the debt moratorium initiated in 1985, although domestic financial deregulation did occur further concentrating the oligopolistic banking sector and encouraging financial market growth (Havemann 2014).

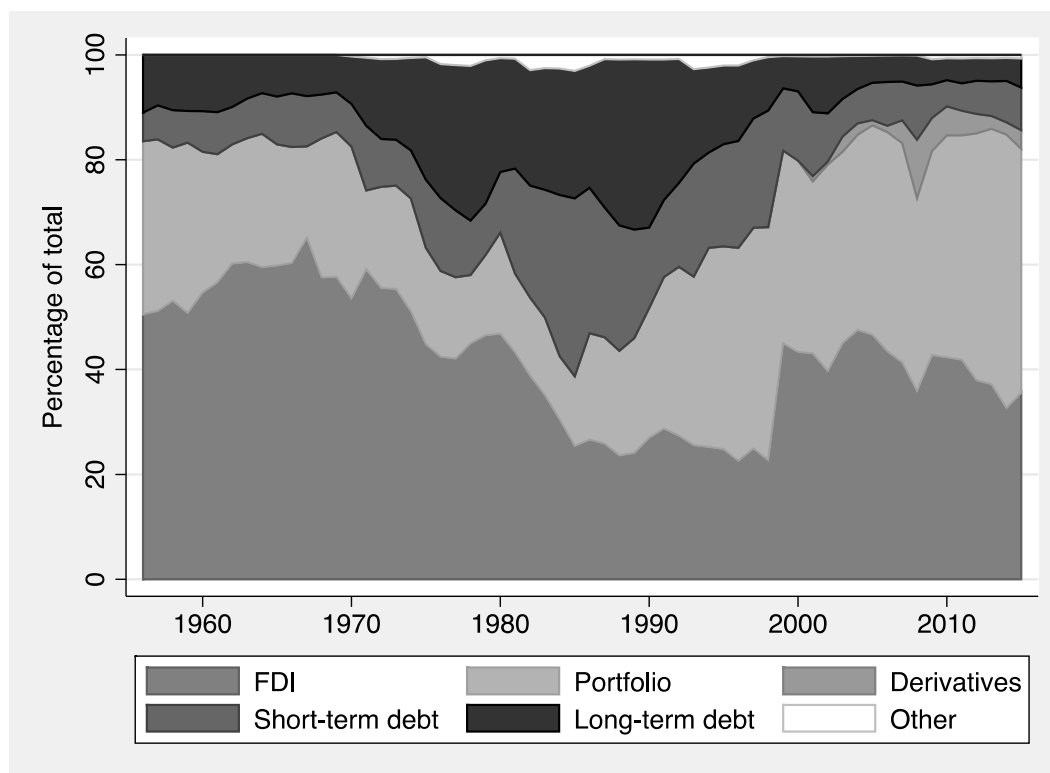
The imposition of macroeconomic orthodoxy by the new democratic regime – canonised in 1996 in the form of the Growth, Employment and Redistribution (GEAR) programme – prioritised economic liberalisation (Isaacs 2014). This saw: some of South Africa’s largest corporations list offshore (Carmody 2002, Chabane *et al.* 2006); the re-entry of South Africa into global sovereign bond markets in 1994 (Aron *et al.* 2009); the reunification of the dual rand in 1995; a surge in capital inflows and a change in their composition; and a return of international banks, playing mostly an investment banking role, together with the internationalisation, in both operations and investments, of South African retail and investment banks and other large investment funds (Singleton and Verhoef 2010). South Africa’s already sophisticated capital market saw substantial deepening.

By the second half of the 1990s and early 2000s, capital account liberalisation and inflation targeting had become the *sine qua non* of monetary policy, reflecting policy prescripts initially attempted in the 1980s; despite these policy changes relatively high real interest rates have prevailed (Addleson 1992, Farrell and Todani 2004, Isaacs 2014).

Liberalisation saw the nature of South Africa's global financial integration change, influenced by domestic imperatives, such as the internationalisation of South African financial institutions, and the influence of global financial market actors. Quantitative change is witnessed through the dramatic increase in capital flows and the resulting stock of outstanding foreign assets and liabilities. Whereas between 1956 and 1986 foreign liabilities (South African assets held by non-residents) had oscillated around 50% of GDP, this fell to an average of 37% between 1987 and 1998 and from 2002 has risen steadily (with a small dip between 2007-2009), reaching 137% in 2015. The stock of foreign assets held by South African residents has risen in tandem but has, until 2015, lagged behind foreign liabilities with South Africa remaining a net 'borrower' from the rest of the world.

Important qualitative changes have also emerged. In line with what has been observed for other DEC's, foreign financial investors have become exposed to shorter-term, domestic currency denominated financial assets, whose return is based on capital gains from trading rather than long-term investment income. The changing composition of South Africa's stock of foreign liabilities over six decades is shown in Figure 1.

Figure 1 Composition of stock of foreign liabilities (%) (1956-2015)



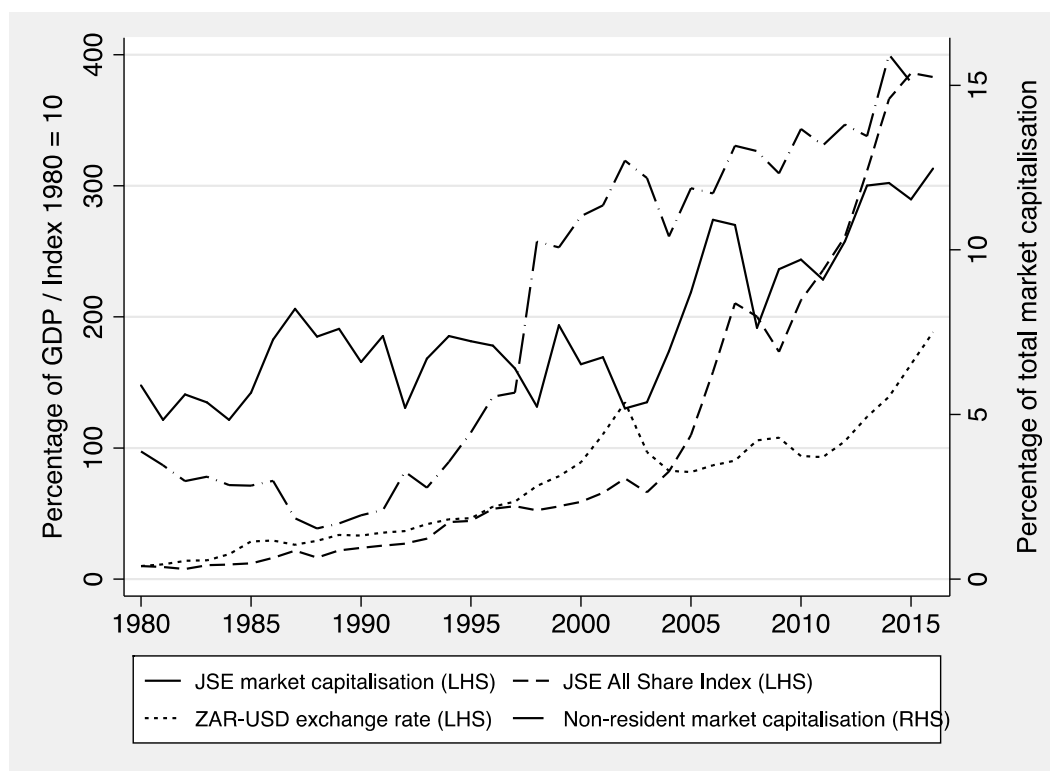
Source: SARB (2017) via Quantec, own calculations

Clearly visible is the steady fall in the stock of FDI as a share of total foreign liabilities from over 60% in the late 1960s to 23% in 1998. The subsequent jump is mostly attributable to the restructuring, internationalisation and offshoring of some of South Africa's largest corporations in the wake of continued liberalisation (Chabane *et al.* 2006)

with inward FDI lacklustre in the post-apartheid period. Debt (primarily bank loans) as a share of foreign liabilities peaked in the second half of the 1980s, and portfolio liabilities – including both equity and debt and generally more short term and volatile – steadily gain in prominence, accounting by 2015 for the largest share of foreign liabilities at 47%. Derivatives have only been measured in SARB data since 2001, but have from then also seen a slight increase (in real terms they have grown exponentially).

As to equity flows, following liberalisation, foreign investors’ participation in the South African stock market grew significantly, driven by the depth, liquidity and returns on this market. In 2014, according to Beck et al. (2016), stock market capitalisation in South Africa equalled 257% of GDP, compared with the upper middle-income average of 71%, while the ratio of shares traded to GDP was three times greater in South Africa than the upper-middle income average (65% compared with 21% respectively). Figure 2 shows that between 1990 and 2016, the JSE All Share Index rose sixteen fold and market capitalisation (as a share of GDP) almost doubled. During a similar period (1990-2015), non-resident market capitalisation⁶ (as a share of total market capitalisation) rose from 2% to 15%.

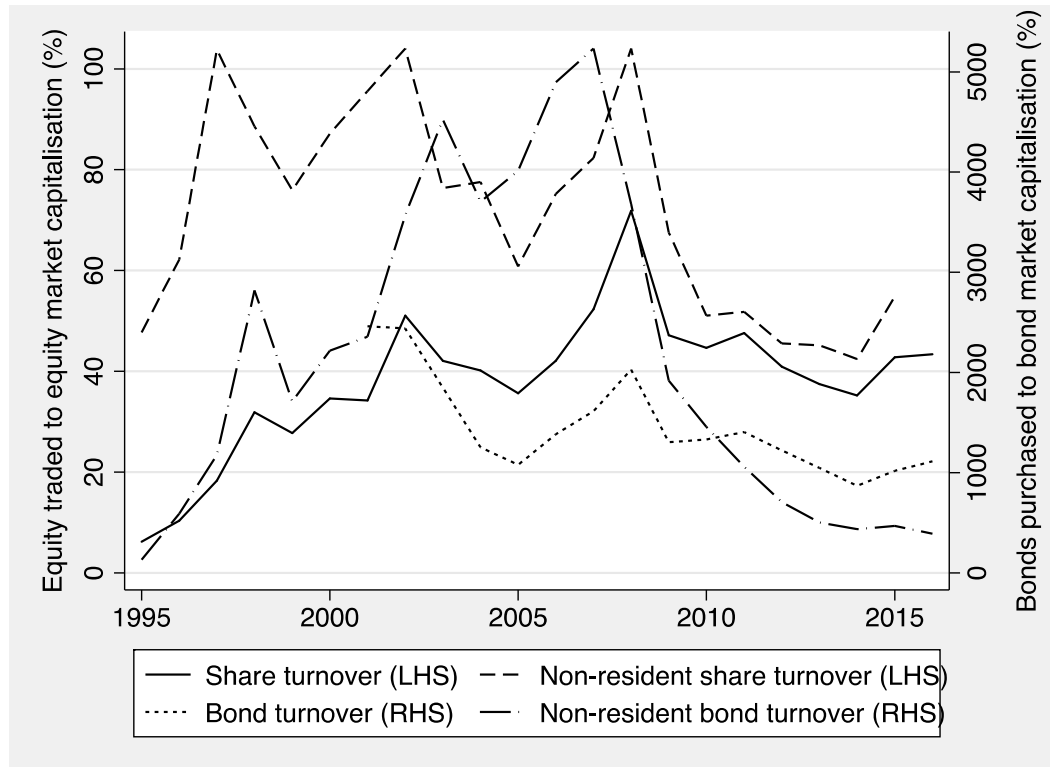
Figure 2 JSE market capitalisation, price index and share purchase by non-residents (1980-2016)



Source: SARB (2017) and OECD (2017) via Quantec and FRED (2017), own calculations

The importance of short-term trading and capital gains for foreign investors (at least until the global financial crisis in 2008) is reflected in Figure 3, which shows the ratio of shares traded by non-resident investors relative to total stock market capitalisation.

Figure 3 Equity and bond market turnover (1995-2015)



Source: SARB (2017) via Quantec, own calculations

Note: Shares traded by non-residents is the average of shares purchased and sold. Data on non-resident market capitalisation for both equity and bond markets were provided directly by the SARB as they are not publically available.

We see that overall equity turnover (residents and non-residents) accelerated dramatically from 1995; in 2008 equity worth 72% of market capitalisation were traded. Critically, non-resident equity turnover was significantly higher than overall equity turnover. In 2002 and 2008 non-residents traded equity worth over 100% of the value of stock market capitalisation they held. As non-resident shareholding grew as a proportion of total market capitalisation (Figure 2) the more rapid trading by non-residents (Figure 3) exerted increasing influence over the pace of market trading as a whole.⁷

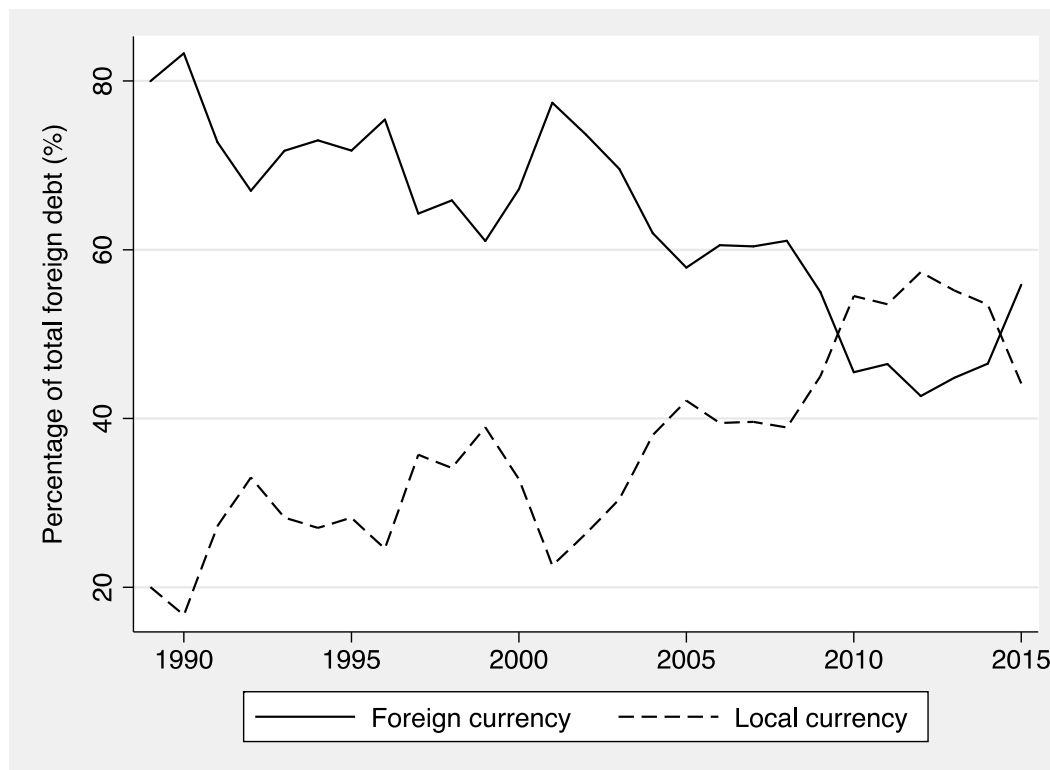
These data exclude offshore equity trading. Shares of up to 105 South African corporations (over a quarter of JSE listed companies) are traded via American depository receipts (ADRs) on major US stock exchanges and over-the-counter (OTC) exchanges (Emerging Market ADRs List 2017, South African ADR's 2017, The Full List of South African ADRs 2017). This is more than any other emerging market, many of which have much larger

economies. Brazil is next with 94, but most other comparative countries, such as Korea, Argentina, Poland, and Thailand, range from 12 to 54.⁸

The second element of portfolio flows is foreign investments in domestic bond markets. Several trends, beginning in the 1990s but accelerating significantly in the 2000s, point to the international financialisation of South African bond markets. First, foreign flows to domestic bond markets, both private and public, have grown significantly, resulting in foreign investors occupying an increased share of the bond market. Between 2003 and 2016 the non-resident share of bond market capitalisation increased from 5% to 22% (SARB 2017, own calculations). In the case of public debt, it is the foreign non-bank sector (various investment funds) driving this, with its share of total outstanding general government debt growing from 9% in 2004 to 32% in 2016 (SARB 2017).

Second, as illustrated in Figure 4, the currency denomination of foreign debt has shifted from foreign to local currency. Whereas foreign currency denominated debt was 83% of total foreign debt in 1990, it was only 56% in 2015 (after a low of 43% in 2012). Today, only 10% of government debt is in foreign currency (National Treasury 2016a, p. 85) and South Africa is one of the top ten emerging market issuers of local-currency government debt (Klingebiel 2014, p. 6).

Figure 4 Currency composition of foreign debt (1989-2015)



Source: SARB (2017) via Quantec, own calculations

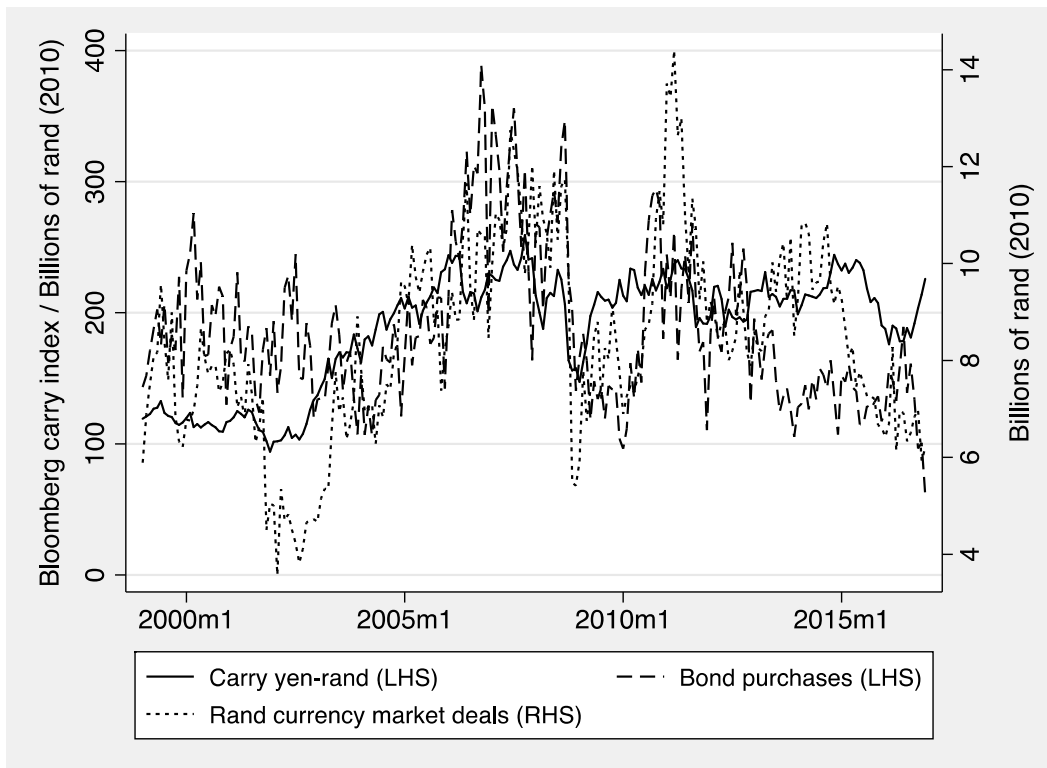
As discussed in Section 2, in the case of domestic currency denominated assets (both on the equity and bond market), the exchange rate becomes a crucial element of domestic returns. As can be seen in Figure 3, South Africa's exchange rate appreciated by 47% between the end of 2001 and beginning of 2006, which increased the attractiveness of South African assets.⁹

Third, the 2000s saw a surge in the issuance of emerging market denominated currencies bonds issued offshore on international markets ('global bonds'). Mirroring the importance of the offshore market for equity issues, bonds issued in rands led this trend globally (BIS 2007). By the fourth quarter of 2016, 14% of debt securities outstanding for South African issuers were issued offshore and 10% of these were denominated in rands (BIS 2017, own calculations). Fourth, as seen in Figure 3, non-resident bond market turnover is both exceptionally high (much higher than for equity markets) and comprises a disproportionate share of total bond market turnover. Regarding the former, in 2007, the value of non-resident bond purchases was fifty times the value of non-resident market capitalisation, indicating the short-term nature of international investment in this market. Regarding the latter, while the non-resident share of bond market capitalisation, in the 2000s, averaged 7%, their share of bond market turnover averaged at 15%, peaking at 25% in 2005/6.

The increased trading of rand-denominated bonds, and rapid market turnover, has been linked to carry trade operations (Hassan and Smith 2011, Hassan 2015).¹⁰ Like South Africa's equity market, its bonds are an attractive target given the very liquid local bond markets, originally deepening under apartheid; large and liquid onshore and offshore foreign exchange markets used to hedge risk; and high interest rate spreads.¹¹ Regarding the latter, South Africa's long-term (10-year) government bond yield has, since 2000, averaged at over double the OECD average (9.2% compared with 4.2%) and exceeded those of most of its emerging market and middle-income peers (such as Brazil, Chile, India, Korea, Malaysia, Mexico, Poland, Slovenia and Thailand) (IMF 2017a, OECD 2017).

The attractiveness and likely strong presence of rand carry trade is witnessed in the high correlation between the carry-to-risk ratio (the ratio of the interest rate differential to expected exchange rate volatility, a standard measure of carry trade appeal), and the bond market and foreign exchange turnover (see Galati *et al.* 2007). This is shown in Figure 5, which contrasts the Bloomberg yen-rand carry index (short yen, long rand, three month trade horizon) against monthly non-resident bond purchases and non-resident (onshore)¹² rand currency turnover (see also Hassan 2015).¹³

Figure 5 Carry trade (1999-2015)

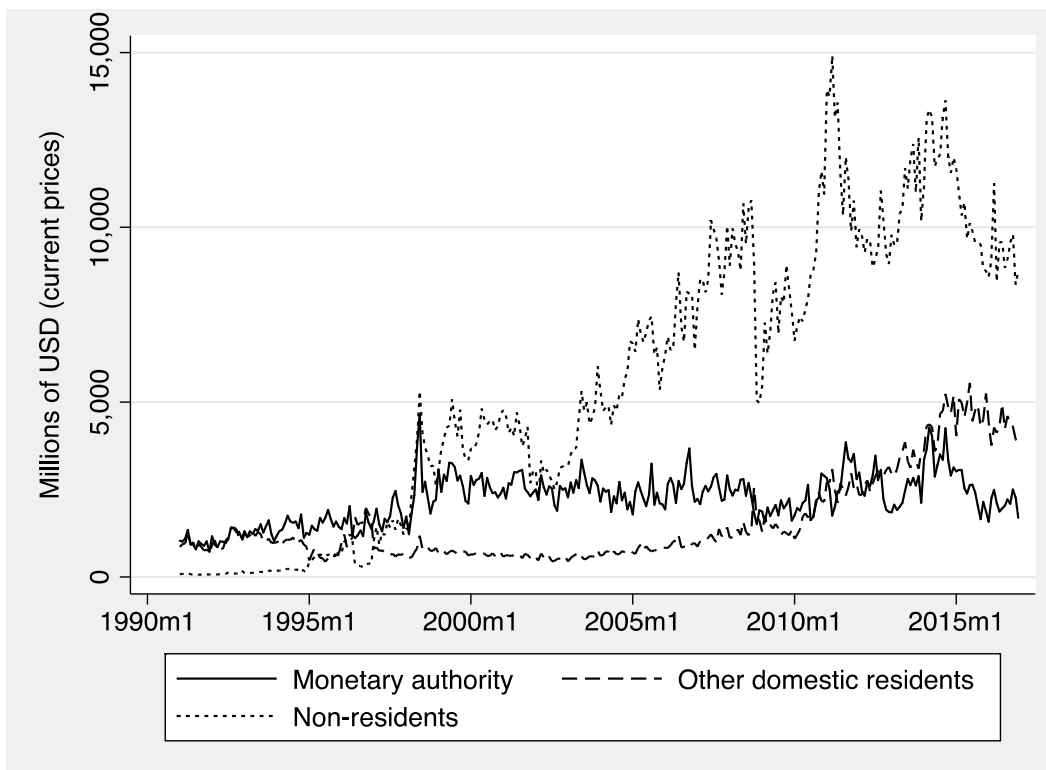


Source: Bloomberg (2017) and SARB (2017) via Quantec

Finally, the increased trading of rand-denominated assets by international investors, and the quest for short-term, highly liquid assets directed at exchange rate and capital gains, is also visible in the extraordinary growth in rand currency market trading. The value of local-bank reported onshore average daily turnover in rand foreign exchange markets rose from \$2.7bn in 1994 to \$15.6bn in 2016 (peaking at \$20bn in 2014). In 2016, global trading of rands was approximately 72 times greater than combined imports and exports of the previous year (both in USD) (BIS 2016a, IMF 2017a). Some of this change is due to hedging as required by greater international trade and production. However, it also is indicative of frequent portfolio rebalancing by international investors of rand-denominated assets of their portfolios (Galati and Heath 2007, Rime and Schimpf 2013)¹⁴ and an increase in speculative rand trading.¹⁵

Figure 6 shows how rand currency trading has been driven by the increase in non-resident participation, growing post-liberalisation and truly accelerating from 2002/3 onwards.

Figure 6 Transactions against the rand in currency markets reported by domestic banks by resident type (1990-2015)



Source: SARB (2017) via Quantec

At the same time, as with equity and bond markets, the offshore trading of the rand surged. Between 1995 and 2016 total turnover in rand OTC foreign exchange instruments grew from an average daily turnover of \$4bn to \$49bn (BIS 2016b). By 2013, 79% of all rand trading was offshore, well above the emerging market average and up from 45% in 1998 (Ehlers and Packer 2013, pp. 61–62, BIS 2016b, own calculations). In line with what has been observed in the domestic market, this growth was driven by non-resident, financial investors. In 2001, resident and non-resident counterparties held an approximately equal share of total OTC rand foreign exchange derivatives, but by 2016 the non-residents share was one and one half times the size of the resident share. By the same time, the share of trading by ‘other financial institutions’ – including non-reporting banks, institutional investors, hedge funds, and proprietary trading firms, as well as official sector financial institutions – had grown from 26% in 1995 to 42% (BIS 2016b).

In sum, over recent years, South Africa experienced a substantial growth in the participation of international investors in its financial markets and a shift towards the trading of domestic currency-denominated portfolio assets in the pursuit of capital gains. These trends mirror those observed in other DEC countries with several South African specific characteristics. First, the participation of international investors in South African equity markets is particularly pronounced. This is driven by: high levels of liquidity and profitability, the offshoring of major South African corporations, and (more recently) international firms taking advantage of capital-raising opportunities in the context of large domestic corporate financial surpluses. Second, non-resident bond market turnover is rapid. This reflects carry trade and high bond yields, mirroring South Africa’s

comparatively high real interest rates, the latter necessary to attract a steady stream of short-term capital inflows to balance the current account. Third, large and liquid rand currency markets have increased the ease and mitigated some of the risk of trading rand assets, while providing speculative opportunity of their own. Fourth, the large offshore trading of rand assets – in equity, bond, and currency markets – is particularly notable in the South Africa case. What underpins this requires further research but it certainly speaks to the growth in certain offshore (particularly currency) markets under apartheid semi isolation and the offshoring, or heavily international character, of South Africa's largest corporations.

We turn now to explore how these changes in the patterns of global financial integration give rise to NFEV and how both of these form part of the financialisation of the South African economy.

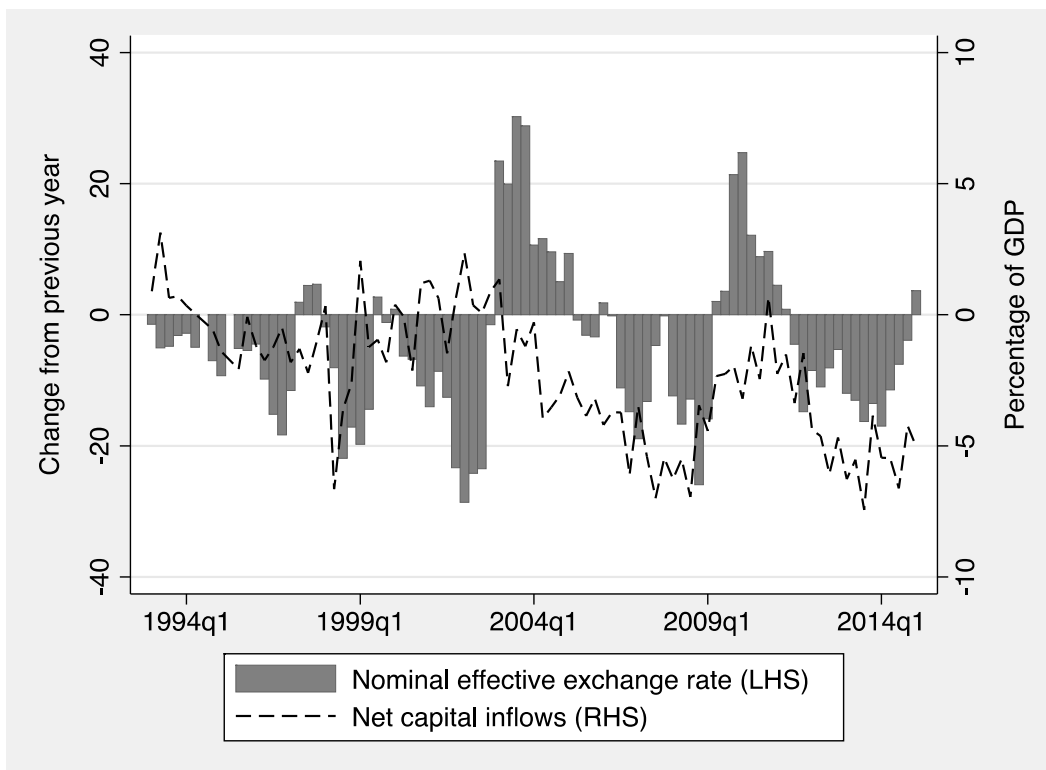
New forms of external vulnerability and the financialisation of the South African economy

Two crucial consequences of the quantitative and qualitative changes in South Africa's international financial integration discussed above have been how these have generated new forms of external vulnerability (NFEV) and how they have supported the financialisation of the domestic economy.

As set out in Section 2, regarding NFEV, the importance of DEC local-currency denominated assets to large international investors has meant that the movement and setting of domestic prices – in particular the exchange rate, interest rate, asset prices and property prices – have become increasingly determined by the portfolio considerations of such investors. These portfolio choices are strongly influenced by conditions on international market and policy choices made at the capitalist core. This is seen, for instance, in the close co-movements between DEC currencies, including the rand, and the VIX, one of the most common indicators of international risk aversion.¹⁶ Moreover, the international trading of domestic currency assets has exacerbated price movements and created the potential for destabilising currency mismatches and feedback trading.

These dynamics are visible in Figure 7 which shows the correspondence between net capital inflows and movements in South Africa's nominal exchange rate.¹⁷

Figure 7 Change in nominal effective exchange rate and net capital inflows South Africa (1993-2015)



Source: IMF (2015) via Quantec and SARB (2015), own calculations

Note: presentation of net inflows is inverted

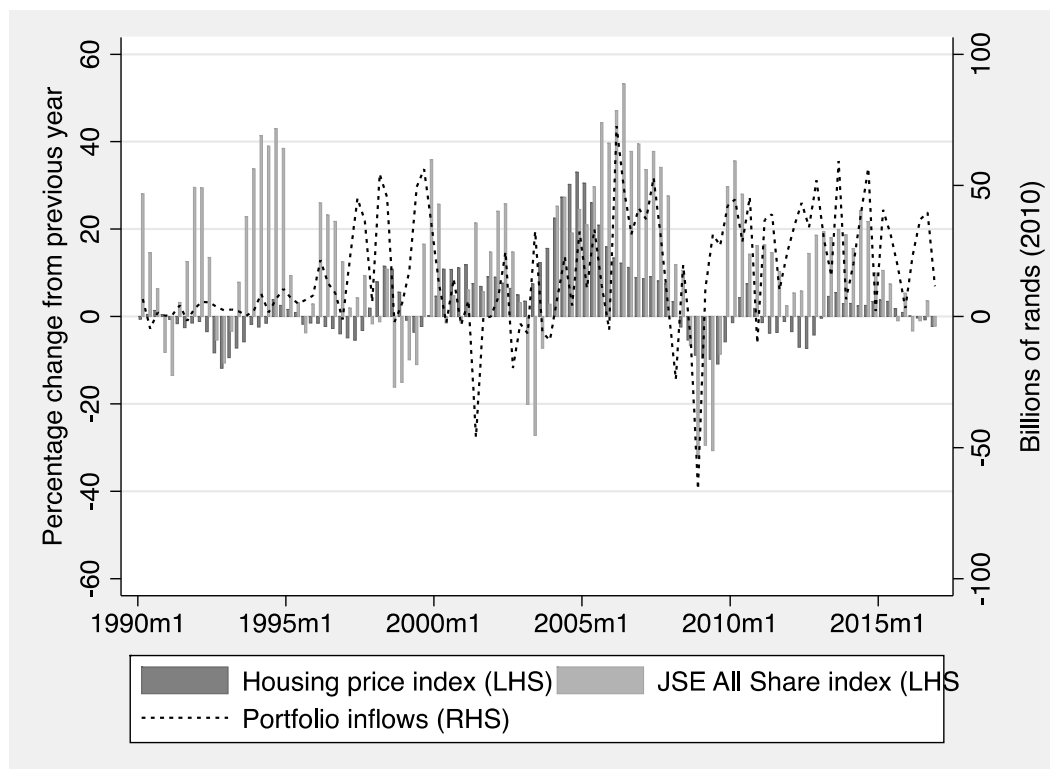
While domestic factors played an important role in the first surge of inflows (1994-1999) subsequent periods of negative or low levels of flows (2001-2003 and 2007-2008) or strong inflows (2004-2006 and 2009/10 onwards) were predominately shaped by international monetary and liquidity conditions, largely disconnected from South African specific economic conditions. Similarly, whereas the first sharp depreciation in the exchange rate in the second half of the 1990s (January and November 1996) corresponded to a current account deficit and substantial capital flight, and the crash in 1998 was caused by contagion from the East Asian crisis, the third depreciation (in 2001) highlights the emergence of NFEV. While there was a current account deficit in the third quarter of 2001, this changed to a small surplus in the following quarter reflecting, as Hodge (2005, p. 24) observes, “what would normally have been a manageable balance of payments”. Nevertheless, the real effective value of the rand fell by 27% due to the portfolio adjustment of international investors in the wake of the bursting of the dotcom bubble.

The subsequent periods of appreciation (2001-2005 and 2009-2012), in turn, were related to a shift by non-residents towards the trading of rand-denominated assets (Figure 4), increased carry trade operations (Figure 5) and a surge in non-resident trading of the rand (Figure 6), all of which were spurred by the return of liquidity on international financial markets. The depreciation in the course of the global financial crisis of 2008 again reflects South Africa’s NFEV as foreign capital fled into its safe haven, the US dollar, irrespective of South Africa’s economic situation (or indeed the fact that the crisis had started in the US itself). The following currency depreciation (2012-2016) occurs as, to varying degrees,

the three trends shown in Figures 5, 6 and 7, are less accentuated or reversed (although domestic political events also contribute).¹⁸ As discussed in Section 2, these exchange rate movements contributed substantially to gains/losses on domestic currency assets, further exacerbating the capital, and hence exchange rate, movements.

Figure 9 shows similar dynamics between the international capital flows and domestic asset prices. One can observe the close correlation between year-on-year changes in equity and housing price indices and portfolio inflows, indicating that these flows themselves might have contributed to the capital gains to be reaped on these markets.

Figure 8 Changes in asset and housing prices and real portfolio capital inflows



Source: SARB (2017) via Quantec

This link between capital inflows and asset prices also speaks to the second relationship noted above, that is the manner in which the changing patterns of South Africa’s financial integration have contributed towards the financialisation of the domestic economy; both of which have also been shaped by the domestic political economy. The desire to attract portfolio capital inflows, for instance, played an important role in the restructuring of the major South African corporations in the second half of the 1990s – arguably the most rapid shakeup of the South African economy ever. As Julian Ogilvie Thompson, the Chairman of Anglo American Corporation South Africa’s largest corporate, said: the restructuring of these corporations was necessary “to create a structure that meets the needs and wishes of today’s investors” (quoted in Wackernagel 1997). The need to maintain such inflows, in

competition with other transnational corporations for international financial capital, has meant share prices and other shareholder value metrics all took on new importance.

This has led to the enormous growth in distributions to shareholders – via dividends and boosting share prices through share buybacks and mergers and acquisitions. Between 1988 and 2015 dividend payouts as a percentage of operating profit for all non-financial JSE-listed companies doubled from 2% to 4%, while the value of share buybacks grew from R3 billion in 2000 (when they were permitted) to R41 billion in 2009.¹⁹ In tandem, fixed investment has fallen and the financial sector's share of gross value added was, on average between 2005 and 2015, almost double its 1960-1993 average. Short-term capital inflows have also contributed towards altering the structure of bank lending as bank liabilities, and subsequently assets, become more short-term (a process exacerbated by certain policy measures as discussed below, see Isaacs forthcoming). Amongst other changes, this has meant greater lending to households and the concomitant crisis of over indebtedness; residential mortgages, for example, rose from 25% of total bank loans, deposits and advances in 2000 to 35% in 2010, after which they fell due to stricter legislation, an economic slowdown, and over indebtedness, while other loans to households rose from 12% in 2008 to 18% in 2014 (Isaacs forthcoming).

This has been extremely beneficial to, and sustained by, not only foreign financial investors, but also domestic actors. The deep financial markets and a sophisticated and highly concentrated financial sector, including large institutional investors, has meant substantial overlap between the imperatives imposed by international financial markets and the interests of domestic finance capital. Many of South Africa's largest (financial and non-financial) corporations, for instance, participate heavily, either locally or through offshore trading arms, in the rand-asset markets described above. For instance, in 2013 38% of OTC rand foreign exchange derivative trades (79% of which, as noted above, were traded offshore) had at least one South African counterparty, 30% of which were 'other financial institutions' (BIS 2016b, own calculations). Indeed, such markets are essential to the operations of these now heavily internationalised corporations,²⁰ while their participation in these markets further exposes them to financialisation pressures. Similarly, asset price appreciation, again sustained by capital inflows, benefits domestic institutional financial investors as well as a small wealthy elite, thus exacerbating inequality.

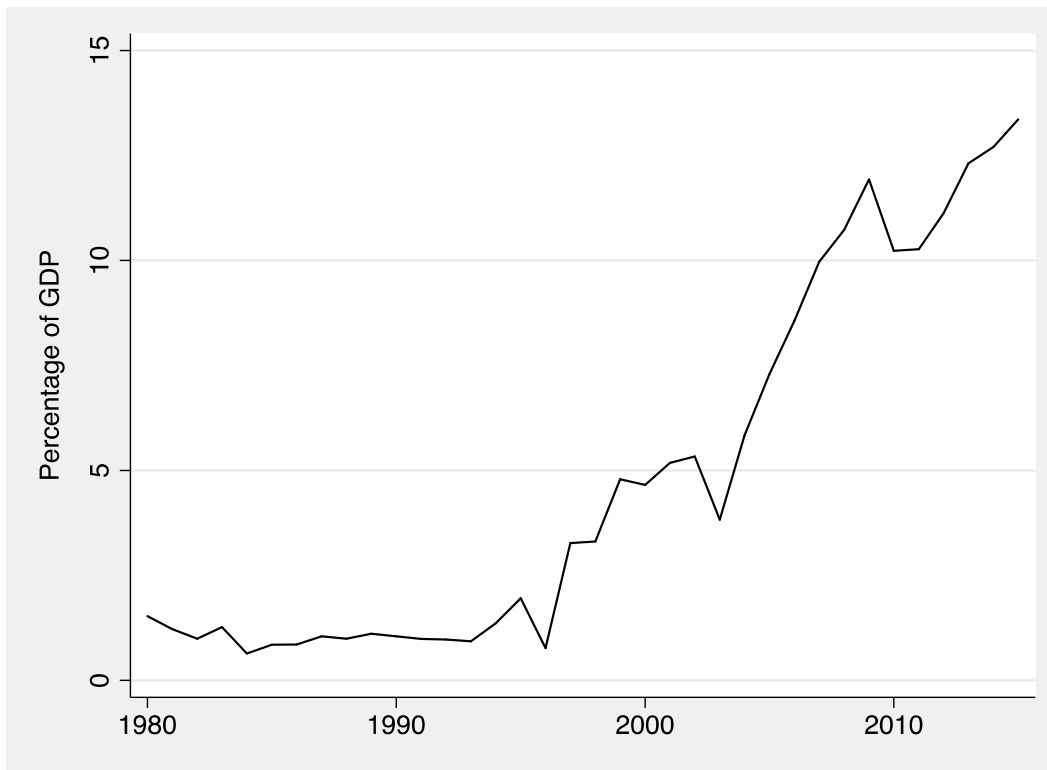
In sum, South Africa's changing patterns of global financial integration have given rise to NFEV manifest in the fact that domestic asset prices have been characterised by large swings, often independent of domestic conditions. These patterns of global financial integration constitute central international elements of South Africa's financialisation, indicating the structural power that international financial markets and actors have come to exert in the South African case. These occurrences have also played an important role in the financialisation of the domestic economy – facilitating the intensive and extensive expansion of finance and the associated restructuring of capitalist accumulation and reproduction – and highlighting an alignment of interests between international financial market actors and domestic actors. These processes have also been closely linked to prevailing monetary and financial policy and policy responses; an argument which we turn to next.

State policy in the context of financialisation and new forms of external vulnerabilities

South Africa's changing financial integration and the NFEV that have arisen have had important repercussions for domestic monetary policy, in particular the accumulation of reserves and consequent sterilisation operations. These policy responses, together with the prevailing monetary policy framework of capital account liberalisation, inflation targeting, and central bank independence have reinforced the patterns of global financial integration and NFEV and further bolstered financialisation in South Africa.

Figure 9 shows the substantial increase in South Africa's foreign exchange reserves from under 1% of GDP in 1996 to over 14% in 2016.

Figure 9 Reserves as a percentage of GDP (%) (1980-2016)



Source: IMF (2017b, 2017a) via Quantec, own calculations

As observed for other DEC's (Rodrik 2006, Paineira 2009), reserve accumulation – although intended, in part, to replace the costly exchange rate interventions of the late 1990s – has brought its own considerable costs (Mminele 2013, SARB 2014). One dimension of this is that the SARB incurs a higher rate of interest on its own liabilities than the yield received on international reserves. For instance, the spread between the US

Treasury Bill rate and the South African repo rate²¹ averaged 7.6% in the post-apartheid period.²² In so far as reserve accumulation is a response to increased international investment in rand-denominated assets and the associated risks, the SARB's loss is counterpoised by the gains made by international investors, highlighting reserve accumulation not only as a net transfer of value between states, but also between public and private spheres. At the same time, reserve accumulation has been essential for guaranteeing international investors rand-dollar convertibility and ease of exit, thus encouraging the patterns of capital inflows previously described.

A second policy response has been the use of 'sterilisation' operations by the SARB to drain the excess liquidity resulting from reserve accumulation. This has been particularly necessitated by the inflation-targeting regime and a monetary policy framework which views inflation as the result of an expanding monetary base (SARB 2012). In addition to levying a cash reserve requirement on commercial banks, the SARB uses various types of open-market instruments, such as SARB debentures, reverse repos and foreign-exchange swaps to sterilise its FX purchases (2016, p. 2). Sterilisation through borrowing (reverse repos and debentures) doubled between 2002 and 2010 from R22.5 billion to R45 billion after which it fell due to a decline in demand for SARB liabilities together with the National Treasury agreeing to assist in sterilisation due to its high costs.²³ The cost to the SARB occurs because the interest paid on these debentures and reverse repos exceeds that earned on its liquidity provision to the banking sector;²⁴ Brink and Kock (2010) calculate this differential at 30 basis points and estimate that between June 2007 and June 2009 this cost the SARB just more than R5bn.

Sterilisation also serves to reinforce both domestic and international dimensions of financialisation. Such liquid assets yield relatively high and safe returns and are attractive to, and profitable for, both domestic and international financial investors. These instruments have become increasingly short-term, particularly since the introduction of new 7 and 14-day reverse repos and debentures in 2012, ensuring greater market liquidity. The shift is particularly accentuated regarding debentures, with 56-day debentures accounting for 48% of the total value of debentures in 2008 and only 2% in 2016; in 2016 the new 7 and 14-day debentures accounted for 62% and 15% of total debentures, respectively (SARB 2017, provided directly to the authors by SARB).

The attractiveness of sterilisation assets has led to an expansion of domestic debt, both at the SARB and in the private sector, as the private sector borrows to acquire these new assets and/or uses them as collateral to increase their borrowing (Painceira 2012). Moreover, given the short-term nature of these SARB instruments, the liquidity of bank balance sheets has been enhanced which has served as the basis for the bank issuing its own securities. This enhanced liquidity of banks' balance sheets has affected credit allocation, leading to shorter-term lending (often to households) and speculative investment (Isaacs forthcoming, Gabor 2010, Painceira 2012). At the same time, the ability of domestic banks to hold short-term public securities has enabled them to capture more foreign resources, thus reinforcing the international aspect of South Africa's financialisation process.

Similarly, the prescriptions at the heart of South African monetary policy – far-reaching capital account liberalisation accompanied by an inflation-targeting regime and central bank independence – have served to facilitate and reinforce the patterns of international capital flows, associated vulnerabilities, and domestic financialisation. Financial liberalisation, has, of course, made possible the trading of rand assets discussed above. An important distinguishing feature of financial liberalisation under financialisation, however, is the maintenance of sweeping capital account openness even in the face of crisis and at the expense of the domestic economy. For instance, in the wake of the global financial crisis, despite the gyrations in domestic asset prices, South African foreign exchange controls were further relaxed with the express purposes of allowing foreign capital to exit the market (Baumann and Gallagher 2013). This stands in marked contrast to the manner in which DEC's responded to the 1997/8 financial crisis, in which affected central banks contracted domestic liquidity in an attempt to stabilise the exchange rate and achieve domestic stability (Painceira 2010). Some attempt has been made to influence the exchange rate (Marcus 2012) but this is difficult within the current monetary framework (Geršl and Holub 2006, Berganza and Broto 2012, BIS 2013) as market-based interventions often reinforce both the patterns of flows and market trading described and the subsequent exchange rate dynamics.

Inflation targeting via the manipulation of short-term interest rates has sustained relatively high real interest rates and thus capital inflows; this has undermined interest rates as the key policy lever as such capital flows themselves expand the money supply (Isaacs 2014, Hassan 2015). Arguably, high interests have been maintained explicitly to ensure a steady stream of short-term capital inflows as the nature of financial integration has made the South African economy reliant on such flows to balance the current account. With inflation in South Africa strongly influenced by the exchange rate (Kantor 2011), an effect strengthened since trade and capital account liberalisation (Aron *et al.* 2012), attempting to control inflation without managing the exchange rate is self-defeating.²⁵ Similarly, central bank transparency and 'credibility' – emphasised within inflation-targeting regimes – can encourage rand asset trading and speculative one-sided bets by traders as the future actions of the central bank are pre-announced and known (Kaltenbrunner and Painceira 2017).

In sum, the monetary policy framework outlined here – prioritising liberalised capital accounts and inflation targeting while relying on market-based interventions such as reserve accumulation and sterilisation to stabilise economic prices – has been shown not only to fail to contain the vulnerabilities that arise from the patterns of flows and trading, but to reinforce them and international and domestic financialisation processes, while incurring their own significant costs. This reflects a privileging of the interests of international investors and (internationalised) domestic finance capital, chiefly by ensuring market liquidity and guaranteeing immediate rand-dollar convertibility and preserving ease of exit.

Conclusion

In this paper we have interrogated the changing nature of South Africa's global financial integration, describing quantitative and qualitative changes in the trading of rand denominated assets by international investors. Regarding the latter we particularly highlighted the increasingly complex, short-term, and local currency denomination of these assets used to generate capital gains rather than reap income from long-term investment. These developments are central international dimensions of South Africa's financialisation and have given rise to NFEV, manifesting in large and often sudden capital and domestic asset price movements, largely independent of domestic economic conditions.

While these developments have been observed for several DEC's, the paper noted some characteristics strongly present in the South African case. First, the substantial offshore trading of South African assets and the heavy involvement of international investors in equity markets. Second, the rapid turnover of South African (rand denominated) bonds. Third, large and liquid rand currency markets. Fourth, the large offshore trading of South African rands and the dominance of non-residents in onshore rand markets.

All of this has meant that economic prices, particularly the exchange rate, have been determined by the patterns of capital flows and rand-asset trading, all characterised by large swings and sudden adjustments largely disconnected from domestic economic conditions. This places market-based monetary policy in a predicament. In fact, the paper shows that the policy responses undertaken, and the prevailing monetary policy regime, reinforce both patterns of trading and subsequent vulnerabilities, while carrying their own costs. Despite the domestic costs, financial integration has been managed in a manner that prioritises the interests of, and strengthens the structural power of, international financial markets. This has benefited local and foreign finance capital and deepened domestic and international financialisation.

On this basis it is critical that alternative or supplementary policy interventions be considered taking into account South Africa's position as a relatively small open economy and its necessary integration within the global economy. Towards this end monetary policy must be reoriented to serve developmental ends; this will entail moving away from an almost exclusive reliance on market-based instruments. Such policies, needed both locally and globally, cannot simply 'manage' the current order but must seek to reengineer the terms upon which DEC's are integrated into the global economy in tandem with the reorientation of the local economy away from a financialised growth path.

Acknowledgements

The authors would like to thank the two anonymous peer reviewers and the special issue editors for their probing and helpful comments.

Funding

The author(s) received no financial support for the research, authorship, and/or publication of this article.

¹ Such an approach also augments the attractiveness of secondary and derivative markets, reinforcing financialisation in other asset markets.

² The term ‘fundamentals’ is taken from the largely neoclassical literature that discusses the volatility of capital flows to DECs and the occurrence of balance of payments crises. Although ill-defined even in that literature, it largely refers to all factors that might cause such volatility and crises, first and foremost the current account, fiscal balance, inflation and more recently balance sheet weaknesses. Despite being problematic from a heterodox perspective, we use this term to highlight a cluster of economic variables, stressed within traditional neoclassical models, which, we argue, are unable to account for recent dynamics in international finance.

³ In the case of foreign investments in domestic currency assets, funded on international financial markets, the currency risk switches from the domestic to the foreign agent. This increases the latter’s sensitive to the (expected) exchange rate and consequently its volatility.

⁴ It is important to note, that the NFEV do not mean that traditional sources of DECs’ external vulnerability cease to matter. Quite to the contrary, frequently DECs’ international financialisation might cause such traditional vulnerabilities, such as current account deficits due to sustained exchange rate appreciations. What is analytically important, is that these traditional vulnerabilities are not a precondition anymore for large and volatile capital and exchange rate movements and might be superseded by the NFEV discussed in this paper.

⁵ Reserve accumulation is usually argued to be prompted as a precautionary response to exchange rate volatility and possible liquidity shocks due to flow reversals; a means to smooth large exchange rate movements, in particular strong appreciations; and as a way of attracting international investors via a tacit guarantee of dollar liquidity provision (Moghadam 2010).

⁶ ‘Non-resident’ refers to all offshore investors including domestic corporations/persons who may be trading through an offshore entity, reflecting ‘internationalised’ investors rather than ‘foreign’ investors *per se*.

⁷ The recent fall in market turnover occurs for both residents and non-residents (more dramatically so for the latter) and may reflect a movement by institutional investors (although not necessarily other investment funds) towards adopting longer-term holdings as is the case elsewhere in the world (Marcus 2012, see also Haberly and Wojcik 2016).

⁸ This internationalisation of South African equity trading is a long-standing trend with a 1987 Securities Exchange Commission (SEC) report noting that the “leading sources of ADRs over the last 10 years have been Australia (308 registrations), the United Kingdom (174), Japan (149), and South Africa (142)” (quoted in Saunders 1993, p. 51).

⁹ South Africa’s currency started to depreciate earlier than those of its peers (for example, the Brazilian real and Turkish lira) and does so again from 2011. This, however, corresponds with increased turnover of rand foreign exchange contracts, a portion of which served to hedge the currency risk associated with on-going bond and equity purchases. Further, such depreciation did not necessarily wipe out capital gains, for instance, between the start of 2005 and the end of 2007, the currency depreciated 21% but the JSE All Share Index appreciated by 130%.

¹⁰ Carry trade is most classically borrowing in a low-interest ‘funding currency’, buying a higher-interest ‘target currency’ in the spot market, using the proceeds to purchase fixed-income high-yield securities denominated in the target currency (often government bonds), and finally converting the payoff back into the funding currency. However, carry trade can also be implemented via derivative markets, for example by selling the currency forward when it is at a significant forward premium. Currency options can also be used to hedge the exchange rate risk to which carry trade exposes the arbitrage (Galati *et al.* 2007).

¹¹ Between 1990 and 2015 the interest rate on South African government securities was 5 to 20% higher than the overnight interbank rate for the Japanese yen and the Swiss franc (FRED 2016), two common funding currencies (Galati *et al.* 2007, Hassan and Smith 2011).

¹² The SARB currency trading data only show transactions involving one domestic party; offshore rand trading is discussed below.

¹³ Rand carry trade has also been shown to be highly profitable and more so than the same frequency trading on the JSE All Share Index (Hassan and Smith 2011).

¹⁴ The currency can also be traded as a proxy for other less-liquid asset classes that play a dominant role in the South African economy and tend to move in tandem with the rand, such as certain commodities.

¹⁵ Ehlers and Packer (2013) note that in South Africa there is a strong correlation between mutual fund flows (a proxy for the investment activity of international investors) and foreign exchange market turnover.

¹⁶ The rand measures as one of the most volatile currencies globally.

¹⁷ The real effective exchange rate moves in sync with the nominal rate, particularly from the early 2000s onwards, showing that the operations of international investors have a significant impact on the competitiveness of the South African economy, and ultimately its productive structure.

¹⁸ As discussed in footnote 4, that these factors came to dominate exchange rate movements does not, however, mean that 'traditional' vulnerabilities disappeared. Notably, the depreciation of the rand from 2005 onwards is in line with a growing current account deficit, which went from 0.8% in 2003 to 5.5% in 2008. Our point is that in the new era of international financialisation such traditional vulnerabilities gain less and less significance in influencing capital flows.

¹⁹ Long-term data on share buybacks is not available in South Africa (see Bester 2008, Madubela 2011, Wesson *et al.* 2015).

²⁰ At the end of apartheid the major South African corporations internationalised their operations by (sometimes dual) listing offshore and foreign expansion and acquisitions, and become integrated into international supply chains. South African financial sector firms also have large international operations and portfolios (see Isaacs forthcoming).

²¹ US Treasury Bill rate and the South African repo rate are used as indicative measures as the SARB does not provide data on the currency denominations or market instruments that comprise its reserve portfolio and not all local borrowing by the SARB will be at the repo rate.

²² A large share of these reserves are 'borrowed' in the sense that they are due to (short-term) capital inflows rather than current account surpluses (Brink and Kock 2010, Akyüz 2014b, UNCTAD 2015). As private foreign investors receive higher returns from their South African investments, low returns on foreign reserves can also worsen the current account (UNCTAD 2015, p. 32).

²³ This assistance is reflected as National Treasury 'sterilisation deposits' with the SARB which amounted to R67bn in March 2016, equal (in real terms) to the peak in SARB sterilisation borrowing in 2010/11; this avoids sterilisation costs but is at the expense of other expenditure (Marcus 2012, Mminele 2013, National Treasury 2016b, p. 24).

²⁴ Given exchange rate depreciation it can be argued that the increased rand value of the dollar reserves counterweighs these costs.

²⁵ Inflation-targeting regimes explicitly prioritise domestic price stability to the exclusion of managing the exchange rate (for a critique of this see Cordero 2008, Rodrik 2008). However, many countries with inflation-targeting regimes still intervene, via open market transactions in a somewhat ad hoc manner, to influence exchange rate movements. The SARB has done so but, from the early 2000s, sparingly and reluctantly (for example Marcus 2012).

References

- Addleson, M., 1992. Monetary Policy in the 1970s and 1980s. In: S. Jones, ed. *Financial Enterprise in South Africa Since 1950*. Palgrave Macmillan, 33–61.
- Akyüz, Y., 2013. *The Financial Crisis and the Global South: A Development Perspective*. Pluto Press.
- Akyüz, Y., 2014a. *Internationalization of Finance and Changing Vulnerabilities in Emerging and Developing Economies*. United Nations Conference on Trade and Development, No. 217.
- Akyüz, Y., 2014b. *Liberalization, Financial Instability and Economic Development*. Anthem Press.
- Akyüz, Y., 2017. *Playing with Fire: Deepened Financial Integration and Changing Vulnerabilities of the Global South*. Oxford University Press.
- Arestis, P., 2001. *Recent banking and the financial crises: Minsky versus the financial liberalizationists*. Edward Elgar Publishing, Chapters.
- Arestis, P. and Glickman, M., 2002. *Financial crisis in Southeast Asia: dispelling illusion the Minskyan way*. University of East London, UEL, Department of Economics, Working Paper No. 22.
- Aron, J., Farrell, G., Muellbauer, J., and Sinclair, P., 2012. *Exchange Rate Pass-through to Import Prices, and Monetary Policy in South Africa*. South African Reserve Bank, South African Reserve Bank Working Paper No. WP/12/08.
- Aron, J., Kahn, B., and Kingdon, G., eds., 2009. *South African Economic Policy under Democracy*. First Edition. Oxford University Press, USA.
- Aron, J., Leape, J., and Thomas, L., 2010. Foreign Portfolio Investment and Capital Markets in South Africa. *MIMEO*.
- Ashman, S. and Fine, B., 2013. Neo-liberalism, varieties of capitalism, and the shifting contours of South Africa's financial system. *Transformation: Critical Perspectives on Southern Africa*, (81/82), 144–178.
- Ashman, S., Fine, B., and Newman, S., 2011. The Crisis in South Africa: Neoliberalism, Financialization and Uneven and Combined Development. *Socialist Register*, 47, 174–195.
- Ashman, S., Mohamed, S., and Newman, S., 2013. *The financialization of the South African economy and its impact on economic growth and employment*. UNDESA.
- Baumann, B. and Gallagher, K., 2013. *Post-Crisis Capital Account Regulation in South Korea and South Africa*. Political Economy Research Institute, University of Massachusetts at Amherst, Working Paper No. wp320.
- Beck, T., Demirguc-Kunt, A., Levine, R., Čihák, M., and Feyen, E., 2016. Financial Development and Structure Dataset (updated June 2016).
- Berganza, J.C. and Broto, C., 2012. Flexible inflation targets, forex interventions and exchange rate volatility in emerging countries. *Journal of International Money and Finance*, 31 (2), 428–444.
- Bester, P.G., 2008. Shareholder distribution choices for industrial companies listed on the JSE: share buybacks versus dividends. Thesis. Stellenbosch : University of Stellenbosch.

- BIS, 2007. *Financial stability and local currency bond markets*. Bank for International Settlements, CGFS Paper.
- BIS, 2013. *Market volatility and foreign exchange intervention in EMEs: what has changed?* Bank for International Settlements.
- BIS, 2016a. *Triennial Central Bank Survey: Foreign exchange turnover in April 2016*. Bank of International Settlements, Monetary and Economic Department.
- BIS, 2016b. BIS derivatives statistics: BIS WebStats.
- BIS, 2017. Debt securities statistics: BIS WebStats [online]. Available from: <http://stats.bis.org/bis-stats-tool/org.bis.stats.ui.StatsApplication/StatsApplication.html> [Accessed 7 Jun 2017].
- Bloomberg, 2017. Bloomberg data terminal.
- Bond, P., 2013. Historical varieties of space, scale and speculation in South Africa: the uneven and combined geographical development of financialised capitalism. *Transformation: Critical Perspectives on Southern Africa*, 82 (1), 179–207.
- Bonizzi, B., 2013. Financialization in Developing and Emerging Countries. *International Journal of Political Economy*, 42 (4), 83–107.
- Bonizzi, B., 2017. An Alternative Post-Keynesian Framework for Understanding Capital Flows to Emerging Markets. *Journal of Economic Issues (Taylor & Francis Ltd)*, 51 (1), 137–162.
- Brink, N. and Kock, M., 2010. *Central bank balance sheet policy in South Africa and its implications for money-market liquidity*. South African Reserve Bank, Working Paper No. WP/10/01.
- Carmody, P., 2002. Between Globalisation and (Post) Apartheid: The Political Economy of Restructuring in South Africa. *Journal of Southern African Studies*, 28 (2), 255–275.
- Chabane, N., Goldstein, A., and Roberts, S., 2006. The changing face and strategies of big business in South Africa: more than a decade of political democracy. *Industrial and corporate change*, 15 (3), 549–577.
- Chang, R. and Velasco, A., 1998. *The Asian Liquidity Crisis*. National Bureau of Economic Research, Inc, NBER Working Paper No. 6796.
- Cordero, J.A., 2008. Economic growth under alternative monetary regimes: inflation targeting vs real exchange rate targeting. *International Review of Applied Economics*, 22 (2), 145–160.
- Correa, E. and Vidal, G., 2012. Financialization and Global Financial Crisis in Latin American Countries. *Journal of Economic Issues*, 46 (2), 541–547.
- Correa, E., Vidal, G., and Marshall, W., 2012. Financialization in Mexico: trajectory and limits. *Journal of Post Keynesian Economics*, 35 (2), 255–275.
- Doucette, J. and Seo, B., 2011. *Limits to Financialization? Locating Financialization within East Asian Exportist Economies*. Hitotsubashi University Repository.
- Ehlers, T. and Packer, F., 2013. FX and derivatives markets in emerging economies and the internationalisation of their currencies. *BIS Quarterly Review*, (December 2013), 55–67.
- Emerging Market ADRs List, 2017. *Emerging Market Skeptic*.
- Ertürk, K.A., 2005. Economic Volatility and Capital Account Liberalization in Emerging Countries. *International Review of Applied Economics*, 19 (4), 399–417.

- Ertürk, K.A., 2006. On the Changing Nature of Currency Crises. *In: Financial Developments in National and International Markets*. Palgrave Macmillan, London, 25–39.
- Farrell, G. and Todani, K., 2004. Capital flows, exchange control regulations and exchange rate policy: The South African experience. Presented at the OECD seminar “How to reduce debt costs in Southern Africa?”, Bond Exchange of South Africa.
- Fine, B., 2013. *Towards a Material Culture of Financialisation*. Financialisation, Economy, Society & Sustainable Development (FESSUD) Project, Working Paper Series No. 15.
- FRED, 2016. Federal Reserve Economic Data - FRED - St. Louis Fed.
- FRED, 2017. Federal Reserve Economic Data - FRED - St. Louis Fed.
- Gabor, D., 2010. (De)Financialization and Crisis in Eastern Europe. *Competition & Change*, 14 (3–4), 248–270.
- Galati, G. and Heath, A., 2007. What drives the growth in FX activity? Interpreting the 2007 triennial survey. *BIS Quarterly Review*, ([object Attr]).
- Galati, G., Heath, A., and McGuire, P., 2007. Evidence of carry trade activity. *BIS Quarterly Review*, (September 2007), 27–41.
- Gallagher, K., 2012. *The Myth of Financial Protectionism: The New (and old) Economics of Capital Controls*. Political Economy Research Institute, University of Massachusetts at Amherst, No. wp278.
- Geršl, A. and Holub, T., 2006. Foreign Exchange Interventions Under Inflation Targeting: The Czech Experience. *Contemporary Economic Policy*, 24 (4), 475–491.
- Grabel, I., 1996. Marketing the third world: The contradictions of portfolio investment in the global economy. *World Development*, 24 (11), 1761–1776.
- Guichard, S., 2017. *Findings of the recent literature on international capital flows: Implications and suggestions for further research*. OECD Publishing, No. 1410.
- Haberly, D. and Wojcik, D., 2016. *Earth Incorporated: Centralization and Variegation in the Global Company Network*. Rochester, NY: Social Science Research Network, SSRN Scholarly Paper No. ID 2699326.
- Hassan, S., 2015. *Speculative Flows, Exchange Rate Volatility and Monetary Policy- the South African Experience*. South African Reserve Bank, Working Paper Series No. WP/15/02.
- Hassan, S. and Smith, S., 2011. *The Rand as a Carry Trade Target: Risk, Returns and Policy Implications*. Economic Research Southern Africa, Working Paper No. 235.
- Havemann, R., 2014. The Exchange Control System under Apartheid. *Economic History of Developing Regions*, 29 (2), 268–286.
- Hodge, D., 2005. *Volatility of the Real Exchange Rate of the Rand: 1990 – 2004*. HSRC.
- IMF, 2015. International Financial Statistics (IFS).
- IMF, 2016. Balance of Payments and International Investment Position [online]. Available from: <http://data.imf.org/?sk=7A51304B-6426-40C0-83DD-CA473CA1FD52&ss=1390030341854> [Accessed 6 Oct 2016].
- IMF, 2017a. International Financial Statistics (IFS).
- IMF, 2017b. World Economic Outlook (WEO).

- Isaacs, G., forthcoming. Financialisation in post-apartheid South Africa. PhD. SOAS, University of London, London, UK.
- Isaacs, G., 2014. *The Myth of “Neutrality” and the Rhetoric of “Stability”*: *Macroeconomic Policy in Democratic South Africa*. PERSA: Political Economy of Restructuring in South Africa, Working Paper No. 1.
- Isaacs, G., 2015. *Financialisation and Development: South African Case Study*. Fessud.
- Jones, S., 1992. The Johannesburg Stock Market and Stock Exchange, 1962-87. In: S. Jones, ed. *Financial Enterprise in South Africa Since 1950*. Palgrave Macmillan, 273–301.
- Kaltenbrunner, A., 2015. A post Keynesian framework of exchange rate determination: a Minskyan approach. *Journal of Post Keynesian Economics*, 38 (3), 426–448.
- Kaltenbrunner, A. and Karacimen, E., 2016. The contested nature of financialization in emerging capitalist economies. In: *The Great Financial Meltdown*. Edward Elgar Publishing, 287–304.
- Kaltenbrunner, A. and Paineira, J.P., 2015. Developing countries’ changing nature of financial integration and new forms of external vulnerability: the Brazilian experience. *Cambridge Journal of Economics*, 39 (5), 1281–1306.
- Kaltenbrunner, A. and Paineira, J.P., 2017. The Impossible Trinity: Inflation Targeting, Exchange Rate Management and Open Capital Accounts in Emerging Economies. *Development and Change*, 48 (3), 452–480.
- Kantor, B., 2011. Interest rates: Surprise, surprise – SA specific (monetary policy) risks influence the JSE and the rand.
- Kantor, B., 2013. Real exchange rates: All about capital flows. *ZAeconomist.com*.
- Karwowski, E., 2015. The Finance–Mining Nexus in South Africa: How Mining Companies Use the South African Equity Market to Speculate. *Journal of Southern African Studies*, 41 (1), 9–28.
- Karwowski, E., 2016. Financial operations of non-financial firms: the case of South Africa. PhD. SOAS, University of London, London.
- Karwowski, E. and Stockhammer, E., 2016. *Financialisation in Emerging Economies: A Systematic Overview and Comparison with Anglo-Saxon Economies*. School of Economics, Kingston University London, Economics Discussion Paper No. 2016–11.
- Klingebiel, D., 2014. *Emerging Markets Local Currency Debt and Foreign Investors: Recent Developments*.
- Krugman, P., 1979. A Model of Balance-of-Payments Crises. *Journal of Money, Credit and Banking*, 11 (3), 311–325.
- Lapavitsas, C., 2009. Financialisation Embroils Developing Countries. *Papeles de Europa*, 19, 108–139.
- Lapavitsas, C., 2014. *Profiting Without Producing: How Finance Exploits Us All*. London; New York: Verso.
- Madubela, A.D., 2011. What shareholder information on the shareholder spread is disclosed in the financial statements of JSE listed entities in accordance with listing requirements of the JSE? Thesis. Stellenbosch: University of Stellenbosch.
- Marcus, G., 2012. *Challenges to South African monetary policy in a world of volatile capital flows*.

- Marois, T., 2011. Emerging Market Bank Rescues in an Era of Finance-Led Neoliberalism: A Comparison of Mexico and Turkey. *Review of International Political Economy*, 18 (2), 168–196.
- Miyajima, K., Mohanty, M., and Chan, T., 2012. *Emerging market local currency bonds: diversification and stability*. Bank for International Settlements, BIS Working Paper No. 391.
- Mminele, D., 2013. *Note on the foreign exchange market operations of the South African Reserve Bank*. Bank for International Settlements, BIS Papers chapters.
- Moghadam, R., 2010. *Reserve Accumulation and International Monetary Stability*. International Monetary Fund.
- Mohamed, S., 2008. The impact of international capital flows on the South Africa economy since the end of apartheid.
- Mpofu, T.R., 2013. Real Exchange Rate Volatility and Employment Growth in South Africa: The Case of Manufacturing.
- Mpofu, T.R., 2016. *The Determinants of Exchange Rate Volatility in South Africa*. Economic Research Southern Africa, Working Paper No. 604.
- National Treasury, 2016a. *Budget Review 2016*. Government of the Republic of South Africa.
- National Treasury, 2016b. *Debt Management Report 2015-16*. Republic of South Africa.
- Newman, S., 2014. *Financialisation and the Financial and Economic Crises: The Case of South Africa*. Financialisation, Economy, Society & Sustainable Development (FESSUD) Project, Working Paper No. 26.
- OECD, 2017. OECD Main Economic Indicators (MEI).
- Painceira, J.P., 2009. *Developing Countries in the Era of Financialisation: From Deficit Accumulation to Reserve Accumulation*. Research on Money and Finance, Discussion Paper No. 4.
- Painceira, J.P., 2010. *The Financial Crisis of 2007-9 and Emerging Countries: The Political Economy Analysis of Central Banks in the Brazilian and Korean Economies*. Research on Money and Finance, Discussion Paper No. 22.
- Painceira, J.P., 2012. *Financialisation, Reserve Accumulation and Central Bank in Emerging Economies: Banks in Brazil and Korea*. Research on Money and Finance, Discussion Paper No. 38.
- Palma, J.G., 2012. *How the full opening of the capital account to highly liquid financial markets led Latin America to two and a half cycles of 'mania, panic and crash'*. Faculty of Economics, University of Cambridge, UK, Working Paper.
- Pauly, L.W., 2003. New Therapies from Contemporary Money Doctors: The Evolution of Structural Conditionality in the Bretton Woods Institutions. In: M. Flandreau, ed. *Money doctors: The experience of international financial advising 1850-2000*. International Studies in Money and Banking, vol. 26., 276–305.
- Powell, J., 2013. Subordinate financialisation: a study of Mexico and its non-financial corporations. PhD. SOAS, University of London, London.
- Radelet, S. and Sachs, J.D., 1998. The East Asian Financial Crisis: Diagnosis, Remedies, Prospects. *Brookings Papers on Economic Activity*, 29 (1), 1–90.
- Rime, D. and Schrimpf, A., 2013. The anatomy of the global FX market through the lens of the 2013 Triennial Survey. *BIS Quarterly Review*, ([object Attr]).

- Rodrigues Teles Sampaio, N.J., 2014. Financialisation in South Africa: examining the financial conduct of non-financial enterprises, banks and households. SOAS, University of London.
- Rodrik, D., 2006. *Understanding South Africa's Economic Puzzles*. National Bureau of Economic Research, Inc, NBER Working Paper No. 12565.
- Rodrik, D., 2008. The Real Exchange Rate and Economic Growth. *Brookings Papers on Economic Activity*, 39 (2 (Fall)), 365–439.
- SARB, 2012. Fact sheet 3: How to fight inflation.
- SARB, 2014. The international transmission of monetary policy - lessons learnt in South Africa. *In: BIS Papers chapters*. Bank for International Settlements, 321–331.
- SARB, 2015. Flow-of-Funds Data - South African Reserve Bank.
- SARB, 2016. *The South African Reserve Bank's system of accommodation*. South African Reserve Bank, Fact Sheet No. 9.
- SARB, 2017. Quarterly Bulletin Data - South African Reserve Bank.
- Sarno, L. and Taylor, M.P., 1999. Moral hazard, asset price bubbles, capital flows, and the East Asian crisis:: the first tests. *Journal of International Money and Finance*, 18 (4), 637–657.
- Saunders, M., 1993. American Depository Receipts: An Introduction to U.S. Capital Markets for Foreign Companies. *Fordham International Law Journal*, 17 (1), 48–83.
- Schaling, E. and Kabundi, A., 2014. The exchange rate, the trade balance and the J-curve effect in South Africa. *South African Journal of Economic and Management Sciences*, 17 (5), 601–608.
- Singleton, J. and Verhoef, G., 2010. Regulation, Deregulation, and Internationalisation in South African and New Zealand Banking. *Business History*, 52 (4), 536–563.
- South African ADR's [online], 2017. *International Investment Portal & Research Center*. Available from: http://www.site-by-site.com/adr/adr_rsa.htm [Accessed 5 Jul 2017].
- Stats SA, 2016. South African manufacturing production and the exchange rate | Statistics South Africa.
- The Full List of South African ADRs [online], 2017. Available from: <http://topforeignstocks.com/foreign-adrs-list/the-full-list-of-south-african-adrs/> [Accessed 5 Jul 2017].
- Tyson, J. and McKinley, T., 2014. *Financialization and the Developing world: Mapping the Issues*. Fessud, Working Paper Series No. 38.
- UNCTAD, 2015. Financialization and its Macroeconomic Discontents. *In: Trade and Development Report, 2015 – Making the international financial architecture work for development*. United Nations.
- Vasudevan, R., 2009. Dollar Hegemony, Financialization, and the Credit Crisis. *Review of Radical Political Economics*, 41 (3), 291–304.
- Wackernagel, M., 1997. Deft juggling gets Anglo off the hook. *Mail and Gaurdian*, 28 Nov.
- Wesson, N., Bruwer, B.W., and Hamman, W.D., 2015. Share repurchase and dividend payout behaviour: The South African experience. *South African Journal of Business Management*, 46 (3), 43–54.

Zettelmeyer, J. and Jeanne, O.D., 2002. "*Original Sin, Balance Sheet Crises, and the Roles of International Lending.*" International Monetary Fund, No. 02/234.