

PUBLIC ECONOMY PROJECT

at the Southern Centre for Inequality Studies

Fiscal Dimensions of South Africa's Crisis

Michael Sachs

March 2021

Public Economic Project
SCIS Working Paper | Number 15

*Southern Centre for Inequality Studies
University of the Witwatersrand*

www.wits.ac.za/scis

About the author

Michael Sachs is Adjunct Professor at the Southern Centre for Inequality Studies, University of the Witwatersrand, Johannesburg. The author was head of National Treasury's Budget Office between 2013 and 2017, and research coordinator at the head office of the African National Congress between 2001 and 2007. His corresponding email address is: michael.sachs@wits.ac.za

Acknowledgements

This paper was prepared as part of the SA Future Economy project at the Wits School of Governance with the support of Telkom. The Public Economy Project at the Southern Centre for Inequality Studies is funded by the Bill and Melinda Gates Foundation.

About the Public Economy Project

The Public Economy Project builds analytical capabilities on macro-fiscal policy, public economics and public financial management in South Africa. Its research generates evidence that is authoritative, policy relevant and accessible, with the aim of supporting public deliberation and engagement between government, social partners, and civil society.

About the Southern Centre for Inequality Studies

The Southern Centre for Inequality Studies (SCIS) is the first research institute of its kind in the global South. It draws on the intellectual resources of Wits University, and partner institutions in South Africa and beyond, to host a truly interdisciplinary research and policy project focusing on understanding and addressing inequality in the global South. Although there are a number of centres for the study of inequality worldwide, they are almost exclusively in the global north, and in the United Kingdom, and United States in particular. We believe that there are distinct drivers and characteristics of inequality in the South. The Southern Centre for Inequality Studies is a truly inter-disciplinary and intersectional research and policy institute located in the global south. Interdisciplinarity has been built into the Centre from the beginning, with thematic and policy focus areas that transcend traditional academic boundaries. This SCIS will ensure that the project objectives and the work undertaken by the various research initiatives and activities will result in a substantive outcome: an evidence based progressive policy programme to overcome inequality in South Africa, and advance our understanding of inequality in the global South.

Visit our website: www.wits.ac.za/scis

FISCAL DIMENSIONS OF SOUTH AFRICA'S CRISIS

Michael Sachs¹ | March 2021

1. INTRODUCTION

How did South Africa arrive at the fiscal crisis it currently faces? It was once thought that the democratic breakthrough of 1994 had heralded a “fiscal renaissance” (Ajam and Janine 2007), but the institutions and policy certainties that undergirded this confidence now face a bleak and painful reckoning.

In search of answers, this paper reviews fiscal data and policy development over the last two decades. The structure of public spending and the dynamics of debt accumulation are looked at in some detail, but less attention is given to taxation. I consider monetary policy only to the extent that it might (or might not) ease fiscal constraints. Macroeconomic trends are looked at insofar as they frame fiscal choices, but the broader context of the South Africa's crisis – rising unemployment and poverty, extreme and entrenched inequalities, economic stagnation rooted in deindustrialisation and financialisation, and the slow but inexorable disintegration of the Congress movement – is left in the background.

Indeed, South Africa's crisis is multidimensional, and a single lens such as fiscal policy is inevitably limited. Nevertheless, I believe it can help illuminate a wider terrain of historical change. As Schumpeter famously said:

[t]he spirit of a people, its cultural level, its social structure, the deeds its policy may prepare – all this and more is written in its fiscal history, stripped of all phrases. He who knows how to listen to its message here discerns the thunder of world history more clearly than anywhere else (quoted in Martin et al., 2009: 1).

An exaggerated claim no doubt, but there is truth enough in it.

In Section 2, I present evidence of a large expansion of public sector commitments in the decade after 2002. This expansion was deliberate and well-targeted. It included a permanent expansion of core public services (basic education, health and policing), an increase in pro-poor fiscal transfers, significant real improvements in the remuneration of public employees and a surge in public infrastructure investment.

Once these new commitments were entrenched, the fiscal policy context changed fundamentally in two ways, which Section 3 examines. First, the surge in South Africa's terms of trade (associated with the commodity price cycle) came to an end after 2011, and this was the fundamental cause of the subsequent economic stagnation. Domestic constraints – such as electricity supply disruptions or rising corruption – were initially of secondary importance, and South Africa's growth path largely followed that of its commodity-exporting peers. Second, the policy and governance environment in which fiscal policy operated changed after the ANC's Polokwane conference in 2007. This resulted in a fragmentation of political power and a shift of policy authority from the constitutional structures of government to opaque and diffuse processes within the ANC. In the face of slowing growth, government could not countenance fiscal adjustment. It committed itself to further expansions of public services but failed to articulate a fiscal programme to support these aspirations. Government relied on the assumption that economic

¹ Adjunct Professor, Southern Centre for Inequality Studies, University of the Witwatersrand, Johannesburg. michael.sachs@wits.ac.za This paper was prepared as part of the *SA Future Economy* project at the Wits School of Governance with the support of Telkom. The author was head of National Treasury's Budget Office between 2013 and 2017, and research coordinator at the head office of the African National Congress between 2001 and 2007. I am very grateful to Andrew Donaldson, Phillip Krause and Firoz Cachalia for important comments and corrections. I would also like to thank Imraan Valodia, Mzukisi Qobo, Nomfundo Ngwenya, David Francis, Kenneth Creamer and Kuben Naidoo for their support, guidance and suggestions in completing this project. Thanks also to two anonymous reviewers. The result is my responsibility alone.

growth would accelerate, which would allow its agenda to be implemented without social compromise. Eventually, a second blow to economic growth occurred after 2015, as investment (both private *and* public) collapsed in the face of incoherent policy, regulatory capture and an intensifying fiscal crisis.

Section 4 looks in greater detail at the fiscal weaknesses and imbalances that have built up over the last decade. Central government's expenditure envelope remained strictly controlled, but costs rose faster than budgets and a host of new fiscal obligations were taken on. This led to a deterioration in allocation of resources, as budgets for capital and the procurement of goods and services were driven down to extract fiscal space. Remuneration of public servants continued to improve faster than budget allocations, leading to falling levels of service provision in healthcare, basic education and policing. While these dynamics worsened the social crisis, the budget deficit remained entrenched and public debt continued to accumulate. I call the correlation of these factors "austerity without consolidation". While constrained across national and provincial departments, government consumption continued to increase through local government and extra-budgetary agencies. At the same time, the quality of public infrastructure investment deteriorated so severely that large additional subsidies were required out of general taxation to keep public enterprises and agencies afloat, and to offset the increased costs that these inefficiencies were imposing on society.

Section 5 looks at the current fiscal predicament, which has been significantly worsened by the Covid-19 crisis. The fiscal position is shown to be profoundly unsustainable. If not resolved, the result will be an unacceptable increase in the burden of interest payments, which will inevitably raise questions about the ability (or willingness) of the state to honour its obligations. South Africa is entering a period of fiscal distress. I argue that the crisis cannot be resolved solely by fiscal consolidation and that the path of consolidation proposed is so extreme that it is neither feasible nor desirable. An attempt at large fiscal adjustment is likely to impose unsustainable social pressures and choke off the recovery, imposing a second blow to livelihoods on top of the Covid-19 catastrophe. In this unenviable context, it is natural to look for innovative alternatives. I consider the arguments for central bank intervention to backstop the fiscal position and find them wanting, at least beyond a short-term palliative, as they would threaten to worsen rather than ease the crisis.

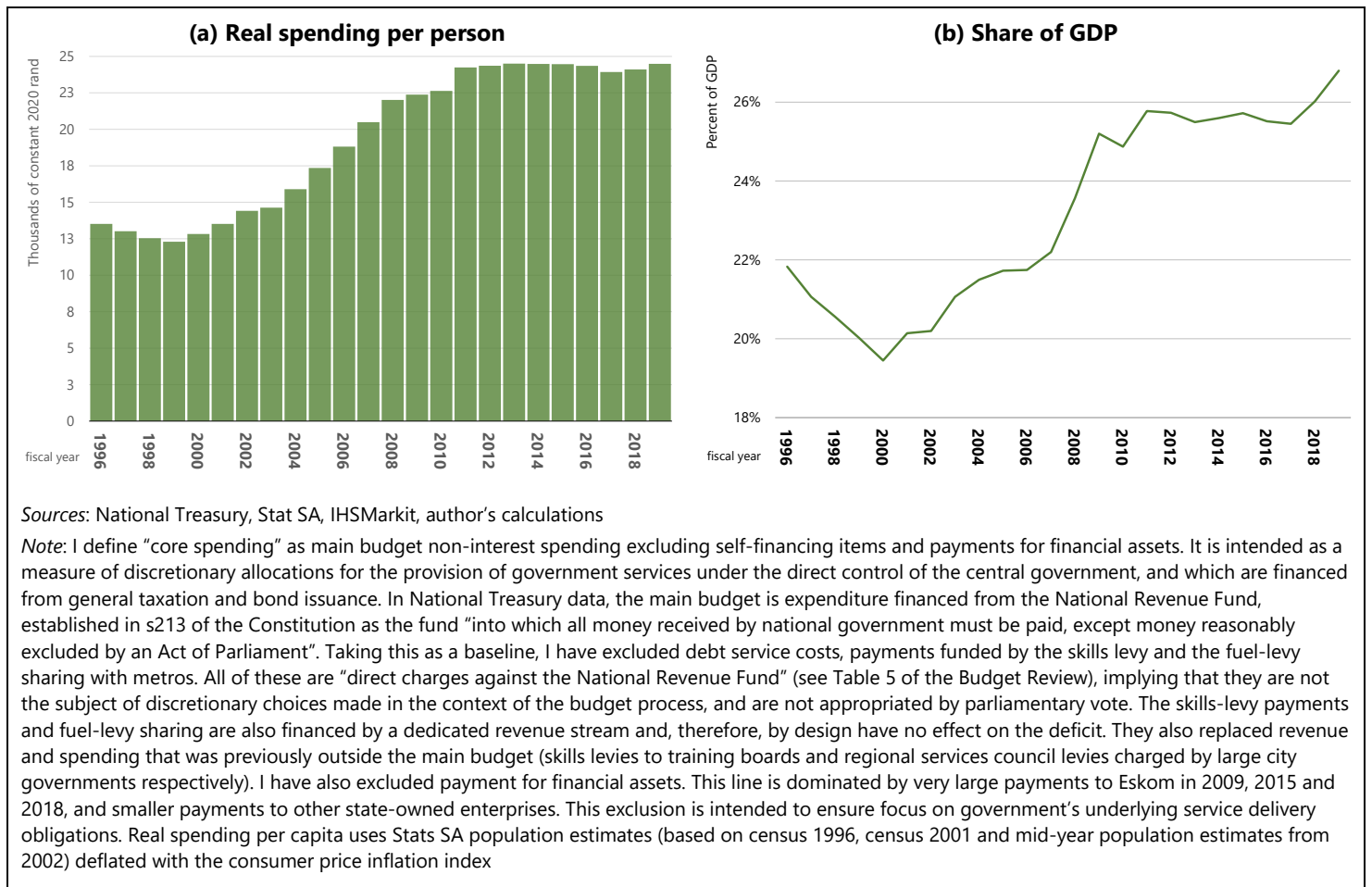
2. PERMANENT FISCAL COMMITMENTS

Prior to the first democratic elections in 1994 the African National Congress (ANC) set out its economic programme for post-apartheid South Africa. The Reconstruction and Development Programme (RDP) made clear that:

[G]overnment policy and mechanisms of raising finance are crucial to the success of the RDP. If they were to cause excessive inflation or serious balance of payments problems they would worsen the position of the poor, curtail growth and cause the RDP to fail. Government contributions to the financing of the RDP must, therefore, avoid undue inflation and balance of payments difficulties. In the long run, **the RDP will redirect government spending rather than increasing it as a proportion of GDP** (African National Congress, 1994: 142–43, emphasis added)

Once in government, the ANC initially left key economic functions, such as the finance minister and central bank governor, in the hands of "old order" functionaries. In 1985, global banks had dealt the apartheid state a devastating blow by refusing to roll over South Africa's debts. For several years before the election, the ANC had argued in favour of policies that would support capital inflows. The fledgling democratic state needed to restore the inflow of foreign savings and unlock the balance of payments constraint, and so continued down the path of liberalisation, open capital markets and fiscal prudence that had been opened by its apartheid predecessor (Gelb, 2004).

Figure 1: Main budget core spending (1996–2019)



In 1996, soon after the appointment of the first ANC Minister of Finance, and in the wake of the market turmoil that followed, government again committed itself to fiscal prudence with the Growth, Employment, and Redistribution (GEAR) strategy. While GEAR represented continuity with macroeconomic policy, it implied a new approach to engagement with the party militants, trade unions and civil society groups that constituted the ANC's broader activist base. In effect, at the time, the ANC sought to establish credibility with foreign investors by demonstrating its capacity to discipline and marginalise its mass base (Gelb, 2007). An IMF analyst later commended South Africa for having "successfully resisted pressure to use the budget as an instrument for quickly redistributing income" (Nowak, 2005: 3).

GEAR's fiscal objectives were to cut the budget deficit, avoid permanent increases in the overall tax burden, reduce public consumption spending and raise government's contribution to fixed investment. A rebalancing in the composition of expenditure would reduce the sum of wages, transfers, and the procurement of goods and services by three percentage points of GDP by the year 2000, to enable an increase in RDP-related capital spending (Republic of South Africa, 1996). This led to the downsizing of the public service employment levels over the next five years (Hassen and Altman, 2010), a process that coincided with integration of apartheid's divided racial bureaucracies and the reallocation of public spending towards the imperatives of democratic rule (Ajam, 2021).

Figure 1 shows the evolution of spending since the 1996 fiscal year.² I have defined “core expenditure” quite narrowly, to reflect choices under the direct control of central government; choices that are financed out of general taxation and borrowing.³ The fiscal consolidation associated with GEAR is clear to see between 1996 and 2000, but this is dwarfed by the rise in expenditure that followed. Over the decade from 2001, spending grew at a real rate of 7% each year on average. In today’s prices, between 1999 and 2011, government spending for each South African rose from R12 300 to R24 200. Over this period, tax rates were also eased (as explored further in Section 4.2): between 1994 and 2009, the corporate income tax rate was lowered from 40 per cent to 28 per cent; the top rate on personal income was lowered from 44 per cent in 1999 to 40 per cent in 2002, and relief for fiscal drag was provided far in excess of inflation.

Four elements were behind increased spending in the decade after 2002: an expansion of resource allocation to health, education and policing; improved remuneration for public servants; a rise in transfer payments to poor households; and a surge in infrastructure spending.

- (a) **Expansion of core government services:** Health, education and policing are the most labour-intensive of government services, absorbing 50 per cent of the national budget but more than 70 per cent of compensation spending. Extending these services necessarily entails increasing employment levels. As Table 1 shows, between 2002 and 2012 police numbers increased by more than 50 per cent, while employment in provincial health departments grew by 44 per cent. In both cases, the population served on average by each employee fell significantly. The growth in education employment was more moderate in absolute terms but made similarly impressive gains relative to the number of enrolled learners.
- (b) **Improved remuneration for public servants:** Agreements reached in 2007 resulted in vastly improved conditions of service for public employees. Revised salary structures in the form of “occupation-specific dispensations” were designed to attract and retain professional employees. The 2007 agreement also entrenched routine grade progression (annual promotions to a higher notch on the salary scale). While ostensibly linked to performance assessments, grade progression became nearly universal in practice, adding 1.5 per cent to the annual growth rate of the salary bill, over and above the annually negotiated “cost-of-living adjustments” (which were themselves typically pegged above consumer price inflation). Table 1 shows that provincial spending per employee in health departments outpaced consumer inflation by an annual average of nearly 5 per cent over the decade. The figure for education is closer to 4 per cent.
- (c) **A rise in transfer payments to poor households:** Figure 2(a) shows that transfers outpaced the surge in compensation spending.⁴ This expansion had two parts. First, cash transfers to households (i.e. social grants and similar payments) increased from 3 per cent of GDP in 2001 to 4.6 per cent a decade later. This line item also includes subsidies to university students from poor households, which accounts for the increase after 2016. Second (and equally significant), the funding of free basic water and electricity for poor households was financed through transfers to local government starting in 2001. These transfers increased from 0.8 to 2 per cent of GDP over the period.
- (d) **A surge in infrastructure spending:** Complementing the increases in recurrent transfers and consumption was a surge in capital spending shown in Figure 3, which distinguishes between outlays largely financed from the budget (in bars) and infrastructure spending leveraged from the balance

² Meaning the year of the 1996 budget – from here on, I drop the “fiscal year” qualification in the text, although this is indicated in the figures and tables as appropriate.

³ A fuller explanation is provided in the notes to Figure 1.

⁴ The rise in compensation spending observed in Figure 2 is less pronounced than might be expected from the data in Table 1. Note that, while police, education and health budgets were expanding, other labour-intensive elements of government services were contained. The defence force, for instance, benefitted from improved remuneration, but employment levels remained constant over the decade (see National Treasury, 2004; 2016b)

sheets of state-owned companies (the line). The former includes capital transfers from the main budget, which financed an expansion of capital spending by municipalities, provinces and national departments, and supported the investment programmes of public agencies responsible for roads, water systems and passenger rail. The budget also supported large projects such as the Gautrain and stadium construction in preparation for the World Cup in 2010. At the same time, Eskom inaugurated a new build programme in response to the first incidents of load shedding in 2007, while capital formation by Transnet doubled as a share of GDP, rising from 1 per cent to 2.1 per cent of GDP between 2005 and 2009.

All through this sustained extension of budgets, government ran a primary surplus.⁵ Despite the easing of tax rates, rapid economic growth ensured that taxation remained buoyant. Improving commodity prices coincided with the longest business cycle upswing in South Africa's history and an easing of global financing conditions. This combination of factors created a false sense of fiscal sustainability by reducing the costs of debt servicing and so expanding the apparent fiscal space for the provision of social services.

Table 1: Employment and real compensation in health, education and police

	fiscal year		Ave. annual growth
	2002	2012	
Health (provincial departments)			
Employees	216 092	310 896	3.7%
Compensation spending per employee (constant 2012 rand)	149 028	238 704	4.8%
Population per employee	174	133	-2.7%
Education (provincial departments)			
Employees	426 915	494 048	1.5%
Compensation spending per employee (constant 2012 rand)	179 317	262 869	3.9%
Learners per employee	28	25	-1.0%
Police			
Employees (fulltime equivalents)	131 560	197 872	4.2%
Compensation spending per employee (constant 2012 rand)	191 770	236 498	2.1%
Population per employee	286	209	-3.1%

Source: Author's calculations based on the following data. Employees and spending: National Treasury: Intergovernmental fiscal reviews: 2003 (Table 4.1 and Table 5.5), 2004 (Table 4.2 and Table 5.7) and 2014 (Tables 3.4, 4.12 and 11.1); Estimates of National Expenditure: 2003 (Table 25.1) and 2014 (Tables 25.3, 25.12 and 23.2). CPI deflator and mid-year population estimates: Stats SA; IHSMarkit. Learners enrolled in public school system: Department of Basic Education and Gustafsson (2020).

Note: Health and education employee numbers and compensation spending reflect the budgets for headcounts and compensation of both professional and administrative employees in provincial government. Employment in the relevant national and municipal functions is excluded from both these sectors. Police reflects total employment in the national budget vote for safety and security. It excludes provincial and local employees carrying out policing functions and includes many employees who may not be police officers. Compensation spending is deflated using a headline consumer price index.

⁵ The primary balance is the difference between revenue and non-interest spending (i.e. the budget balance minus interest payments). A primary surplus is a positive primary balance.

Figure 2: Core spending by national, province and social security funds as a share of GDP

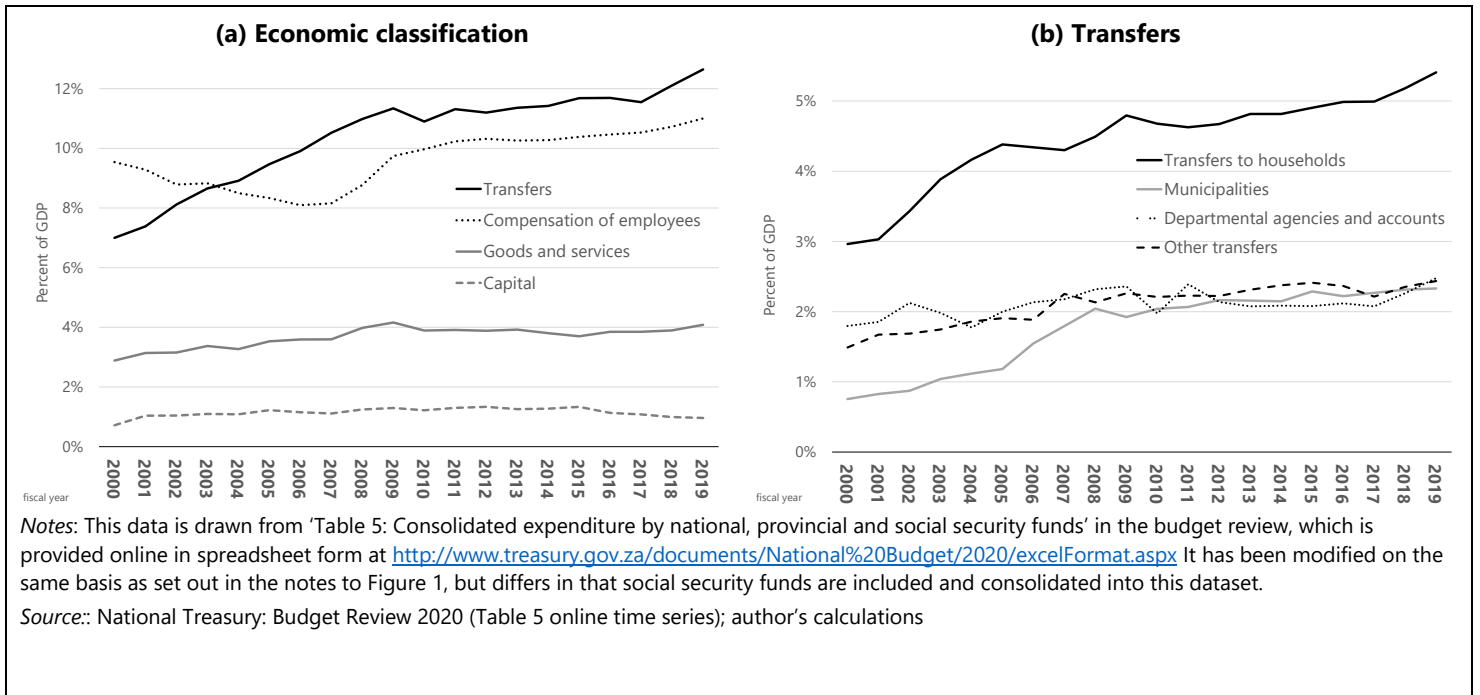


Figure 3: Capital spending by public sector institutions (2001-2018)

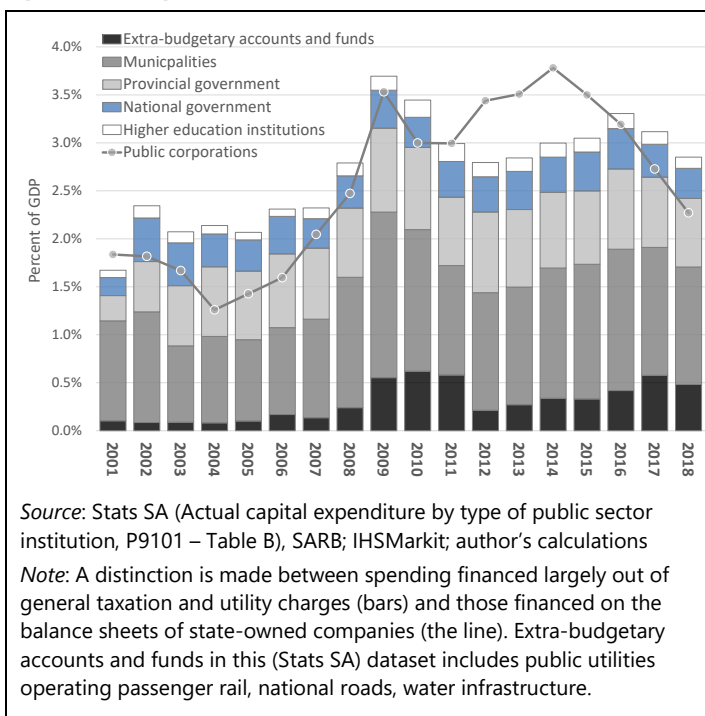
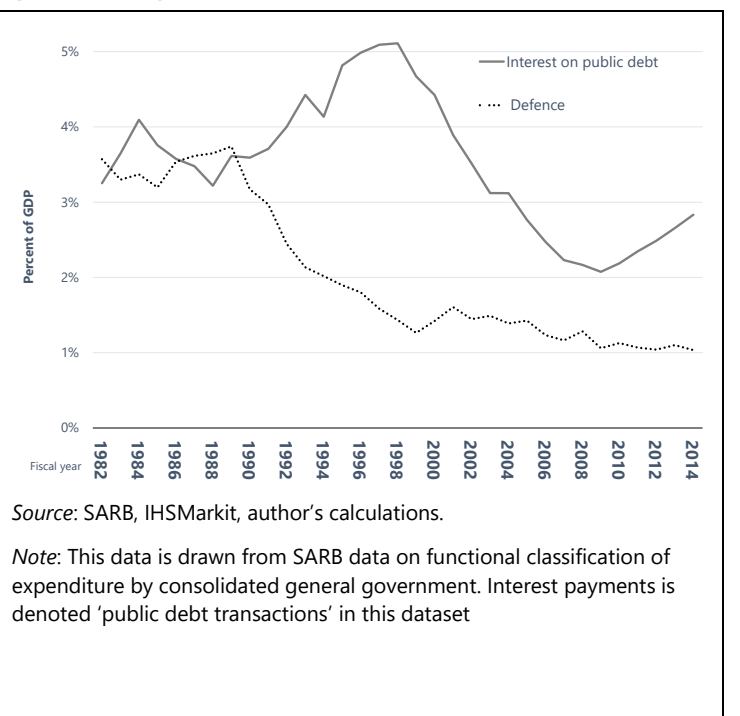


Figure 4: Spending on defence and interest payments (1982-2014)



Fiscal space was also created by reducing defence spending. With the demise of apartheid, South Africa's defence force withdrew from battlefields in Southern Africa and deployments against political resistance at home. As Figure 4 shows, the windfall from reduced defence spending was concentrated in the years between 1989 and 2000. Although defence spending increased with the arms deal⁶ in 2001, it was driven down to 1 per cent of GDP in the years that followed.

In contrast with the RDP's commitment to "redirect government spending rather than increasing it as a proportion of GDP" (op. cit.), the fiscal consolidation associated with GEAR was followed by a large expansion of public consumption, and a simultaneous easing of the tax burden. Although ultimately unsustainable, the spending increase was entirely warranted and well directed. Concerns about crime, both as a social problem and a constraint to faster economic growth, were widespread (see for instance Stone, 2006). Similarly, improved basic education and healthcare were (and still are) regarded as essential for social development and economic expansion. In 2007, the first incidents of load shedding alerted South Africans to the inadequacy of economic infrastructure.

Had these expanded resource allocations led to sustained progress in the quality of public services and been accompanied by improved industrial investment, trade competitiveness and productivity, they might have formed part of a new dynamic of self-reinforcing growth and development. Had global dynamics remained supportive, the result might have been a sustainable fiscal path. Instead, the extension of fiscal commitments and surge in public infrastructure investment was followed by a permanent fall in GDP growth.

3. THE WORLD CHANGES

With hindsight, it is not difficult to see why government was upbeat about South Africa's prospects in the first decade of the millennium. As the global commodity boom kicked in, economic growth accelerated, capital inflows were buoyant, the rand was strong, and inflation and interest rates were benign (see Frankel et al., 2006). Easier global financing conditions kept the bond yield below accelerating economic growth (see Figure 26), while inflation remained in check. Despite the extension of fiscal commitments, government maintained a primary balance backed by rapid growth and buoyant revenue. The combination of these forces brought the debt-to-GDP ratio down to historic lows, and the budget balance moved into surplus.

However, two factors then changed the conditions under which fiscal policy operated. Global economic developments redefined macroeconomic fundamentals, as the historic surge in the terms of trade that had driven South Africa's growth came to an end in 2011. Coinciding with this was the change in domestic political conditions that had begun with the ANC's Polokwane conference in 2007. At the very moment that the slowdown in growth demanded fiscal adjustment, government policy became increasingly incoherent and incapable. This enfeeblement of public institutions eventually led to a collapse in investment and a second blow to growth after 2015. Each of these changed conditions are discussed in the sections that follow.

3.1 Global shifts and South Africa's slowdown

The financial crisis of 2009 was a heavy blow, but one that South Africa weathered better than most. The contraction was initially severe, but the economy rebounded over the next two years (see Figure 5). The 2010 World Cup preparations lifted private-sector confidence and supported a strong recovery in private investment, which complemented the public sector's ongoing surge in infrastructure spending. Fiscal expansion in developed countries buoyed global demand, and South Africa's export volumes surged.

⁶ Arms deal spending peaked in 2005 and continued until 2011.

Commodity prices strengthened once more, as Chinese growth rebounded to 10 per cent, down from its peak of 13 per cent but still remarkably strong.

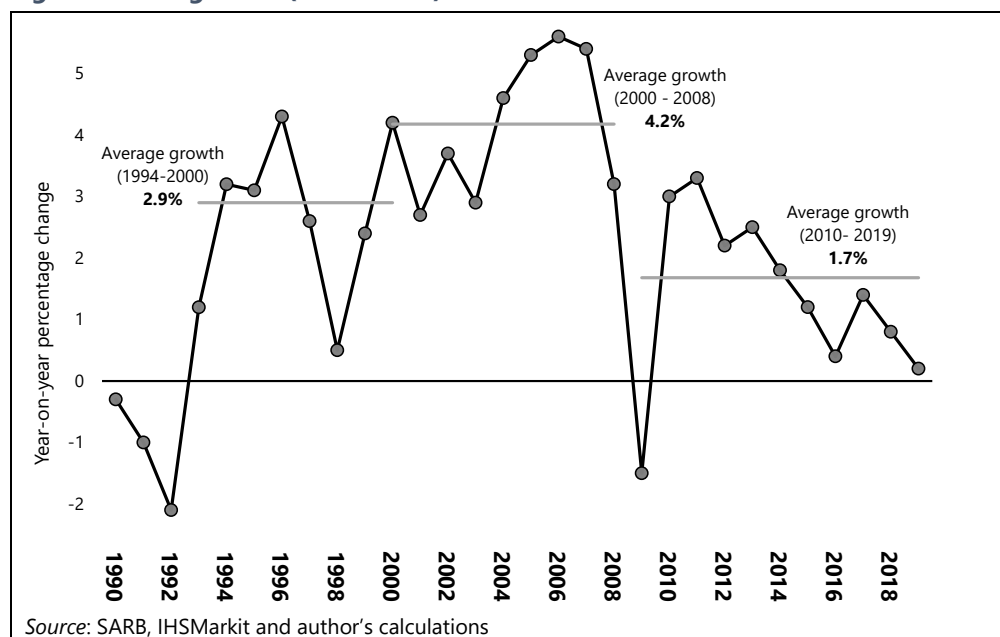
However, after 2011, China’s economy began to slow, and commodity prices followed. Almost simultaneously, the European Union curtailed public spending and shifted from a current account deficit to surplus, imposing deflationary pressures on the world economy (Klein & Pettis, 2020). South Africa began to decelerate.

Figure 5 shows South Africa’s rate of economic growth since the transition to democracy. In the 1990s, growth averaged 2.9 per cent – a return to the historical average of 3 per cent (Havemann & Kerby, 2020). The global turbulence of the Asian crisis and fiscal consolidation at home weighed down on growth in the last 1990s, moderating hopes for a sustained economic dividend for the post-apartheid state. But redemption appeared to beckon as the new millennium dawned. Over the next decade, growth rates averaged 4.2 per cent – the longest and strongest growth acceleration on record. Policymakers may have hoped that this represented a new normal, spurred by a stronger macro-policy framework and world class institutions, but it was not sustained. From 2014, output per capita began to decline and has continued to do so until today.

Hoping that the deceleration would be temporary and cyclical, government premised its fiscal strategy on an economic recovery. In November 2010, the government published its “New Growth Path”, which emphasised the “counter-cyclical” role of macroeconomic policy and mandated continuing efforts to leverage the balance sheets of state-owned companies behind public infrastructure investment (Republic of South Africa, 2010).

Fiscal policy remained expansive and, with no moderation in expenditure levels, large deficits emerged as the automatic consequence of revenue shortfalls. Public infrastructure investment continued its robust growth and real interest rates began to fall, turning negative in 2011. Despite all this, the rate of economic growth continued to decelerate, apparently impervious to macroeconomic stimulus.

Figure 5: GDP growth (1990–2019)



Havemann and Kirby (2020: 2) look at patterns of South African growth over more than 300 years and find that “global growth is the single most important long-run determinant of South African growth”. Prior to 2010, South Africa tracked global growth but then diverged from the world average. This has been taken as evidence that in the last decade domestic and idiosyncratic factors have been the primary explanation for the slowdown (see for instance National Treasury, 2016a:3). But Figure 6 paints an alternative picture, showing that South Africa was far from alone in diverging from the world average after 2010. Compared to a group of nonfuel commodity exporters from Africa and Latin America, South Africa’s growth trajectory can be explained to a great extent by global developments. Until 2011, China’s rapid industrialisation had raised the price of commodity exports, while lowering the price on imported wage goods. This altered the terms of trade for these developing countries, with important consequences for growth, distribution and opportunities for industrial development (Kaplinisky, 2010).

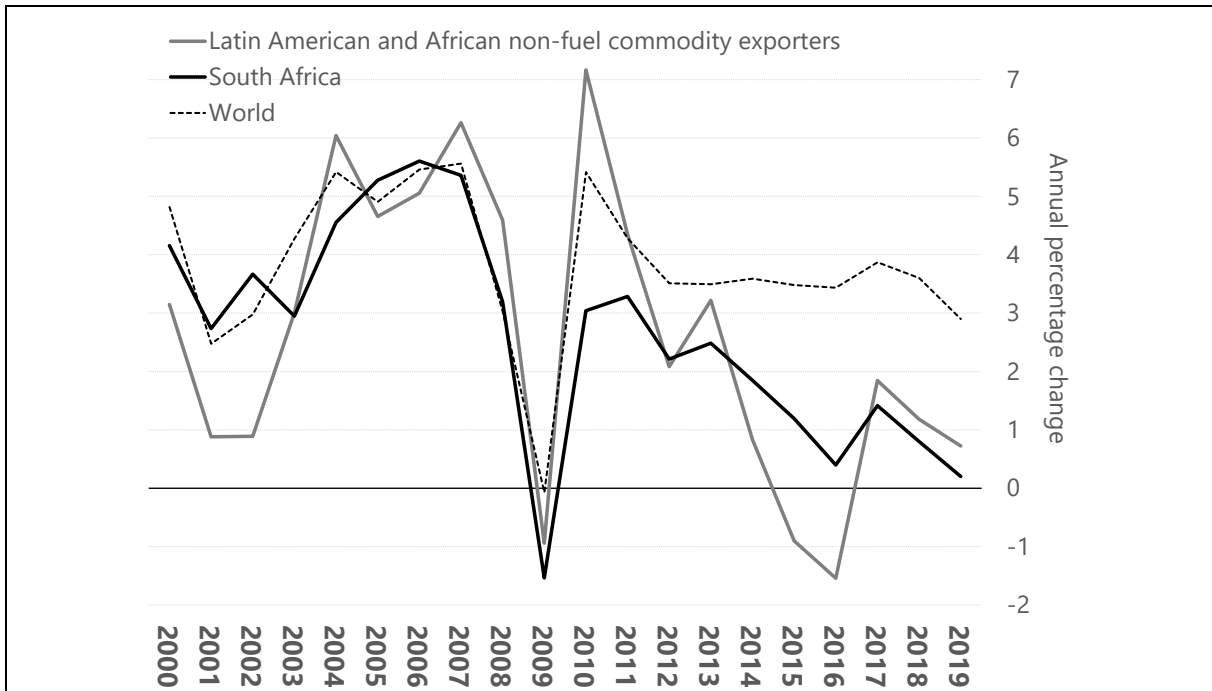
Despite the salience of the commodity cycle in South Africa’s growth cycle, in fiscal terms South Africa is not a “commodity republic” of the kind envisaged by Céspedes and Velasco (2014) because commodity-linked revenues directly account for a small share of taxation. However, commodity prices have deep impacts across an economy whose production structure remains rooted in minerals and energy (Fine & Rustomjee, 1996). Raw and semi-processed minerals still account for the bulk of South Africa’s exports (Makgetla, 2018), while non-commodity exports – manufactured goods and services – are increasingly focused on Africa, where growth prospects are even more strongly tied to commodity prices (Deaton, 1999).

The commodity cycle also has an important financial channel that affects exchange rates, international capital flows and interest-rate spreads. For South Africa, this eases financial conditions directly, as well as indirectly, because of its role as a platform for investment in Africa, since a significant share of value on the Johannesburg Stock Exchange reflects investments and production on the African continent. South Africa’s flexible exchange rate and highly developed financial sector help smooth short-term fluctuations, but longer-lived trends in commodity prices impact decisively on the path of growth and financial conditions.

Figure 7 shows the historic significance of the last commodity “super cycle”. Panel (a) builds a composite index using indices of real US\$ prices of platinum, gold, coal and other components of South Africa’s current export basket. This is shown together with an index of the gold price (also in real US\$ terms). Gold dominated South Africa’s exports through most of the twentieth century, reaching a peak in 1970, after which the current export basket becomes an increasingly more appropriate index. Until 1971, major global currencies were often fixed against the price of gold, and its fluctuations reflected the evolution of the international monetary system and long-term inflation trends. After 1971, gold was decoupled from the dollar, and its price movements became more volatile, as the world shifted to flexible exchange rates. From South Africa’s point of view, gold price movements increasingly aligned with those of its other mineral exports.

From 1970, the commodity price cycle swings up dramatically, reaching a peak in 1980 and then falling towards a trough around the turn of the millennium. This sets the stage for the “super cycle” between 2002 and 2012 that was driven by China’s rapid industrialisation. The commodity price is reflected in South Africa’s terms of trade (the ratio between the price of exports and imports), shown in panel (b), that experienced sustained improvements from the mid-1960s to 1980 and an even more pronounced and sustained gain between 2000 and 2011.

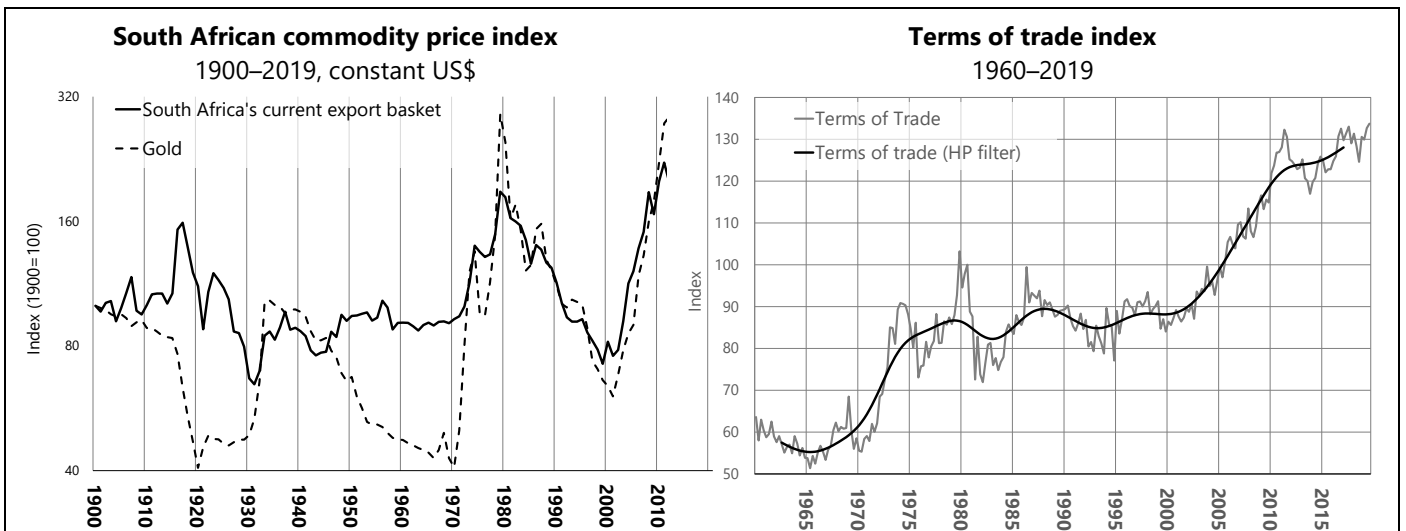
Figure 6: GDP growth: South Africa, world average and select nonfuel commodity exporters



Source: IMF World Economic Outlook dataset, IHSMarkit, author's calculations

Notes: Weighted average GDP growth in 23 African and Latin American nonfuel commodity exporters. Weights are defined using each nation's average share of world GDP (based on purchasing-power-parity) between 2010 and 2019. Nonfuel commodity exporters are African and Latin American emerging market and developing economies whose main source of export earnings are nonfuel primary products as defined in IMF data (see IMF, 2015: 149, Table D).

Figure 7: Commodity prices and the terms of trade



Source: Jacks (2019), Comtrade and author's calculations

Source: SARB, IHSMarkit and author's calculations

Notes The gold price dominated South African commodity exports through most of the twentieth century, but from the 1980s production shifted in to the current export basket. This implies that the gold price is the relevant export index for South Africa until the 1970s with the "current basket" then becoming increasingly dominant. The current export basket is the weighted average of the price indices for steel, gold, platinum, coal, iron ore, manganese, chromium, copper and aluminium weighted by share in South Africa's commodity exports in 2006 and 2016

The observation that terms of trade movements define the pattern of economic growth in developing countries is standard in economic literature (see for instance Céspedes & Velasco, 2012), and has been made often in respect of South Africa’s growth path (see for instance Fedderke, 2014). Pritchett (2000: 221) points out that thinking about growth in terms of a business cycle around a stable trend of potential output may not be appropriate for developing countries:

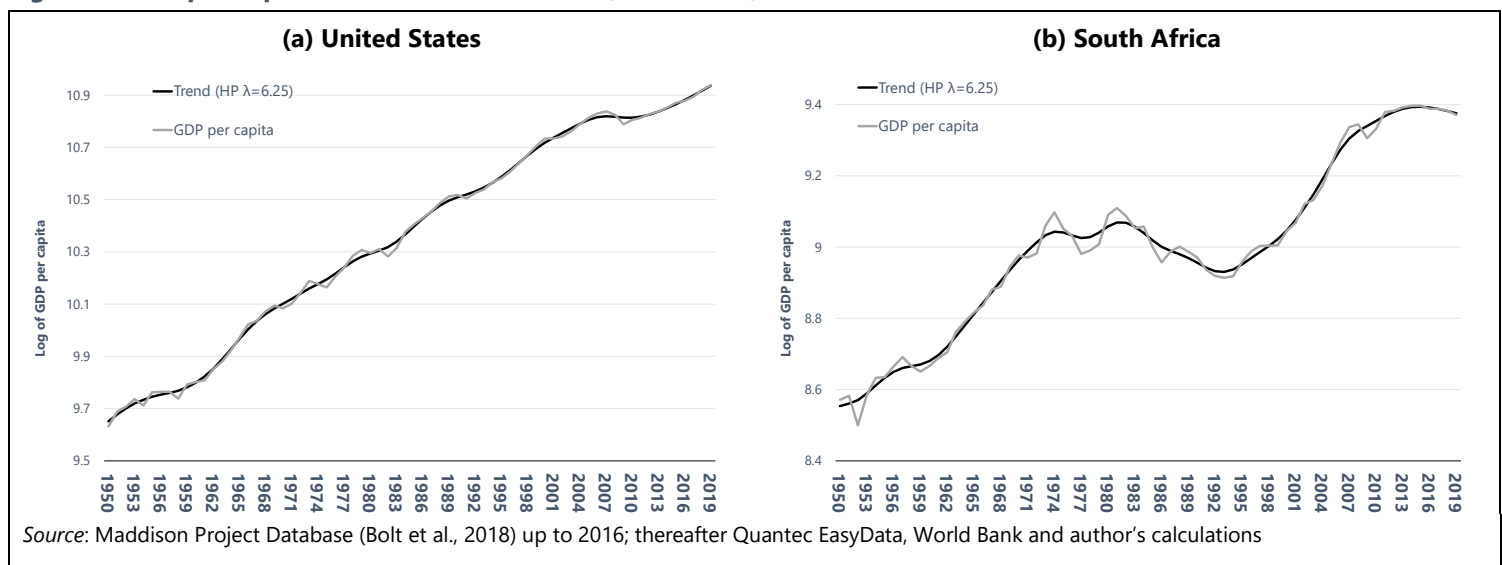
[A]most nothing that is true of U.S. GDP per capita (or that of other countries of the Organisation for Economic Co-operation and Development) is true of the growth experience of developing countries. A single time trend does not adequately characterise the evolution of GDP per capita in most developing countries.

This difference can be seen when the patterns of growth in South Africa and the USA are compared (Figure 8). Until the mid-2000s, the USA’s growth rate shows a relatively linear trend, whereas the picture for South Africa is very different, with periodic accelerations and decelerations lasting over a decade or more. Solid output growth in the 1950s and 1960s is supplanted by falling GDP per capita, reflecting the structural crisis of the apartheid economy and coinciding with the turn in the commodity price cycle. In the 1990s, growth is restored and its momentum accelerates through the commodity boom. But another shift in the trajectory of growth appears to loom as the time series comes to an end in 2016.

In a typical advanced economy, the business cycle reflects short-live shocks to income, which are offset by relatively stable consumption that dampens the cycle. By contrast, economic fluctuations in developing economies reflect underlying shifts in the growth trend, which may be ascribed to shifts in the “policy regime” (Aguiar & Gopinath, 2007). Since agents perceive these shifts as permanent, consumption (including government consumption) is raised to meet a higher level of permanent income. This theme is taken up by Amra et al, (2019: i), who discuss the relevance of this approach for fiscal policy in middle-income countries over the most recent cycle:

The [commodity] super cycle created the mirage that economic performance had structurally improved, mistaking a long, commodity-fuelled uptick in the business cycle for higher trend growth. This thinking supported fiscal expansions. When the commodity boom ended, it became apparent that countries had saved less than they should have, and that fiscal policy had, perhaps inadvertently, been pro-cyclical. It left countries with depleted fiscal buffers and large budgets when the cycle came to an end, limiting room for fiscal stimulus when needed.

Figure 8: GDP per capita: USA and South Africa (1950–2019)



3.2 A second (self-inflicted) blow to growth

The causes of South Africa's slowdown were not solely global. In 2007, at the height of the growth upswing, blackouts across the national grid began. These have recurred intermittently, especially after 2014. Although power shortages would certainly have placed an upper limit on the rate of growth, their direct impact may not have been large. A recent estimate by South African Reserve Bank (SARB) economists found that if load shedding had persisted at the intensive rate experienced in the first quarter of 2019 for the rest of the year, "it could shave-off about 0.3 pp from the annual growth rate" (Morema et al., 2019: 1). In other words, the direct impact of load shedding was important but not decisive. However, it is likely that the *indirect* effects of the Eskom crisis became more salient, as the promise of a reliable electricity supply began to lose credibility. Confidence weakened, private sector investments were postponed and government's failure to resolve the crisis became an additional drag on efforts to revive the pace of growth.

Related to this was the impact of "state capture". The increasing incoherence of policy was partly the consequence of deliberate efforts to repurpose the state and redistribute rents (Chipkin et al., 2018). This retarded the efficiency of public investment (which is discussed below), undermined tax collection by disrupting the revenue authority and destabilised efforts to resolve the electricity supply constraint. From 2015, South Africa fell behind even the dismal performance of its global peers (see Figure 6). This second blow to growth took place in the face of improving terms of trade.

From an aggregate demand perspective, Figure 9 shows that several factors coalesced to shift the economy into an even lower gear.

- **Falling export growth.** For decades, South Africa's export performance has been deteriorating consistently. After 2012, the European Union shifted to current account surplus, rebalancing global trade (see Klein & Pettis, 2020). This position strengthened from 2015 and might have had an impact on South Africa's exports.
- **Tightening macroeconomic policy** in 2015. Fiscal policy tightened and government consumption spending slowed. At the same time, South Africa's sovereign risk spread widened (see Section 5.4 and Figure 28), prompting a percentage point increase in the central bank's policy rate. The dangers of macroeconomic tightening were well known at the time, with even the IMF advising authorities that "debt sustainability is essential, but further adjustments need to be carefully designed to avoid pressuring an already-weak economy" (IMF 2016: 1)
- The most significant factor in the slowdown appears to be the **contraction in domestic investment** after 2015. This was led by the private sector and was most pronounced in mining. The Chamber of Mines blamed regulatory constraints and electricity shortages for deterring investment (Chamber of Mines of South Africa, 2017). But the slowdown was far broader than mining. As shown in Figure 10, capital formation also began to contract in the secondary and tertiary sectors, as business optimism and public confidence in the direction of the country fell to their lowest levels since the democratic transition. This was followed in short order by a sharp slowdown in public investment. In this case, the impact of poor project management, slow demand growth and the policy chaos associated with state capture took their toll. The balance sheets of state-owned companies had been extended to create poorly chosen assets whose economic value did not justify the liabilities incurred (issues I return to in Section 4.5 below).

Figure 9: Real growth in selected components of aggregate demand (2010–2019)

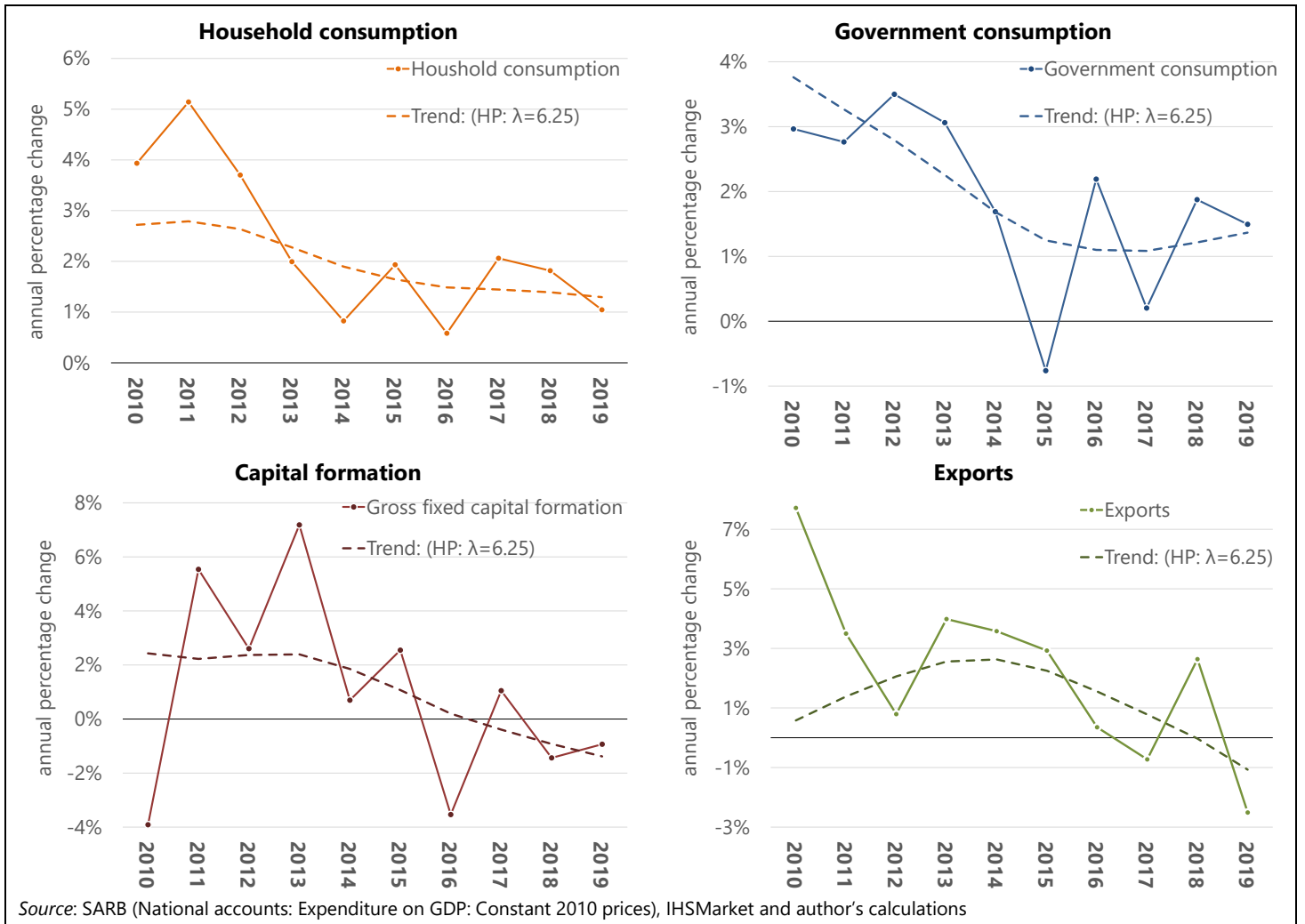
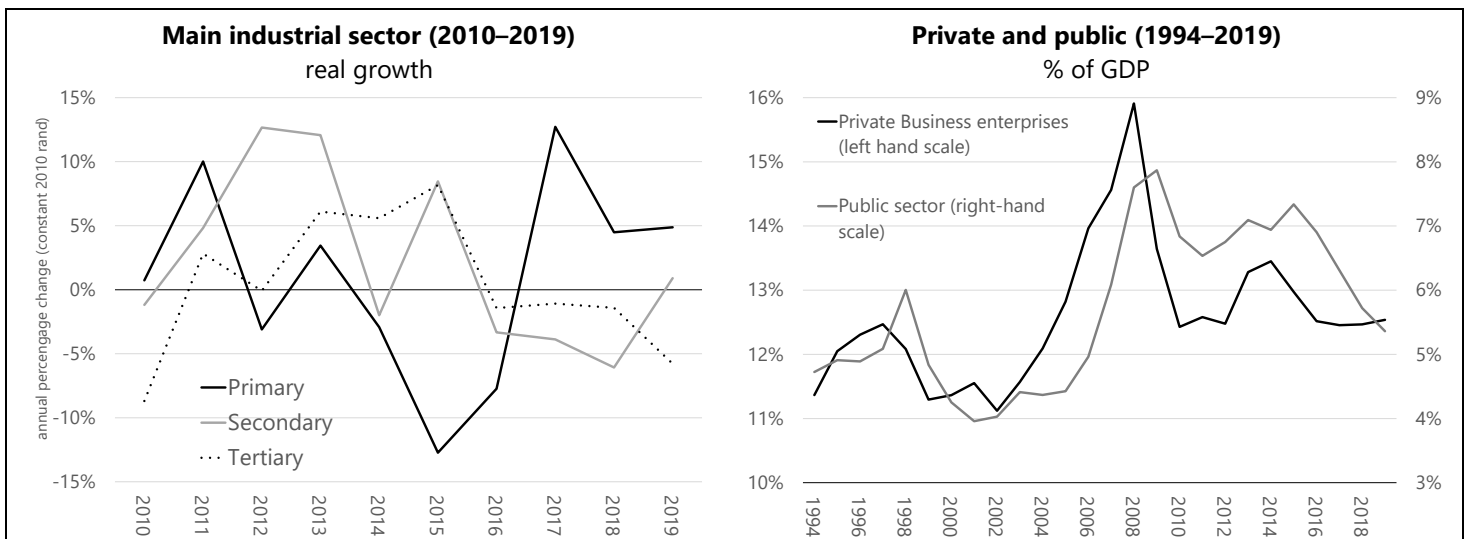


Figure 10: Gross fixed capital formation



Source: SARB (National accounts: Gross fixed capital formation: Constant 2010 prices by economic activity), IHSMarket, author's calculations

Note: Primary is the sum of agriculture, forestry and fisheries, mining and quarrying and manufacturing; Secondary is electricity, gas and water, transport, storage and communication, and construction; Tertiary is financial, social and commercial services; Public sector is general government and public corporations

This second blow to growth meant a further significant deterioration in South Africa's fiscal prospects. An unusual period of elevated tax buoyancy came to a sudden end (see Section 4.2 below). The rate of growth fell below the interest rate raising deep concerns about debt sustainability (see Figure 26), while the primary deficit began to widen.⁷ As these fundamentals of fiscal sustainability were shifting, the demands for greater public subsidies for university students – the “fees must fall” movement – found widespread sympathy, and were eventually accommodated by the budget. This while an increased sovereign risk spread imposing tighter financial conditions on government (see Figure 28). Behind these shifts in macroeconomic fundamentals and fiscal sustainability, the political crisis of government that had been building for a decade became increasingly acute.

3.3 Political transition

As the world economy faced the global financial crisis, South Africa was in the middle of a political transition to a new leadership within the governing ANC. This led to fundamental changes in the character of political authority and public administration; changes that set a new context for fiscal policy in the years ahead, and impeded the ability of government to present a coherent response to South Africa's weakening economic prospects.

At the ANC's Stellenbosch conference in 2002 the most senior (“top six”) leadership of the party was elected unanimously and unopposed, as part of a National Executive Committee that was strongly aligned with the Mbeki cabinet. Five years later, at the Polokwane conference, every position was contested by two opposing slates. The Mbeki slate lost the contest decisively.

The Mbeki administration had sought to centralise policy authority, but the Zuma administration that emerged from the contestation in Polokwane was built on a fragmented coalition. The conference outcome reflected brokering by provincial party elites who were able to mobilise regional and branch bureaucracies behind their chosen slate. Mbeki had steadfastly refused to offer them the keys to government office (Darracq, 2008). Aggrieved, they delivered Zuma victory on the back of a broad coalition of forces hitherto excluded from influence over state policy. Left-wing activists within the ANC, the leadership of public sector unions, small black business lobbies, traditional leaders, popular churches and small-town elites coalesced around Jacob Zuma. His authority was built on a popular coalition that reflected the fragmentation of South African politics and the elevation of provincial and local elites over national actors (Chipkin, 2016; 2019). It also meant a more assertive and determined approach to the distribution of public sector rents (Von Holdt, 2019), and a state-centred approach to development.

Once in office after 2009, the new coalition prioritised reform of “the macro structure of government” (see Chabane, 2009). The political executive of government was expanded, while departments and agencies proliferated, resulting in a functionally overstretched and splintered state machinery (Naidoo, 2019). National Treasury had to share macroeconomic policy authority with new departments, while planning functions were separated from budgeting and moved into the Presidency. As fiscal resources began to tighten and new demands were placed on the policy agenda, the managerial capabilities of civil service were thrown into disarray.

The Polokwane coalition also shifted policy authority away from state processes towards the ANC's party structures. It was widely felt that the latter had been “weakened in the policy making process, which takes place largely in government structures [...] [where] ministers rely on the expertise of technocrats” (Darracq, 2008: 436–37). A case in point was GEAR: “Behind the argument of urgency, it was set up in the dark by a small committee of experts working under [...] [Thabo Mbeki] and presented as non-negotiable” (Darracq 2008: 438).

⁷ In a simple model these three variables – the interest rate, the growth rate and the primary balance – determine the path of the debt-to-GDP ratio.

But choices can be made in the dark in various locations. The Constitution imposed clear rules of accountability, transparency and procedure on state structures, but the committees of the ANC could operate in relative obscurity, widening the scope for rent-seeking and weakening the capacity of government to articulate a coherent policy agenda. As political appointees asserted their control over the state, the turnover of personnel at the most senior level of the public service reached alarming levels: 172 people occupied the position of director-general in 38 national departments between 2009 and 2017 (van Onselen, 2009).

The basis for this weakening of the state and the elevation of party-political structures over the government executive had been laid long before Polokwane. By the time of the transition, crude instrumentalist theories of state power, rooted in Soviet Marxism, were well entrenched in the ANC. The Public Service Act of 1994 had subordinated civil servants to political appointees.⁸ The ANC established the practice of “cadre deployment”, through which technical and professional appointments to the civil service and public enterprises emerged from opaque political consultations. The Mbeki administration built on this foundation, clipping wings of the independent Public Service Commission to facilitate political appointments (Msimang cited in Barron, 2020), while Mbeki’s AIDS-denialism had the effect of weakening the legitimacy of scientific knowledge and technical expertise as a basis for public policy choices.

After the 2009 election, a single party continued to preside over government, but policy increasingly reflected the fragmented dynamics usually associated with coalition governments, including their well-known inability to resolve policy contradictions, restrain budget deficits and execute effective fiscal programmes (see Roubini & Sachs, 1989; Perotti & Kontopoulos, 2002). The ambiguous character of party processes – which by their nature require a broad consensus between disparate factions – left policy incoherent, weakening the executive of the state and fragmenting authority within it.

Paradoxically, while disrupting and weakening government, the Polokwane moment signalled a more assertive, expansive, and state-centred approach to social and economic transformation, captured in the idea of a “second transition” (African National Congress, 2012b). An important ANC policy document of the time – State Intervention in the Minerals Sector (SIMS) – stated that:

Since 2002 there has been unprecedented demand for minerals due to the Asian boom, which has resulted in historically high mineral prices. **It also appears that this “super-cycle” may continue for another two or three decades**, until the minerals intensity of growth stabilises in China, India and other rapidly growing developing economies. However, due to transport and energy constraints, South Africa has not been able to fully take advantage of the high prices for iron ore, manganese ore, coal and ferro-alloys, stimulated by the boom... These bottlenecks need to be resolved in order to grow employment. The robust demand for our resources puts us in a strong position to maximise their developmental impact, especially if put out to public tender against developmental objectives (job creation). (African National Congress 2012a: 8, emphasis added)

The document went on to observe that “under the current fiscal regime our nation is clearly not getting a fair share of the resource rents generated from its mineral assets”, and proposed to correct this with a resource rent tax on the mineral sector, which it claimed would generate R40 billion or about 1.2 per cent of GDP in annual revenue (ibid: 36–37).

⁸ Section 3(7) of the Public Service Act of 1994 grants ministers, premiers and MECs “all those powers and duties necessary for [...] the internal organisation of the department concerned, including its organisational structure and establishment, the transfer of functions within that department, human resources planning, the creation and abolition of posts and provision for the employment of persons additional to the fixed establishment; [...] the recruitment, appointment, performance management, transfer, dismissal and other career incidents of employees of that department, including any other matter which relates to such employees in their individual capacities, and such powers and duties shall be exercised or performed by the executive authority in accordance with this Act.”

Government did not adopt the proposal for a resource rent tax,⁹ but the SIMS document highlights three assumptions that were strongly entrenched in policy thinking at the time. First, it was believed that the commodity boom would continue, or that a restored momentum of global growth would ease South Africa's situation. The view that the world economy would recover strongly from the global crisis, returning to the pre-crisis normal, was mistakenly but widely held for years after 2008, including by international financial institutions such as the International Monetary Fund.

Second, it was (and still is) generally accepted that infrastructure shortfalls were a binding constraint which, if addressed with public investment, would unshackle South Africa from its weak growth performance and therefore "pay for itself". Third, it was widely held that the fiscal regime could be easily adjusted to realise greater resources for public interventions, without imposing additional taxation on affluent households. Rather than adjusting spending downwards, or raising the tax burden on the middle class, the public resource envelope could be expanded by redistributing rents from the large corporate sector. All three of these assumptions contributed to complacency about the fiscal challenges of sustaining the progressive realisation of socio and economic rights, which had been entrenched in the 1996 Constitution.

In September 2012, government adopted a National Development Plan (NDP). The NDP recognised (on page 31) that global economic growth was likely to be lower in the decade ahead, and yet proposed a growth target of 5 per cent, suggesting that this could be achieved by growing exports, investing in economic infrastructure and removing the policy constraints to faster expansion. On this basis, the plan committed government to an ambitious policy agenda, comprising 119 policy proposals, which included a large extension of post-school education, the introduction of a universal health insurance scheme, and the provision of income support for the unemployed through public works.

The NDP offered scant consideration of the fiscal implications of these proposals. Like the SIMS document, it assumed that accelerating economic growth would generate the resources necessary to finance expanded public provision. But while the NDP offered no fiscal programme, and while its core assumptions proved to be wishful thinking, its expansive social policy agenda was never questioned and continues to define the government's democratic mandate.

Subsequent policy work did little to resolve the problem. The White Paper on Post-school Education committed government to expand enrolments in universities and colleges from 3.6 million in 2014 to 9.2 million by 2030 (a 6 per cent annual growth rate) and to increase the real value of public subsidies per student (Republic of South Africa, 2013; Government Technical Advisory Services, DNA Economics, and Mzabalazo Advisory Services 2016 Table 1). It made no suggestion on how this would be funded, except that these policies would be implemented "as resources become available" (Republic of South Africa, 2013: xiv, 8, 37). This might be interpreted as a commitment to expand access once economic growth made this possible.

Similarly, the White Paper on National Health Insurance reached no clear conclusion about funding. While projecting that public health spending would increase from 4 to 6.2 per cent of GDP, the White Paper suggested that "focusing on the question of 'what will NHI cost' is the wrong approach as it is better to frame the question around the implications of different scenarios for the design and implementation of reforms to move towards UHC" (Republic of South Africa, 2017:39). Once again, it is stressed that the "transition [from private to public financing of healthcare] is easier to manage if GDP growth is more rapid, so that tax changes can be introduced without unduly impacting on household's disposable income".

⁹ Although a royalty tax had been introduced on mining and petroleum resources in 2008.

The Minister of Finance summarised National Treasury's approach as, "If we do not achieve growth, revenue will not increase. If revenue does not increase, expenditure cannot be expanded" (Nene, 2015). Treasury increasingly complemented this stance with the idea that 'structural increases in spending' would need to be back by off-setting increases in taxation.

4. AUSTERITY WITHOUT CONSOLIDATION

The contradiction between dwindling fiscal resources and an expansive policy agenda was left unresolved. It was assumed that accelerating growth would ease fiscal constraint and, if this was to be the case, no explicit programme to adjust other expenditure commitments or raise additional revenues was required. Meanwhile, the reform of government served to splinter and overburden policymaking, while increasingly subordinating technical expertise to the political authority of a rudderless and divided ruling party.

The results, discussed in this section, was a regressive deterioration in the allocation of public resources, increasing reliance on inefficiency and regressive tax handles, and a fall in the real value of public services received by poor South Africans. While austerity conditions were increasingly felt on the frontline of service delivery, the fiscal consolidation needed to stabilise the public finances never took place. At the same time, the public infrastructure boom failed to raise growth or productivity, and instead imposed the additional burden of increasing inefficiency of the state-owned companies directly on the fiscus.

4.1 An entrenched budget deficit

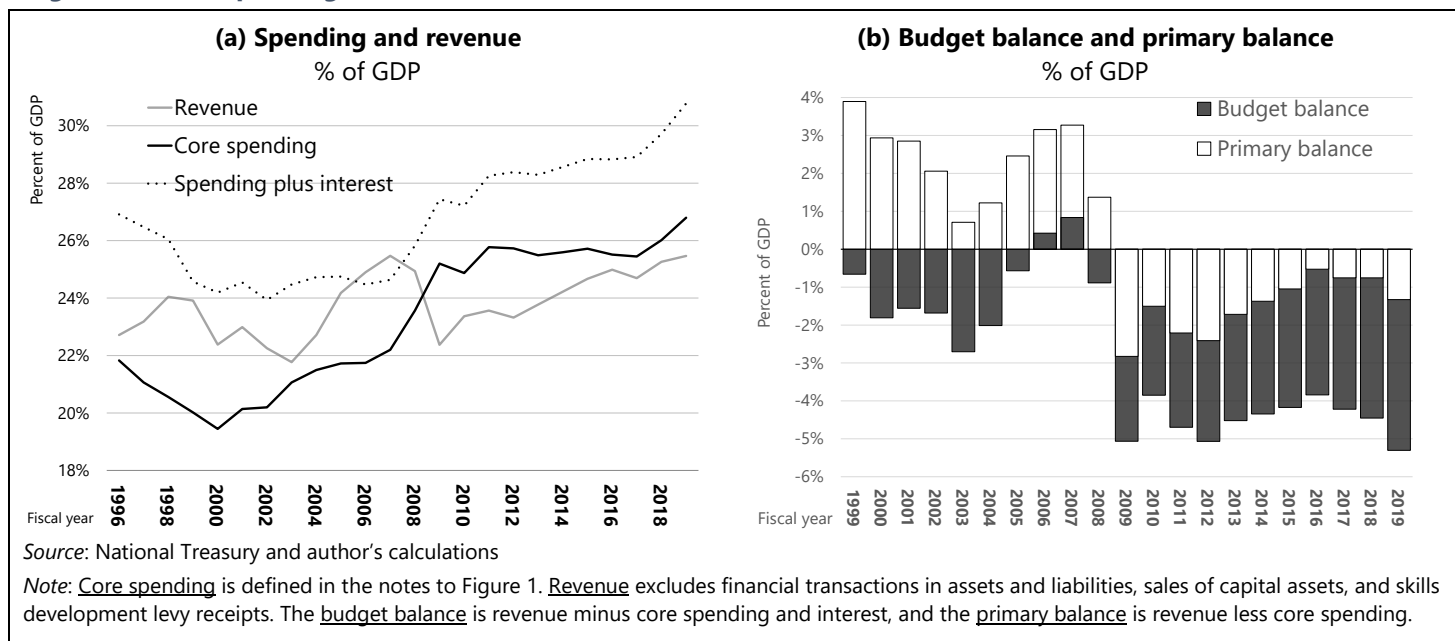
Government's fiscal policy response to the sustained deceleration of growth was to contain expenditure, while relying on taxation to close the primary balance. Government committed to keep future spending within the nominal limits of the medium term expenditure framework (National Treasury, 2013: 32; 2014: 8). Consequently, after rising substantially from 2002, core expenditure plateaued as a share of GDP after 2012. In real per capita terms, spending was slightly lower in 2018/19 than it had been in 2011/12 (see Figure 1).

Compensation spending was well contained, increasing by only 0.5 percentage-points of GDP between 2011 and 2018. Transfers remained stable as a share of GDP until 2017/18 but then began to increase, as government channelled resources into free university education (see Figure 2). Capital spending by general government fell after the 2010 World Cup but recovered over the next five years, driven by growth in municipalities and extra-budgetary agencies (see Figure 3). The upward shift in core spending observable after 2016 reflected the implementation of free university tuition; the expansion of health spending, as the public agencies required for national health insurance were established; and (above all) the slowing of economic growth (the denominator), which outpaced National Treasury's efforts to slow down expenditure (the numerator).

An effective lid on spending and rising revenue meant that the primary deficit *did* close year after year, falling to 0.5 per cent of GDP in 2016 (Figure 11) and creating the appearance of credible progress towards a fiscal correction. But the fiscal space created by rising revenue was more than offset by increased debt service costs and, therefore, the headline budget deficit did not close. A structurally entrenched deficit, at 4 or 5 per cent of GDP, was increasingly devoted to finance the interest on debt.

In 2016, the picture changed radically, in the face of a further slowing of economic growth (discussed in section 3.2 above). The progress towards a primary balance was reversed, as tax buoyancy suddenly fell, reversing a run of surprisingly good outcomes in personal income collections.

Figure 11: Core spending, revenue and the deficit



4.2 Faith, hope and tax buoyancy

Treasury's growth projections in successive budgets tell a story of enduring faith in economic recovery and recurring disappointment (see Figure 12a). Reviews by the Parliamentary Budget Office found that other official forecasters and private sector economists were even wider off the mark than National Treasury (Amra, 2020; Amra & Ellse, 2018). This included the IMF, whose projections of global demand were a key assumption in National Treasury's macro-econometric model. Whatever its foundations, the widely held belief in an economic recovery served to encourage a strategy of "kicking the can down the road", postponing fiscal reckoning until the revival in growth.

Also reducing the pressure for fiscal adjustment was the fact that tax collections were remarkably buoyant. Revenue collection outpaced GDP growth, so that between 2010 and 2016 the tax-to-GDP ratio improved every year. SARS was able to announce on-target tax collection at the end of each fiscal year, shifting attention from rising shortfalls over the medium-term (Figure 12b).

This elevated tax buoyancy was almost entirely a result of the surge in personal income tax (PIT) collections between 2012 and 2016. Figure 13 shows that consumption taxes (mainly VAT and fuel levies) tracked GDP, while taxes on capital, wealth and corporate income fell sharply after the global financial crisis and have continued to deteriorate since then.¹⁰ But PIT surged even as growth decelerated. The unusual buoyancy of PIT is explained by several factors. The first is shifts in the functional distribution of value-added, shown in Figure 13b. It is likely that these were related to the commodity price cycle. As the boom ended, the rents associated with high mineral prices dissipated, leading to a fall in the profit share and a concomitant decline in corporate income tax receipts. Meanwhile, employee remuneration outpaced the growth of GDP, increasing as a share of value added until 2017.

¹⁰ The categorisation of tax instruments in this discussion is along lines suggested in Saez and Zucman (2019)

Figure 12: Growth and tax: Forward estimates and outcomes

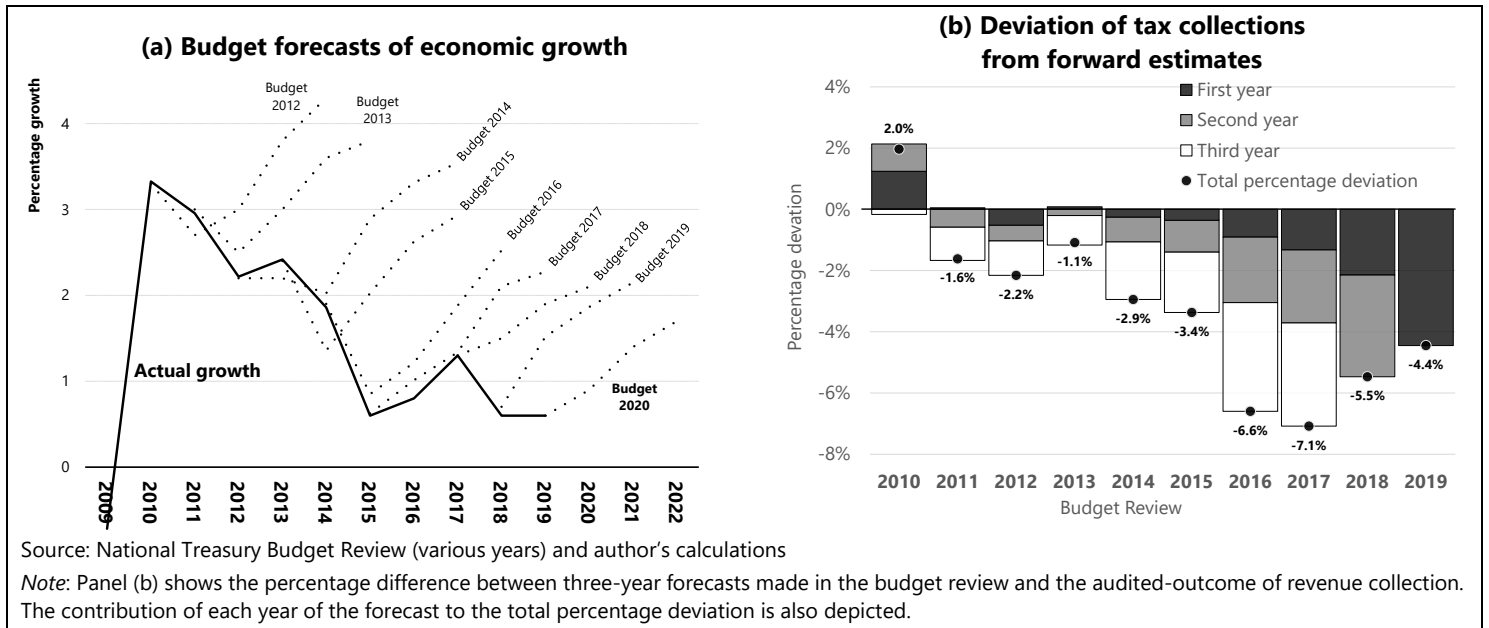


Figure 13: Taxation, GDP and the functional distribution of primary income

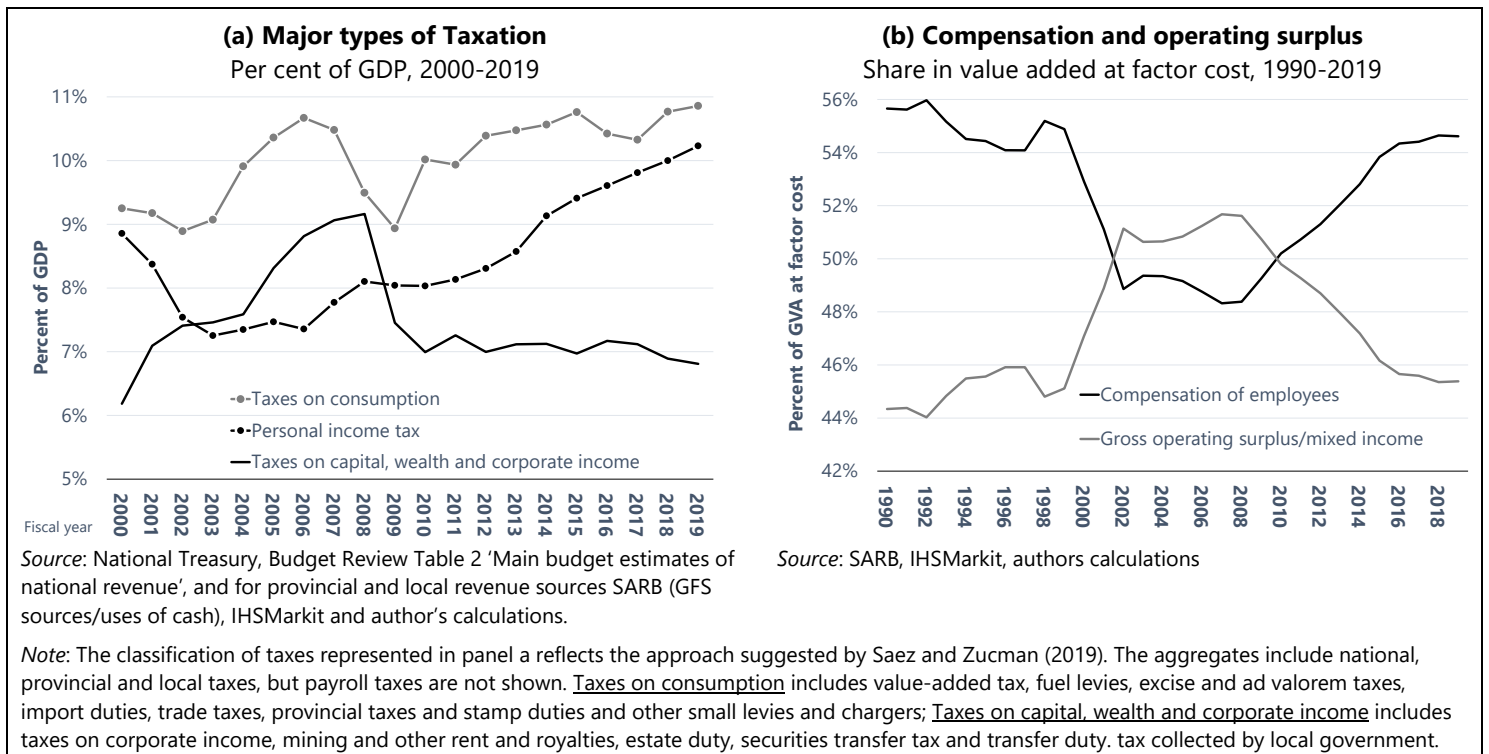
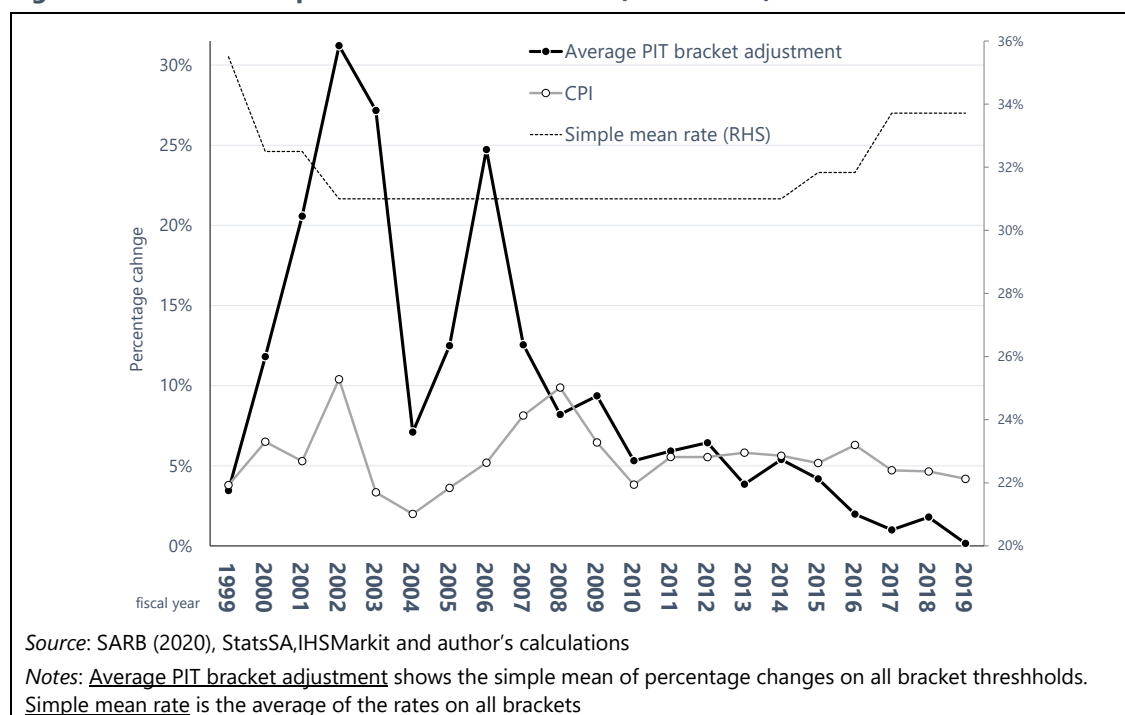


Figure 14: Bracket creep and consumer inflation (1999–2019)



Yet during this period, PIT collections grew even faster than aggregate earnings. Given the concentration of PIT on the upper end of the earnings distribution, a second factor to consider is trends in labour market inequality. Prior to 2012, the Gini coefficient for labour earnings hovered around 0.55 but jumped to 0.7 in 2015 (Merrino, 2020: 6a, 6b, 7). In 2017, earnings inequality eased, at around the same time that compensation growth fell behind GDP growth for the first time. This suggests that the unusual period of PIT buoyancy was correlated with rising inequality in earnings. It may be that affluent South Africans sustained real gains in compensation – driving up tax collections – even as growth slowed and unemployment surged among unskilled and low-income workers who fell below the tax threshold.

A third factor driving buoyancy was the impact of tax policy. As mentioned earlier, tax rates had been lowered during the commodity boom. Then, as growth decelerated, government increasingly resorted to tax increases to sustain fiscal consolidation. Notable tax increases included rate hikes in dividend withholding tax (2012 and 2016), value-added tax (2018) and the introduction of a new top bracket on PIT with a marginal rate of 45 per cent (2015). Large adjustments – far outpacing inflation – were also made to the fuel levy in 2015 and 2016. Figure 14 shows how policy choices eased the burden of PIT during the commodity boom. Rates were lowered, and taxpayers were given generous relief through adjustments to the brackets far in excess of inflation. In the period after 2009, this approach was reversed, and government increasingly relied on inflation to increase effective tax rates.

Three points arise from this discussion. First, it is sometimes assumed that the fall in revenue after 2016 was related to the “state capture” of the revenue service after 2016 and its consequent disruption by malignant political forces. These events are no doubt significant and coincide with the slowdown in revenue collection. However, the evidence presented here suggests underlying economic shifts were more important. After 2016, economic growth slowed, and earnings growth slowed even more. In any case, the focus of concern in relation the capture of the revenue service pivoted around the manipulation of VAT refunds and the impact of the “large business unit” on corporate income tax collection. There has been little focus on PIT collections, which had been effectively automated and account in large measure for the shifts in tax buoyancy reviewed here.

Second, the evidence presented on tax rates and fiscal drag suggests a procyclical approach to tax policy in South Africa. While the commodity boom raged, government moved to ease the burden of taxation but increased taxes when faced with a permanent deceleration of growth.

The last issue concerns equity in the distribution of fiscal adjustments. South Africa has a highly progressive tax structure (see Figure 30), but tax policy over the last decade may have had regressive outcomes. Consumption taxes are the largest source of revenue in South Africa (Figure 13), and the combination of VAT and fuel levy hikes since 2009 would have increased the tax burden on less affluent South Africans. The introduction of a new top marginal rate was a progressive step, but the recourse to fiscal drag is regressive because it raises the effective tax rate on middle income taxpayers, while those whose earnings fall mainly in the top bracket (i.e. above R1.5 million) face little consequence. Finally, South Africa's wealth taxes (such as estate duty, transfer duty and local government property taxes) are small as a share of general government revenue, and so taxes on capital are mainly in the form of corporate income tax. These are subject of generous automatic relief during periods of downturn, as can be observed in Figure 13.

These factors suggest that a large share of the burden of fiscal adjustment was felt by less affluent citizens. Added to this, automatic stabilisers in South Africa fall almost exclusively on the revenue side and so, in recessionary conditions, there is no offsetting relief for poor citizens through expenditure. While tax policy increased the overall burden, its incidence may have been shifted onto the lower middle classes through the increasing weight of consumption taxes and the frequent resort bracket creep. Meanwhile, the real value of public services on which the poorest rely most (education and health) was eroded by the combination of expenditure constraint and rising wages.

4.3 Tight budgets, rising pay, falling services

Tight expenditure control without explicit policy choices led to a deterioration in the quality of public allocations and an erosion of the value of services. Figure 15 shows trends in selected categories of spending. Interest payments outpaced the growth of all other spending. After 2016, government added free university education to its fiscal obligations, driving up transfers to universities. To make space for these elements within a limited spending ceiling, capital spending was severely constrained across all government spheres, while goods and services budgets were held down as a share of GDP (see Figure 15)

Compensation budgets were contained across national and provincial government. However, although total spending was contained, remuneration increased faster than budget allocations. As discussed in Section 2, the occupational-specific dispensations led to a large pay gains between 2008 and 2012, annual wage settlements outpaced inflation, and grade progression added another 1.5% adjustment to average remuneration. The combination of expenditure containment from above and rising salaries from below left departments with two responses, which both led to pressure on the quality of public services. The first was to shift budgets from other line items, leading to shortages in the provision of goods and services, neglect of maintenance and persistent underspending on planned capital budgets. This resulted in compensation spending rising as a share of the total budget.

The second was to slow hiring and leave vacant positions unfilled, allowing attrition of employees to reduce headcounts. To gauge this impact Table 2 continues the analysis of compensation trends in core government services begun in Table 1, albeit using a different data source. Robust employment growth came to a halt after 2012, and employment levels began to decline in education departments. The service delivery gains in the first period – which reduced the ratio of the population to each employee – began to deteriorate in education and policing. At the same time, compensation spending per employee continued to outpace inflation by more than 2 per cent in all three sectors, indicating that real gains in remuneration continued, albeit at a far slower pace.

Figure 15: Trends in the economic classification of the expenditure (selected items)

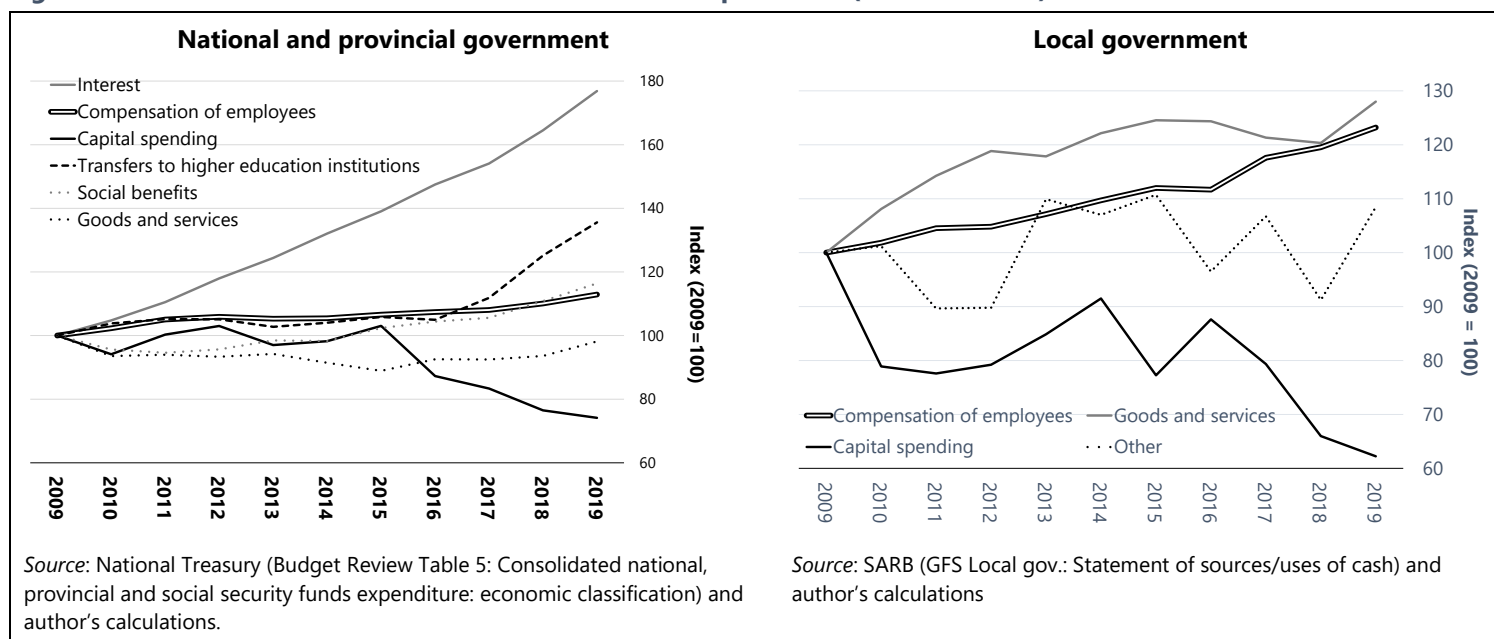


Table 2: Employment and compensation trends in health, education and policing

	2008	2012	2018	Ave. annual growth 2008-2012	Ave. annual growth 2012-2018
Health (provincial departments)					
Employees (fulltime equivalents)	269 216	325 580	335 866	4.9%	0.5%
Compensation spending per employee (constant 2018 rand)	267 432	316 345	365 272	4.3%	2.4%
Population per employee	185	162	172	-3.2%	1.0%
Population per OSD employee	391	248	249	-10.7%	0.1%
Education (provincial departments)					
Employees (fulltime equivalents)	494 841	526 180	498 621	1.5%	-0.9%
Compensation spending per employee (constant 2018 rand)	288 631	341 038	384 225	4.3%	2.0%
Population per employee	25	24	26	-1.1%	1.5%
Learners per OSD employee	29	28	31	-1.1%	1.8%
Police					
Employees (fulltime equivalents)	172 162	196 420	191 284	3.4%	-0.4%
Compensation spending per employee (constant 2018 rand)	254 163	294 139	337 080	3.7%	2.3%
Population per employee	289	269	303	-1.8%	2.0%
Population per OSD employee	363	341	389	-1.5%	2.2%

Source: Author's calculations based on National Treasury, Persal, Stats SA, Department of Basic Education.

Note: This table is based on data drawn directly from Persal (government's payroll system) and provided by the GTAC public expenditure and policy analysis unit. This data differs from table 1 (which was based on numbers reported in published budget documents) in that (a) senior management service employees (i.e. non-OSD level 12 – 16 employees) are excluded, and (b) all employee numbers are stated as full-time equivalents. Otherwise the coverage and categorisation are comparable to table 1.

Rising pressures on service delivery in the education sector have been apparent for some time. Between 2010 and 2016, the number of permanently employed educators declined by 4 per cent and, if temporary teachers are included, the decline was 5 per cent (Gustaffson, 2017). This has led to rising learner-educator (L.E) ratios (i.e. class sizes), particularly in primary schools. Gustafson (2017: 1) notes that:

What is worrying is that the overall national patterns show that schools serving poorer communities have seen larger increases in their LE ratios ... Even with some savings resulting from a shift towards younger teachers, the average cost of a teacher is increasing in real terms, and is increasing in excess of the budget trends. The inevitable outcome is thus cuts in personnel numbers.

Spaul et al. (2020) also detail how the “race between teacher wages and the budget” was increasingly resolved by slowing the hiring of teachers, leading to rising class sizes, and show how these pressures have been particularly acute in the poorest provinces.

Similar pressures have been observed in the public healthcare sector. Health budgets grew in real terms until 2012 and then stagnated (Blecher et al., 2017). While constraints on spending became increasingly binding, cost pressures did not abate. Rising salaries and occupation-specific dispensations were the main element in these pressures, but prices of imported medicine and medical equipment were also pushed up by the continuous depreciation of the rand. Meanwhile, utilisation of the public health facilities has continued to grow faster than budgets, straining the resources deployed to clinics and hospitals.

At the margin, a large share of increased health sector budgets have been deployed through specific ringfenced allocations for the treatment of HIV/Aids, TB and malaria, and the roll out of rotavirus, pneumococcal and human papillomavirus vaccines. While obviously warranted and effective, such “vertical programmes” can result in targeted successes even while the broader health system is eroded and starved of resources (Cairncross et al., 1997).

If conditional grants for specific interventions are excluded, and the real input costs and increased utilisation factored in, resources in the health system have been under significant pressure since 2012 (Blecher et al., 2017). Estimates by the Western Cape health department suggest “an adjusted real decline in health budgets of 1.3–2.2% per annum or R7 billion in total over the period from 2015/16 to 2018/19” (ibid: 29). In response to these pressures, health departments imposed limits on hiring and restrictions on filling (unfunded) vacant posts, centralised procurement and actively managed medicine purchases and cost containment measures. However, the largest “savings” have been in capital spending and infrastructure.

Public spending on health and education account for a large share of the consumption basket of poor South Africans. As a matter of national income accounting theory, government consumption should be properly assigned to the households that consume public services, but this is assigned to “government” as a matter of statistical convenience (Lequiller & Blades, 2014: 193). Using national transfer accounting to estimate the incidence of this spending, Oosthuizen (2019: 19) makes the following instructive finding:

What is immediately evident is the dominance of the public sector within consumption for Africans and, to a slightly lesser extent, Coloureds, particularly among the young and the old. Public consumption accounts for between one-half and two-thirds of per capita consumption for Africans under the age of 19 years, and between 45 per cent and 54 per cent among those aged 70 years and older. Among Coloureds, these proportions are 36–50 per cent and 25–32 per cent respectively. In contrast, public consumption represents just 9–17 per cent of per capita consumption among Whites under the age of 19, and 6–7 per cent of consumption for those aged 70 years and above.

This reflects the incidence of cash transfers, in the form of social grants to children and the elderly, but also the fact that children are the main beneficiaries of public education, while the elderly make greater use of healthcare than the rest of the population.

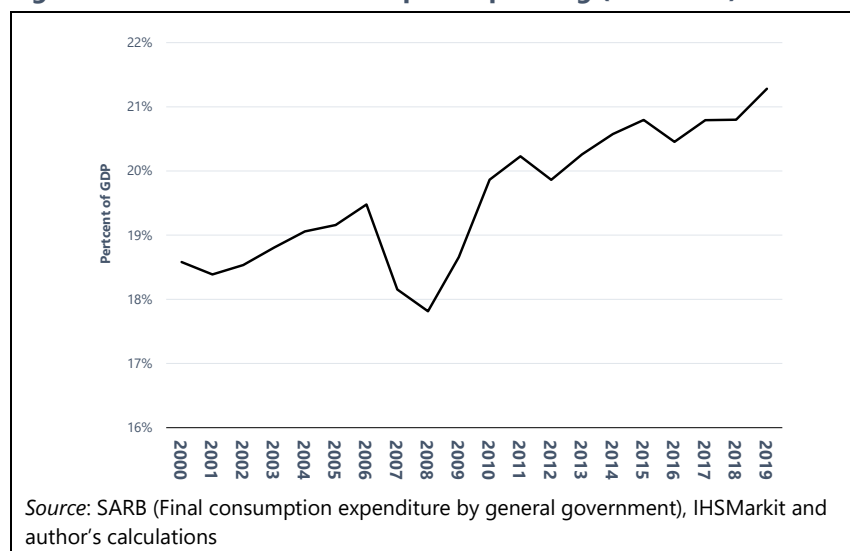
These trends in health and education spending indicate a real erosion of the value of core public services over the last decade. This resulted largely from the combination of constrained budget ceilings and rising

pay for public sector workers. Instead of resolving this contradiction one way or another, it has been allowed to fester. In effect, the burden of adjustment has been displaced onto users of public services, including the poorest South Africans.

4.4 Pressure at the centre, slippage at the sides

Although, as shown, core expenditure increased in real terms between 2002 and 2012 and then plateaued, this is not correct for broader definitions of public spending. Government consumption as it appears in the national accounts has continued to rise (Figure 16). How can this be reconciled with my claim that spending has been contained for a decade? The answer lies mainly in my definition of “core expenditure” (see the notes to Table 1). This measure focuses on budgets that central government can adjust and which are financed out of general taxation and borrowing. However, not all parts of the public sector depend on budget revenue, and many have supplementary sources of income.

Figure 16: Government consumption spending (% of GDP)



One example are transfers financed from the skills levy. These are a “direct charge” and not subject to parliamentary appropriation.¹¹ Changes to the amount levied or the use to which the funds are put requires amendments to national legislation.¹² At the same time, these transfers do not affect the deficit, as they are financed by a ringfenced payroll tax, and the amount of expenditure is automatically set equal to the taxes collected. The money is channelled to the Sector Education and Training Authorities (SETAs) and the National Skills Fund (located in the Department of Higher Education and Training). Figure 17 shows that these payments have grown over the last decade (driven by the same forces that drove wage bill growth and resulted in PIT buoyancy described in Section 4.2).

The SETAs are one example of “extra-budgetary institutions”, a broad set of around 150 boards, regulators and public agencies financed partly from transfers out of general taxation, but also through various user charges, levies or taxes, and accounting to various departments of national and provincial government.¹³ Figure 18 shows the growth in consumption spending (i.e. compensation of employees and goods and services) across different elements of general government. While a comparatively small

¹¹ See Table 1 of the statistical annexure to the any recent edition of the budget review for a list of direct charges

¹² The Skills Development Levies Act No. 9 of 1999

¹³ Extra budgetary institutions depicted in Figure 16 do not include the state-owned enterprises and public utilities responsible for electricity, water, passenger rail, road construction, broadcasting, postal services, industrial research and others are also excluded. See SARB (2017). While part of the public sector, these institutions are not part of general government. Also note that the SARB definition of “extra-budgetary institutions” is not the same as Stats SA’s definition of “extrabudgetary funds and accounts” (which appears in Figure 3), and the National Treasury’s definition of “public entities” also defines things differently.

subset of expenditure, consumption spending by extra-budgetary institutions and social funds has far outpaced the rest of government. This may reflect less strict controls over spending within existing entities, or the proliferation of entities over time.

Between 2011 and 2017, consumption spending by provincial departments has been stable as a share of GDP, and its rise since 2017 is largely explained by the slowing of GDP growth. Remarkably, provincial departments spend significantly less on goods and services than they did a decade ago (as a share of GDP). Moderate growth in national government’s compensation spending has been offset by downward pressure on goods and services.

In contrast to the containment of spending pressures in national and provincial departments, compensation spending by local government is now around 40 per cent larger than it was a decade ago (evaluated as a share of GDP). Goods and services expenditure by local government has also escalated strongly. Local government operations are partly funded from the budget but in the affluent urban centres, which account for a large share of the sector’s spending, property taxes finance operations (the only significant tax on wealth in the South African system), while user charges fund the provision of water and electricity.

This evidence suggests that the budget pressure imposed by intense containment of main budget non-interest expenditure has not been matched by similar control of extra budgetary institutions and local government. While there has been pressure at the centre, public consumption growth has continued to slip out the sides, where fiscal controls are less effective. Whereas extrabudgetary funds depend in large measure on transfers from the fiscus, the state-owned enterprises should be financed by market sales and user charges and are, therefore, defined as outside of “government”. But this relative autonomy from fiscal control has, arguably, resulted in an even greater channelling of public resources towards state companies. The next section considers the failure of these companies to translate these resources into sustainable and efficient infrastructure development, and how this eventually rebounded on the fiscus through large transfer payments.

Figure 17: Skills levy transfers (% of GDP)

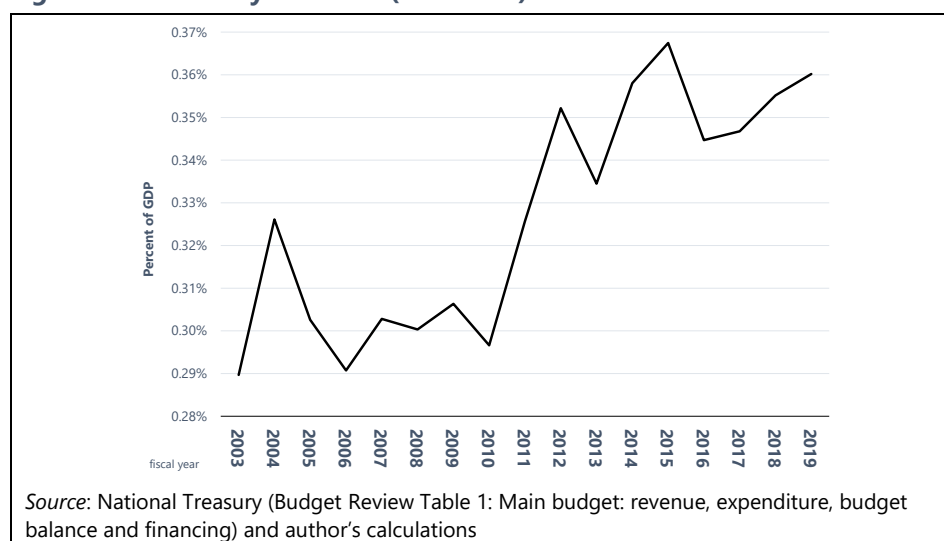
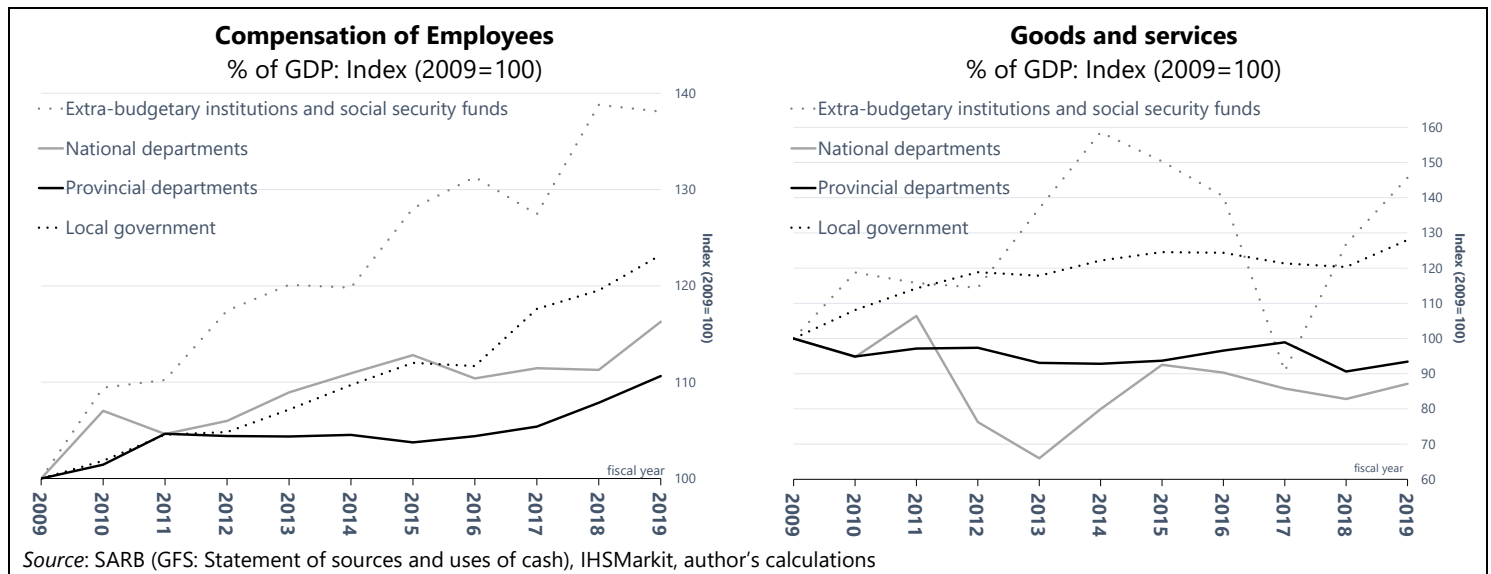


Figure 18: Consumption spending by general government



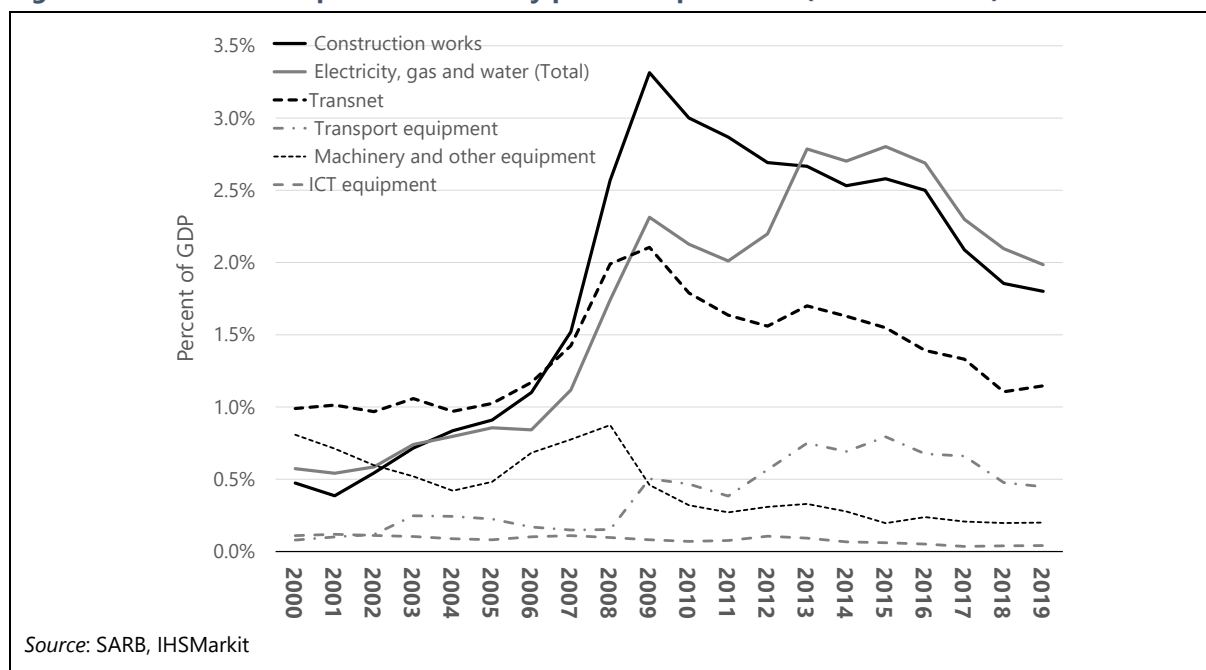
4.5 Uneconomic public investment and increasing fiscal obligations

While the magnitude of government’s investment spending is relatively simple to report, it is far more difficult to gauge the value of the assets created by this spending. As Pritchett (1999) points out, spending on public investment is not necessarily equal to the increment in the value of the public capital stock. If the value of the assets produced falls below the cost of producing them, then investment spending is wasteful. While it lasts, this spending generates construction jobs and contracts and contributes to aggregate demand. However, if it fails to deliver durable benefits for economic growth and development – i.e. raising productivity and expanding national output – its impact is not much different from consumption. Pritchett suggest three reasons for why the value of fixed capital assets might diverge from their cost of production: relative price shifts, unanticipated technological changes and mistakes in the selection and execution of projects.

In South Africa, state-owned companies led the infrastructure surge that accompanied the commodity boom (see Figure 19 below). The resources pumped into public infrastructure reached a peak of 8 per cent of GDP in 2009 (adding general government and public enterprises together). Problems emerged for Transnet with the slowdown in commodity prices. By 2015, its investment programmes were scaled down and rescheduled due to “reduced demand and lower prices for commodity exports” (National Treasury, 2016a: 131). In this case, we might say that changes in relative prices threatened to leave Transnet with stranded assets. If so, the curtailing of Transnet’s investment programme was the right response at the time. In Eskom’s case, it is likely that “mistakes” played a bigger role in the collapse of its investment programme. The selection and design of its infrastructure programme, as well as the execution of its projects reflect problems that are common in infrastructure mega projects around the world (Flyvbjerg, 2014).

More broadly, the infrastructure boom of 2007–2016, which was driven by both private and public investments, coincided with a slowdown in economic growth. This is captured by a dramatic increase in South Africa’s incremental capital-output ratio (ICOR), which is a measure of the impact of investment spending on economic growth in the subsequent year.

Figure 19: Gross fixed capital formation by public corporations (selected items)



Janse van Resnberg et al. (2019: 7) show that the investment rate increased, but the efficiency of that investment fell:

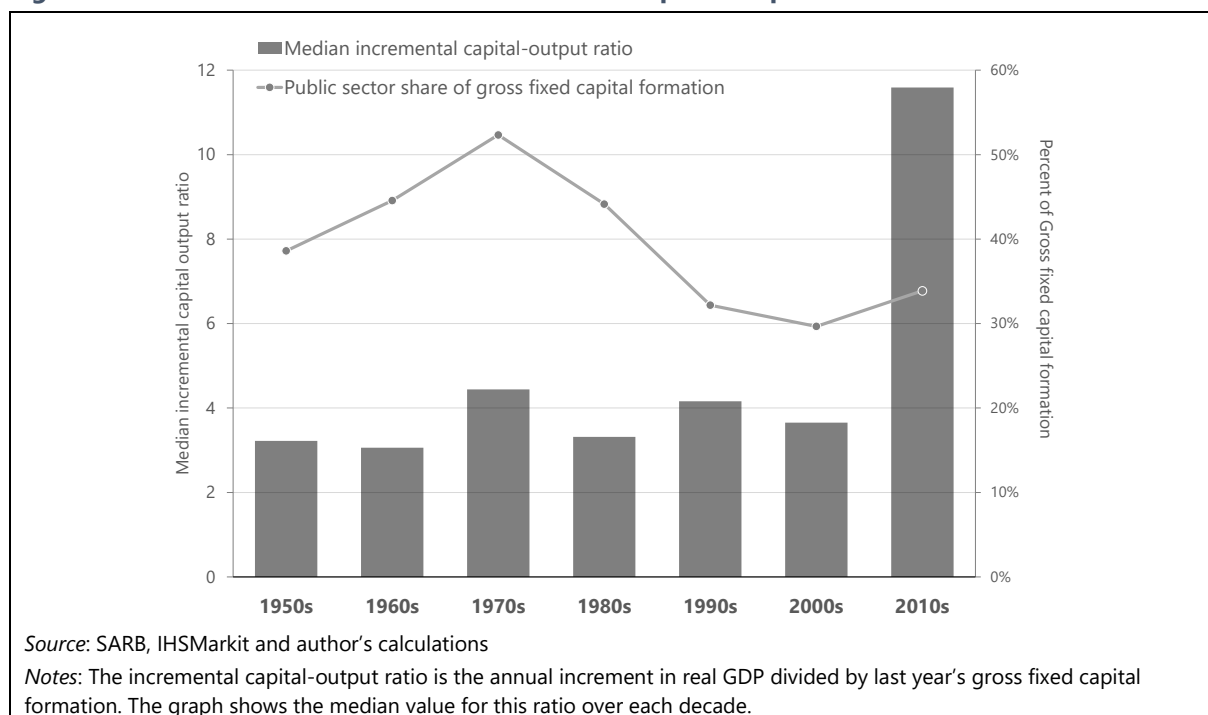
Over South Africa’s modern economic history, it has historically taken around 3½ to 6 units of investment to generate a unit of output. Over the past decade, however, the ICOR has worsened steadily. Over the last six years, it has climbed to more than triple its long-term average, and it is now almost four times higher than in the 2000s. Compared with other emerging markets South Africa’s ICOR has gone from being slightly worse than average ... to being clearly inferior (behind 82% of peers). This shows the quality of capital spending has become much worse over the post-crisis period.

Figure 20 replicates their analysis and also shows the share of public sector spending in total gross fixed capital formation. In the 1970s, public investment accounted for more than 50 per cent of capital formation. This surge in public infrastructure spending coincided with an increase in the ICOR during that decade. In the 2010s, the surge in public investment is comparatively smaller, but the escalation of the ICOR is truly unprecedented.

One reason for this correlation might be that public infrastructure spending, which is increasingly important at the margin, is not creating truly productive assets. But spending might also appear to be “wasted” because infrastructure is built too far ahead of demand, or because broader expectations of economic growth and demand fail to materialise. Whatever the reason, the “stranded assets” that result impose a financing burden. Where public sector creates assets with a value below its cost of production, society will be saddled with servicing the liabilities that result.

These costs might be passed onto households and firms in the form of higher tariffs or charges for the use of public infrastructure, which are one of the factors behind rapid increases in charges for water, electricity and other “administered prices”. In general, public sector prices have outpaced inflation in the private sector (Mano, 2020). A significant driver of this divergence may be the costs imposed by poor infrastructure choices. Other factors might include a Baumol effects, public-sector wage premium, a tendency to procure goods and services at a mark-up on the market price, corruption or a host of other institutional factors.

Figure 20: Public investment and the incremental capital-output ratio

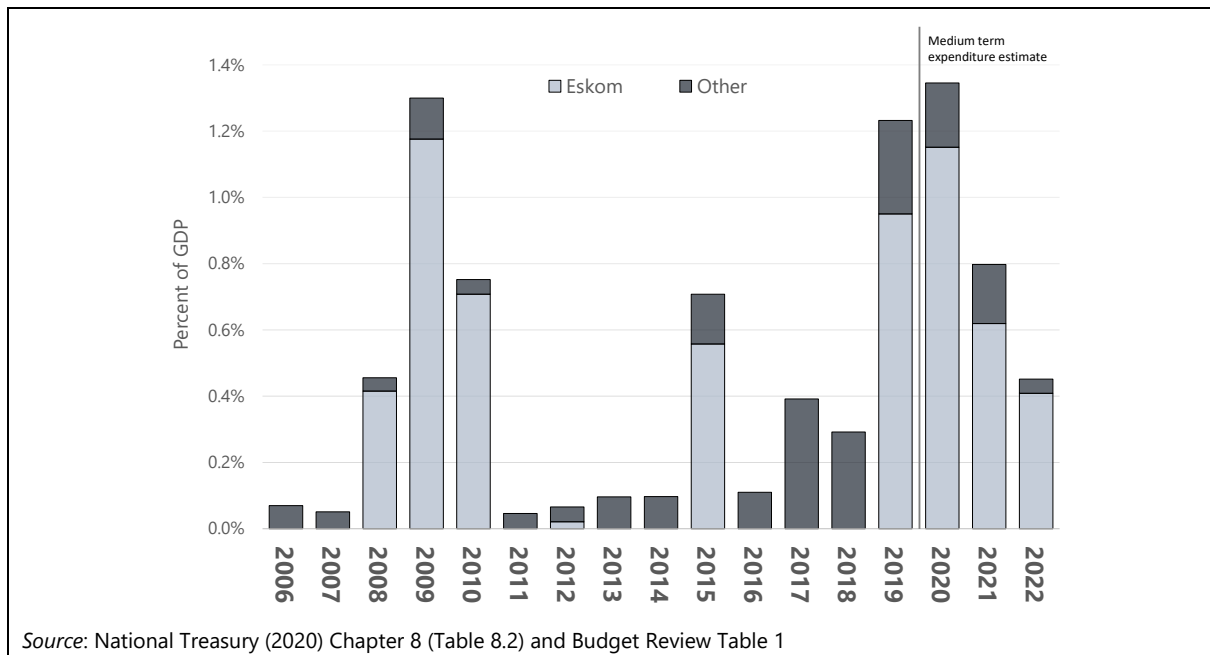


Whatever the case, rising public sector infrastructure failures contribute to increased prices, which impedes economic development and imposes an unacceptable social burden on households. One way of alleviating this burden is to subsidise the service out of general taxation, which will have several consequences. The first is distributional: instead of paying the tariff directly, households and firms carry the burden through increased taxes or through reduced allocations to other spending priorities. The burden does not disappear, but its incidence is distributed differently across the real incomes of households. If the user charge is concentrated strongly on the affluent (as was the case with e-tolls on public highways, discussed further below), this shift is likely to be regressive. The second set of consequences concern economic efficiency and the structure of industrial production. The incentive of users to limit their consumption of the infrastructure is lessened. In the case of e-tolls, this means no incentive to avoid congestion. In the case of electricity, more intensive users are effectively subsidised, favouring the use of electricity-intensive production and adding to the externalities associated with carbon emissions.

If government is unable or unwilling to subsidise the price of infrastructure services out of general taxation, it could alternatively “administer” the prices, so that they fall below the real cost of production (a cost which in this case includes all the inefficiencies and mistakes embedded in the choice of infrastructure). If this route is taken, a financial imbalance will build up on the books of the agency that provides the service. This will eventually result in a financial crisis playing out on the balance sheet of the affective entity.

The definition of core spending adopted in this paper has excluded “payments for financial assets”, which are now depicted in Figure 21. These payments are dominated by transfers to Eskom – R60 billion allocated between 2008 and 2010, in the form of a “subordinated loan” that was later converted to “equity”; further injections of “equity” in 2015 (R23 billion) and 2019 (49 billion); and a further R112 billion promised for the next few years in the 2020 budget.

Figure 21: Payments for financial assets (% of GDP)

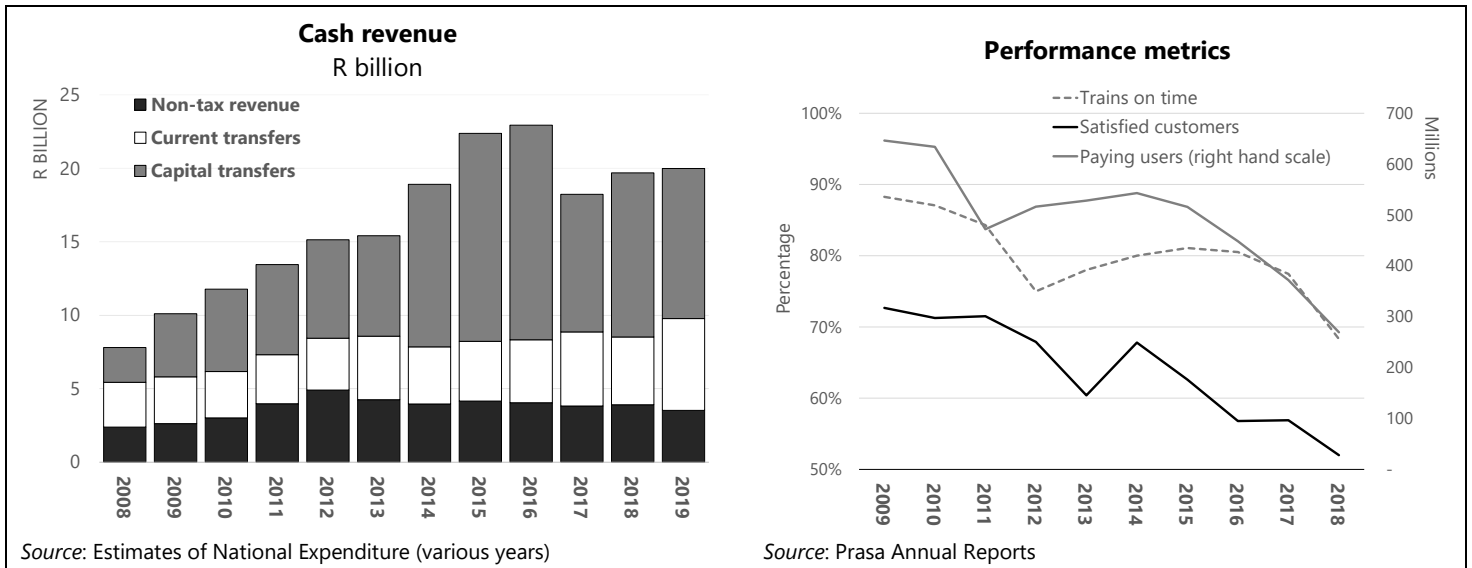


Eskom argues that these bailouts are a quasi-fiscal deficit; an unfunded obligation on its books that arises because electricity tariffs do not reflect the true economic cost of electricity production (Joubert, 2019; De Ruyter, 2020). Eskom is not alone in claiming that electricity prices are below the long run marginal cost of production (see Van der Heijden, 2013: Annex 2). In this light, we might think of these payments as an implicit subsidy to the price of electricity paid out of general taxation. Instead of passing the true cost of electricity onto firms and households, government has accepted a de facto obligation to subsidise electricity supply.

Over the last decade, several other large public enterprises and infrastructure projects have – implicitly or explicitly – been subsidised in this way or will have to be subsidised in the future. A case in point is the disarray over electronic tolling in urban centres, which is unresolved after almost a decade. Government appears to have abandoned user charges even for the most affluent users of public infrastructure. Unless an alternative means to finance this infrastructure is found, national roads will begin to deteriorate in urban centres, leading to gridlock and constraints on economic growth. Pressure will mount for increased taxation, and the only alternative will be to divert resources from townships and rural roads to affluent suburbs. In either case, the abandonment of user charges will certainly have regressive consequences, as the incidence of e-tolls is more progressively distributed than general taxation. More generally, the principle of financing infrastructure in affluent areas through user charges will need to be re-established. If not, the fiscus will be forced into increasingly regressive directions.

The Passenger Rail Agency of South Africa (Prasa) provides another example of inefficient capital allocation. Over the last decade, Prasa has received over R103 billion of capital transfers out of general taxation (Figure 22). From media reports, it appears that this has coincided with the deterioration and collapse of Prasa’s infrastructure (Ritchie & amaBhungane, 2020). If so, “mistake” would be a generous explanation for the waste of fiscal resources, and the squandered opportunity of providing cheaper, more convenient transport for employed workers. In addition to capital subsidies, the budget provides Prasa with an operational subsidy of R4–R5 billion per annum. Since its formation in 2009, Prasa’s non-tax revenue (i.e. mainly the income it gets from the sale of tickets to passengers) has stagnated, as the number of paying commuters has fallen. This suggests that Prasa’s revival – which is wholly warranted from an economic development point of view – will require significant increases in subsidies, as well as additional allocations of capital, to reverse Prasa’s decline amidst plenty.

Figure 22: Passenger Rail Agency (PRASA): Revenue sources and performance metrics



5. SOUTH AFRICA'S FISCAL CRISIS

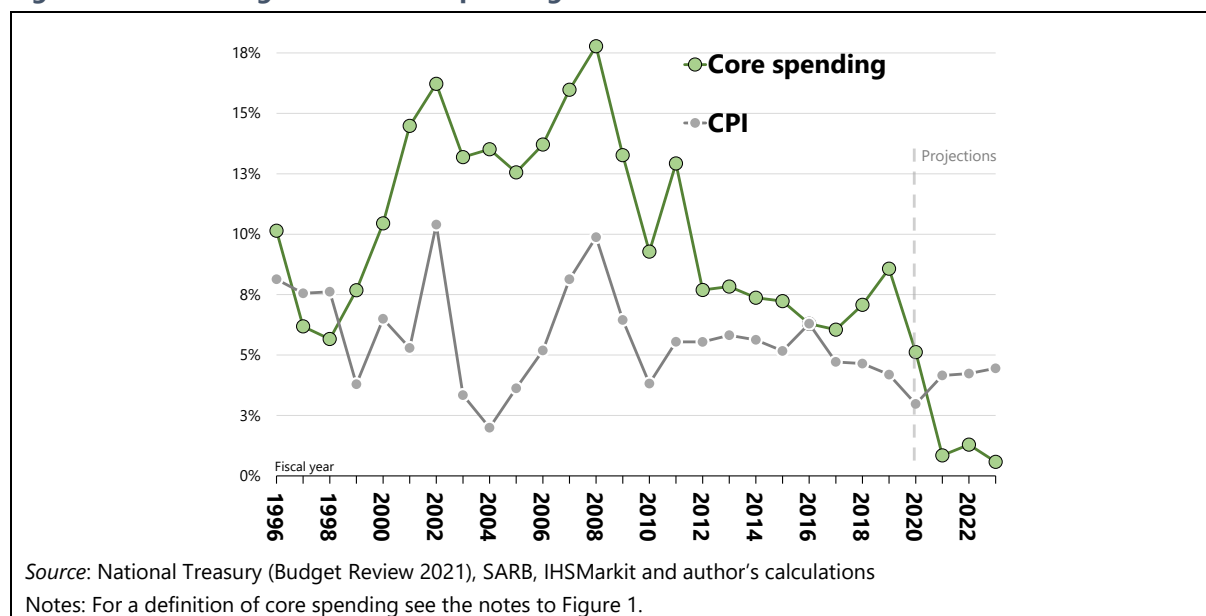
This section considers the fiscal crisis that South Africa now faces as it struggles to recover from the impact of Covid-19. The recent budget proposes a path of consolidation that, if executed at the scale and pace suggested, the erosion of core public services will gather pace. It will also be difficult to accelerate the pace of economic growth in the face of a large and sustained negative fiscal impulse. But even if the consolidation achieves its targets, it is unlikely to stem the rise in the debt burden. This burden consists of rent that is drained out of the proceeds of production, and the consequences this has for economic growth and the distribution of national income. Without an acceleration in nominal GDP, it is difficult to see how South Africa will avoid a period of fiscal and financial disorder.

5.1 A very ambitious consolidation

Shortly before the coronavirus pandemic hit South Africa's shores, the Minister of Finance tabled a budget that planned for deep and sustained reductions in government expenditure. The emphasis on the need to contain government consumption was strengthened in subsequent budget statements. To achieve this, government is planning a four-year nominal freeze in remuneration (2019–2023) and very large cuts to goods and services budgets.

National Treasury projects real government consumption will contract in real terms for the next three years. Figure 23 puts the size of the expenditure consolidation into historical perspective. If executed, this would be the largest contraction in government spending since the transition to democracy, far larger than the programme associated with GEAR and coming after a decade of 'austerity without consolidation', as detailed in Section 4 above. Spending on capital, goods and services by provincial and national government has been under pressure for several years (see Figure 15). Over the last decade, expenditure containment led to a deterioration in the quality of expenditure and an erosion of the real value of health and education services. In the absence of explicit policy choices, the burden of adjustment was shifted onto front line services, in the form of falling headcounts, deteriorating infrastructure and hidden deficits. Given the size of the adjustment now proposed, it is difficult to see how this will be achieved without even deeper consequences for public services and the consumption basket of poor South Africans.

Figure 23: Nominal growth in core spending and consumer inflation



The planned consolidation implies a 14 per cent reduction of real spending per capita over a three-year period. Since it targets government consumption, the consolidation is focused strongly on core elements of public provision: the value of public basic education, healthcare, social grants and the criminal justice system will be substantially reduced.

Government intends to erode much of this value by forcing down the real incomes of nurses, doctors, police officers, magistrates, court officials, prison warders and teachers, along with auxiliary and support workers in these sectors – public servants who account for 70% of the government wage bill. But it is highly unlikely that the proposed fiscal consolidation can be achieved without a reduction in the number of personnel, particularly in basic education, the criminal justice system and the defence force.

Considering that the population they serve is increasing, the real value of these services will decline. Since no wage restraint has been negotiated with the private sector, the incentives for the best qualified personnel to shift out of the public sector will intensify, eroding the human capital base of public services. Even if cost-of-living adjustments are negotiated down to zero, keeping average remuneration from growing will be difficult unless promotions, pension and medical insurance contributions and other allowances are also curtailed. Budgets for essential goods and services, such as textbooks, petrol, medicines or maintenance, will also come under increasing pressure in the battle to rein in consumption spending.

Given the prominence of public spending in the consumption basket of most citizens, especially black and poor citizens (Oosthuizen, 2019), questions must be asked about the political feasibility of this path, which follows hard on the heels of the shock that Covid-19 dealt to consumption, employment and incomes in 2020. It bears repeating that not only is the shock large, but debt stabilisation requires that it be sustained over the next five years. At the very least, the incidence of the blow (if it is to be inflicted) will be resisted, and the ensuing negotiations could have unpredictable consequences. In my view, it is unlikely that government will muster the political energy to sustain such a large adjustment into the next general election.

Moreover, expenditure cuts of this magnitude would constitute a very large blow to economic growth. A sustained contraction in government spending is only compatible with accelerated economic growth if private consumption, exports or investment offset the shock. Such an outcome cannot be ruled out, but fiscal policy will continue to act as a large and sustained headwind, slowing the pace of economic recovery.

5.2 Debt level vs. debt path

Without a sustained acceleration of economic growth, it is difficult to see how the deficit will be closed or debt stabilised. This is reflected in the National Treasury’s forecasts, which see the primary balance close towards 1.5 per cent of GDP by 2023, while the overall deficit is forecast at 7.3 percent, significantly above its pre-Covid levels. The targets for debt stabilisation will require that fiscal consolidation continues well beyond the three-year planning period and assume a moderate recovery in economic growth.

Figure 24 shows National Treasury’s two debt scenarios from the June 2020 budget against the backdrop of the pattern since 1960. Following the tabling of the consolidation plan (dubbed the “active scenario” in the June 2020 budget), at least two reviews of the data questioned whether the proposed cuts would be deep enough to stabilise debt. Burger (2020: 2) reports that

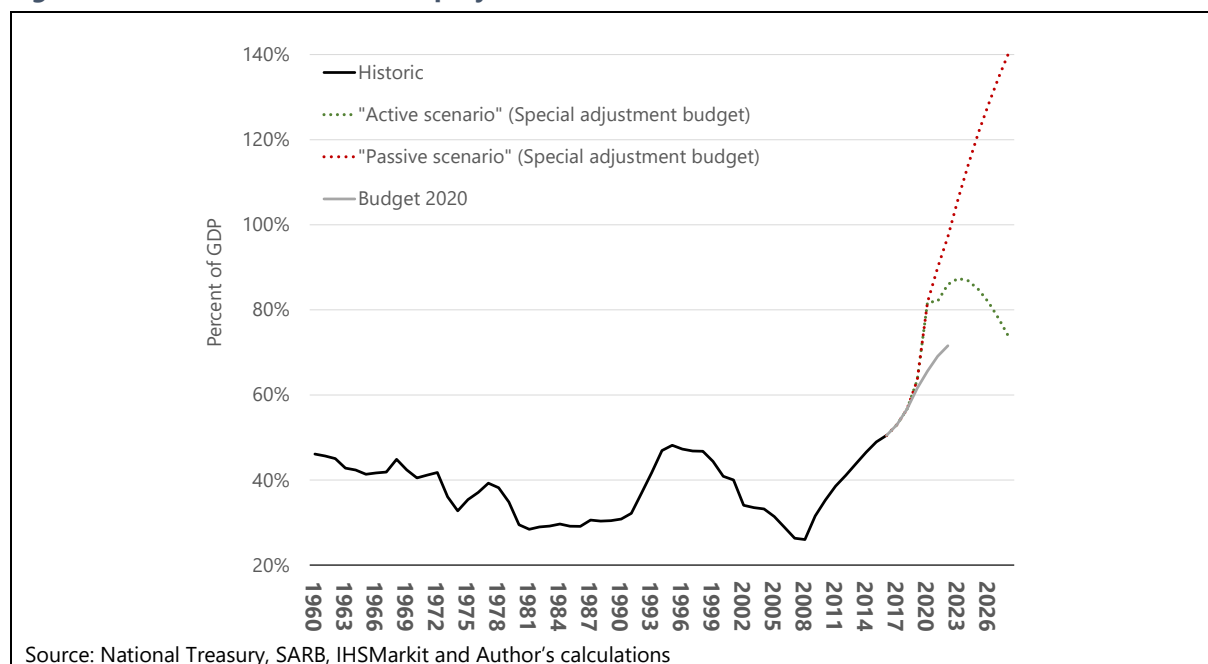
Treasury appears to have underestimated the size of the primary surplus the government will have to run to keep it to the active scenario path [...] [I]t is unlikely that the debt-to-GDP ratio can be stabilised at any level below 100 per cent, as doing so would require changes in the primary balance much greater (and much more painful) than is typically seen even in IMF adjustment programmes.

Keller et al. (2020: 1) attempted to replicate the active scenario, finding that this is possible “only under a set of (exceptionally) onerous—if not unlikely— assumptions”. They conclude that “the required near-term interventions to ensure debt stabilization may be far greater than the authorities [...] currently perceive them to be”. As Burger (2020: 3) points out:

[T]his large adjustment would likely dampen economic growth merely by virtue of the fact that it would be a drag on aggregate demand. This, in turn, might render the policy self-defeating as it might dampen the denominator in the debt-to-GDP ratio more quickly than the numerator.

On current growth projections, the fiscal adjustment needed to stabilise debt is so large that it strains credulity. Even if the future does not turn out as bad as the passive scenario, this path appears more plausible than the sudden stabilisation of debt envisaged in the active scenario. A path of escalating debt somewhere between these two extremes is the most likely. Since 2008, South Africa’s debt level has been rising, and the impact of the Covid-19 shock has been to accelerate the pace of debt accumulation. Rather than asking when debt will stabilise, the more realistic question is how much the path of rising debt can be slowed.

Figure 24: Debt-to-GDP ratio and projections

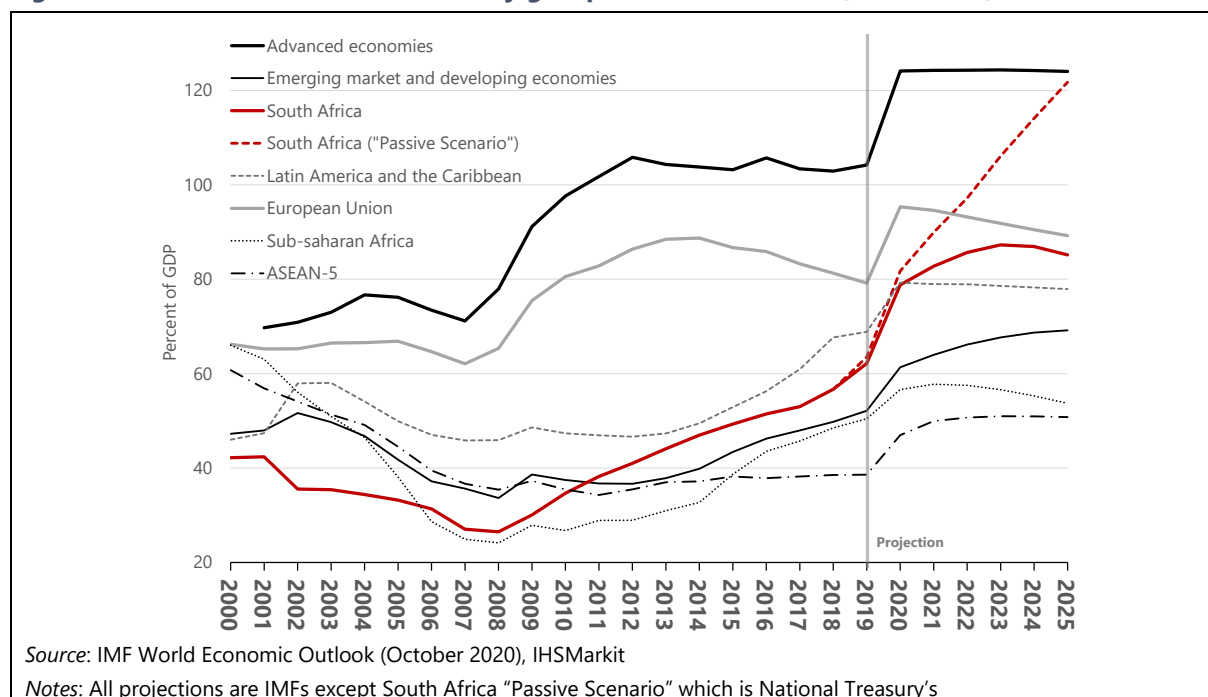


Fiscal sustainability has political, social, economic and financial dimensions (see for instance the discussion in Schick 2006). Debt sustainability analysis of the kind employed by the IMF focuses on financial metrics and usually entails an assumption about a threshold for the debt-to-GDP ratio above which debt is judged unsustainable. This focus on the level of debt has been reinforced by debates concerning the existence of a threshold beyond which the debt level impedes economic growth (for example Reinhart & Rogoff, 2010; Herndon et al., 2014).

But, as Wyplosz (2011) pointed out, such thresholds are always of an arbitrary nature and debt sustainability analysis that rests on such a threshold implies judgements about the credibility of government, the quality of political institutions and the future behaviour of public authorities and private investors in the face of debt distress. A more robust definition of sustainability is one that relies on the trajectory of the debt-to-GDP ratio rather than its ratio at any given point in time. Debt may be judged sustainable if the (financial) net worth of the public sector is improving or stable (at whatever level). Conversely, if the debt ratio is ever-increasing – without concomitant action to raise the net present value of future primary balances by curtaining expenditure or raising revenue – then the financial net worth of the public sector is continuously deteriorating, and debt should be judged unsustainable.

Figure 25 shows the average debt-to-GDP ratio in selected country groups. Prior to the global financial crisis of 2008, debt was stable at a high level in the “advanced economies”. After 2008, these economies took on significant additional debt to finance their fiscal response to the crisis and absorb private-sector banking liabilities onto government’s balance sheet. Between 2007 and 2012, the average debt-to-GDP ratio of this group increased by 44 percentage points and then stabilised after 2012, when the European union and other advanced economies shifted towards “austerity” budgets. The Covid-19 crisis is expected to result once again in advanced economies adding around 20 percentage points of GDP on average to their stock of public debt. The IMF’s projections may look optimistic, but the point is that debt did stabilise after 2008 and is widely expected to stabilise again.

Figure 25: Debt-to-GDP ratios in country groups and South Africa (2000–2019)



It is true that, if the debt-to-GDP ratio is compared to other countries in 2019, South Africa had relatively moderate levels of public debt. But if the trajectory of debt is more important than its level, South Africa's position looks far weaker. In the last few years (even prior to the Covid-19 shock) debt accumulation has been accelerating. Whereas many countries engage in counter-cyclical debt accumulation, South Africa's deficit path suggests an underlying and unresolved structural imbalance, which existed prior to – but has been aggravated by – the Covid-19 crisis.¹⁴

5.3 The interest rate and growth of national income

There is a second reason why simple cross-country comparisons between the level of debt at a point in time are an insufficient guide to fiscal sustainability. The reason advanced economies have been comfortable taking on large chunks of new debt (both after 2008 and now) is that the interest rate on this new debt falls below the rate at which national income is growing. When r (the interest rate to paid to service sovereign debt) is less than g (the growth rate of the economy), any level of debt and any budget deficit is more sustainable. If r stays below g into the future, then debt can be rolled over as it loses value relative to income, making future tax increases unnecessary. Conversely, if the rate of interest rises above the rate of growth, then debt will increase of its own accord, even if there is no (primary) budget deficit.

Aizenman and Ito (2020) call this “the snowball effect”, showing that a positive snowball effect (i.e. $r < g$) reduces both the level and costs of servicing of debt over time. Conversely, if the snowball effect is negative ($r > g$), the costs of servicing debt rises and so does the potential for financial and macroeconomic crisis. Blanchard (2019) presents evidence that $r < g$ is usually the case in the USA, and infers that the “snowball effects” is likely to remain positive into the future, justifying a higher level of debt. Mauro and Zhou (2020) show that the same positive condition is widespread across developed and developing economies, including South Africa where r has been below g for three quarters of the time over the last 150 years or so.

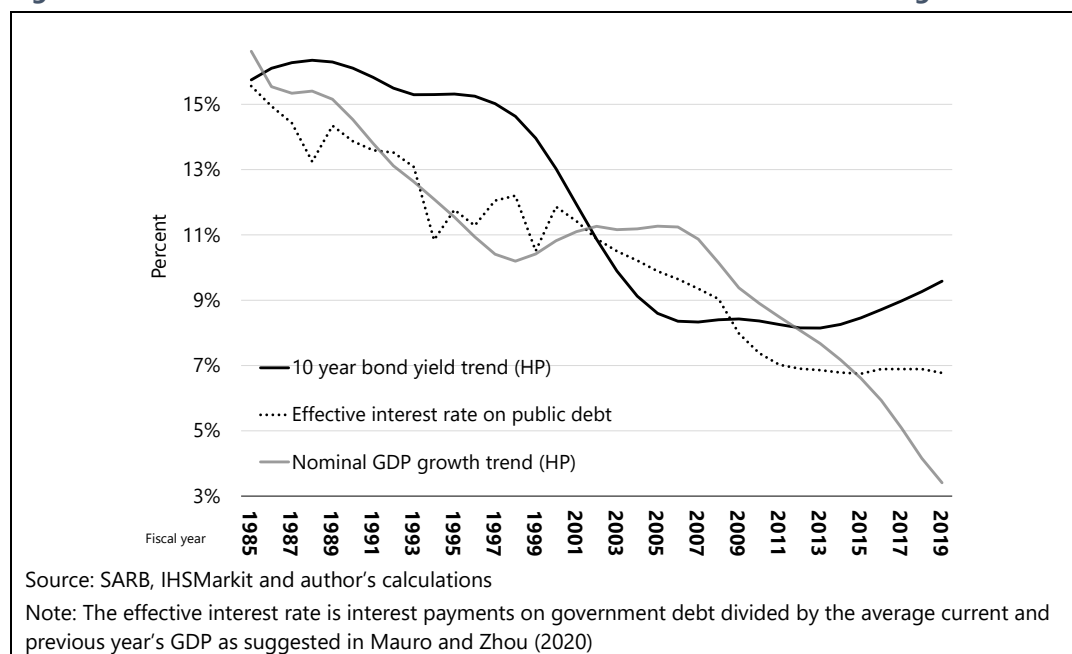
This might suggest grounds for optimism about debt sustainability in general, but Figure 26 gives reason for circumspection in South Africa's case. For many years, the interest rate on South Africa's sovereign debt has been declining along with the rates of safe assets around the world.¹⁵ The rising trend in the bond yield implies that r (effective interest rate) will rise. However, the staggering feature of Figure 26 is not the movement of interest rates, but the secular decline in the rate of nominal GDP growth. In South Africa, g is now far below r , and a negative snowball effect makes any deficit and any level of debt less sustainable.

In much of the world, sovereign interest rates are below economic growth, which has created space for additional debt. The IMF recommendations that developed economies take on further debt are rooted in the assumption that this position will be sustained (IMF, 2020). In South Africa's case, it is barely conceivable that debt can be stabilised unless the rate of economic growth rises. On current official forecast, nominal GDP growth is expected to remain far below the 10-year bond yield over the next three years.

¹⁴ South Africa is certainly not alone in this position. Sovereign debt distress in the wake of Covid-19 is anticipated to reach levels not seen since the crisis of the 1980s (Bolton et al., 2020). The IMF expects 54 low income countries to face debt distress (IMF, 2020).

¹⁵ The interest rates a sovereign pays on its debt can be measured in several ways. Often the yield on a 10-year or benchmark bond is used, but this is a simplification, as the portfolio of outstanding public liabilities is composed of a mixture of instruments. Moreover, most public debt instruments have fixed interest rates, so shifts in the bond yield take time to change the average cost of debt. Market yields are, therefore, best thought of as the marginal interest rate on government debt (i.e. the cost at which additional debt may be issued), whereas the average rate is given by the ratio of total debt service costs to gross debt. This effective interest rate is also the appropriate metric with which to gauge debt dynamics in a standard model (Mauro & Zhou, 2020).

Figure 26: Government's interest on debt and the trend in nominal GDP growth



5.4 South Africa's high interest-rate burden

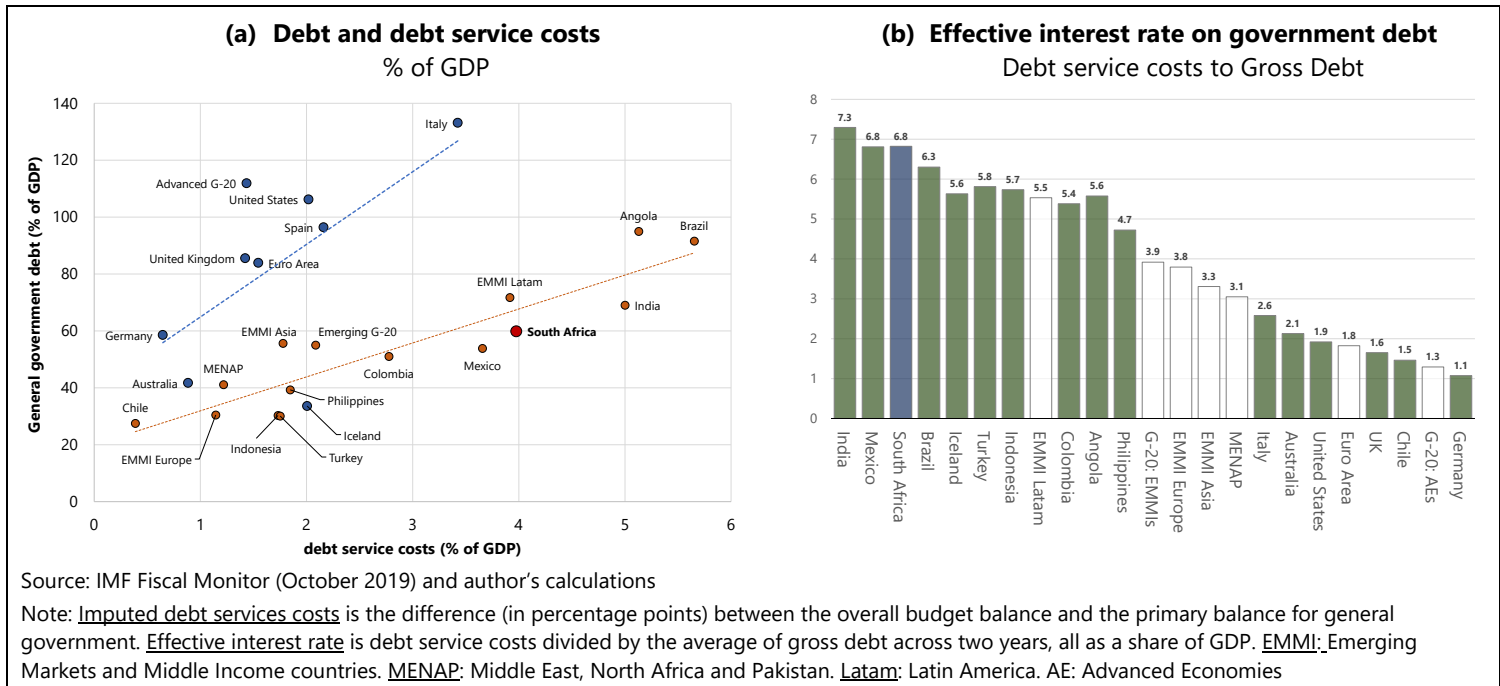
Reviving the pace of nominal growth is critical to stabilising debt. At the same time, it is worth asking why the interest rate that South Africa pays on its sovereign debt is so high. As Figure 27(a) shows, in 2019, South Africa's debt stock was equivalent to around 60 per cent of GDP, close to that of Germany (at 58.9 per cent). But South Africa allocated 4 per cent of its domestic output to service its debt, whereas Germany paid over only 0.6 per cent. Italy had a debt-to-GDP ratio (133 per cent) more than double that of South Africa but paid a lower share of its GDP to service this debt.

The proximate cause of these observations is that South Africa pays far higher interest rates on its public debt than most countries (Figure 27b). There is a clear pattern of differentiation between advanced economies and the rest of the world reflected in the separate regression lines in panel (a). Part of the reason for this may be that inflation tends to be lower in advanced economies, but the higher interest paid by developing countries also reflects a sovereign risk premium. This occurs because creditors regard the liabilities issued by the USA or United Kingdom as safe assets but take the risk of sovereign default into account when advancing credit to the former colonies.

Fedderke (2020) investigates the factors shaping South Africa's sovereign risk premium over the last 50 years. He finds that the spread (or gap) between South Africa's bond yields and those of the USA increases when South Africa's economic growth slows. Other macroeconomic factors raise South Africa's risk premium, including higher inflation, higher levels of public and private debt, and rand depreciation against the dollar. Fedderke finds that "since 2008, the increase in public debt [in South Africa] has been associated with an increase in the yield spread from 2 to 4.62%" and claims that the "substantively dominant association" is that between the risk premium and the South African public debt-to-GDP ratio (ibid: 28).

Clearly the level of debt does matter for the cost of debt servicing, and this positive association can be seen in comparative perspective in Figure 27. However, it cannot be the whole story. If it were, Italy would pay more than South Africa to service its debt. On average, the advanced economy members of the G20 have a debt load almost double that of their emerging counterparts but face a far lower interest burden.

Figure 27: Sovereign debt and interest rates: selected countries and country groups (2019)



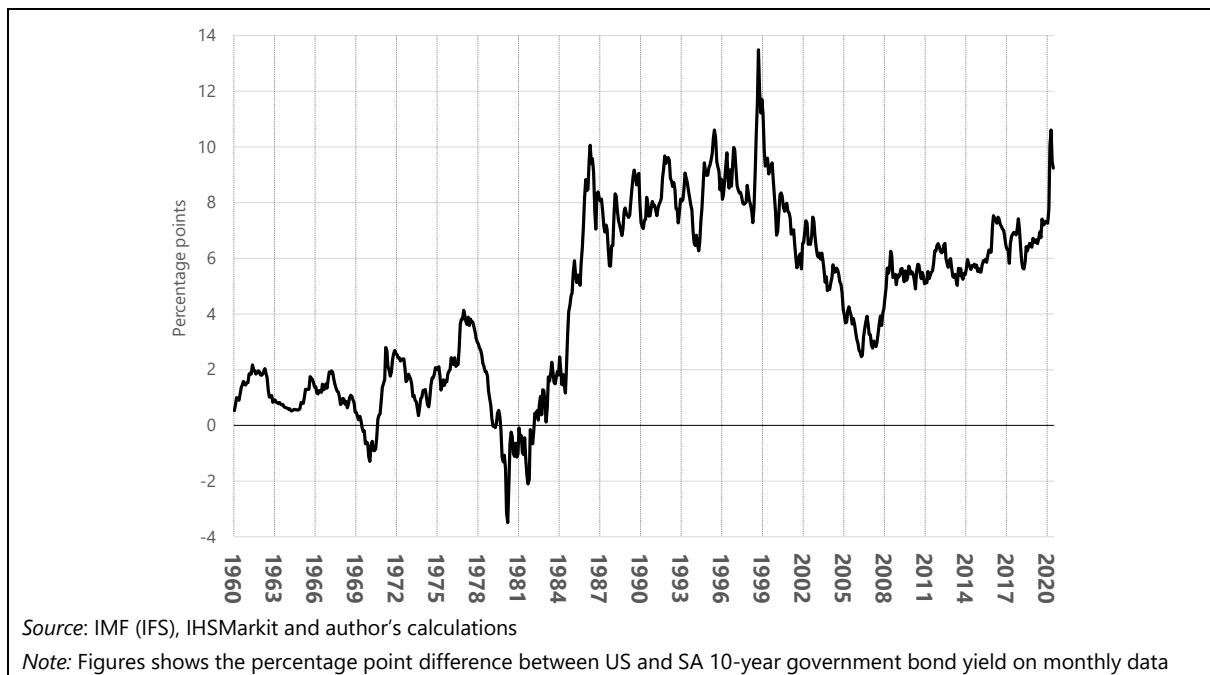
Further explanations for the difference (in South Africa's case) are highlighted in the following observations that Fedderke (2020: 5) makes about the long term trend (the data for which are reproduced in Figure 28):

While South African long-term yields declined significantly from 2000 onward (corresponding to the adoption of inflation targeting), this translated into a declining trend in spreads only until mid-2006, since when the trend has been upward. Startling is the observation that the rising spread became evident prior to the sub-prime crisis (though the latter arguably accelerated the increase), and that the spread in 2019 had reached levels last seen during the 1980 period of maximal political uncertainty and international financial isolation.

While falling spreads were correlated with the adoption of inflation targeting, a more plausible explanation (also consistent with Fedderke's econometric findings) is that the premium was determined by both policy innovation and "macroeconomic fundamentals", and that these rested on the commodity price upswing and the easing of global financing conditions. In this interpretation, the combination of accelerating growth and global monetary easing drove down the value of – and cost of servicing – public debt. Even while government extended its permanent fiscal commitments (discussed in Section 2) its position looked wholly sustainable. Since then, global monetary conditions have remained easy, but global growth has slowed, and South Africa's growth has ground to a virtual halt.

Political dynamics also left a mark on the risk premium. The timing of the upward shift between December 2007 and January 2008 coincides exactly with the ANC's Polokwane conference (see Section 3.3). Subsequent fluctuations are strongly related to political events, such as the dismissal of Nhlhla Nene as Minister of Finance in 2016.

Figure 28: Spread between US and South African bond yields (1960–2020)



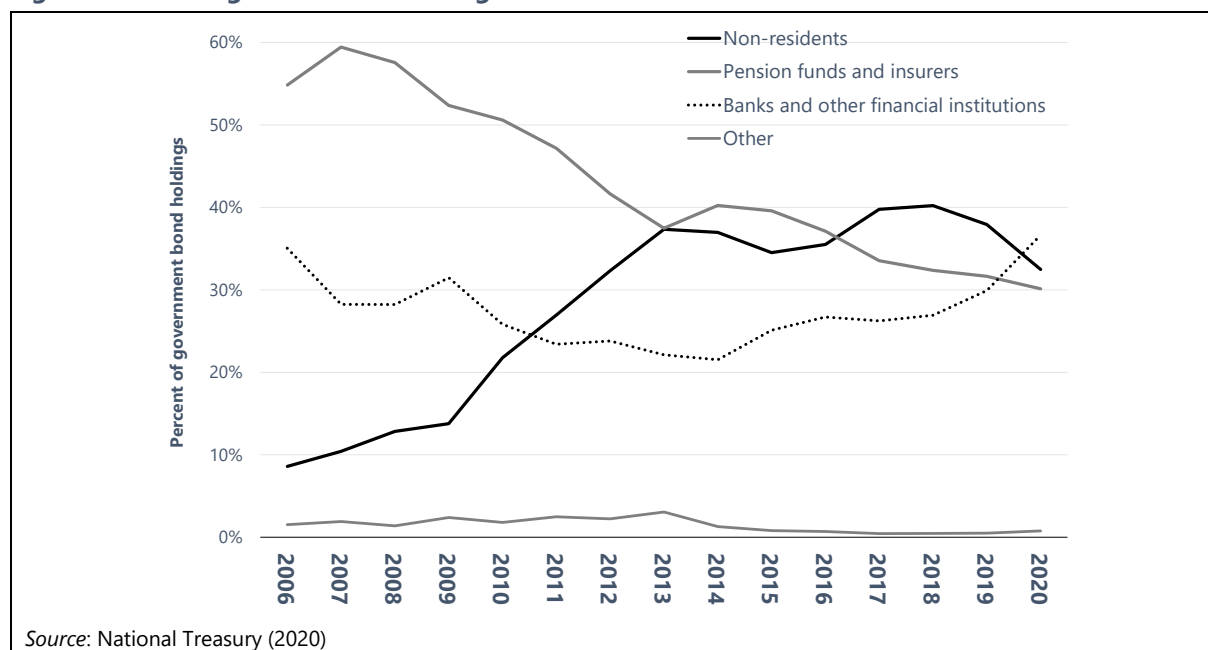
The sovereign risk premium is now – as Fedderke points out – at levels last seen in the 1980s, which was a time of chronic economic stagnation combined with fundamental uncertainty about the constitutional order and the ability of then white political elite to sustain economic expansion within the framework of the existing political settlement – a situation that Marxist scholars of the time called an “organic crisis” (Saul & Gelb, 1981). While the domestic origins of the crisis are clear, falling commodity prices, played a significant part in driving economic growth down. Global monetary conditions had also tightened (because of US policy choices) and, in the context of elevated interest rates, the developing world faced a generalised crisis of debt sustainability.

Today, the high interest rates that South Africa pays on its government debt reflect the twin forces of global economics and domestic politics. The balance between growth and interest rates are determined to a large degree by shifting global conditions. Capital markets naturally fret that government might fail to honour its obligations in full, or fear what will follow the demise of 1994’s increasingly strained political settlement. Debt sustainability rests strongly on these assessments of the general prospects for South African growth and perceptions about its political and social sustainability. As these metrics shift, a basket of fiscal obligations that might have once appeared right and sustainable can become the cause of national bankruptcy.

5.5 An intolerable burden of rent on debt

If debt continues to rise and interest rates do not abate, South Africa faces a significant increase in the burden of debt on the public finances and the economy more generally. This burden is the flow of real resources needed to sustain interest payments to bond holders at the expense of taxpayers and the beneficiaries of public spending. It is effectively a rent on current economic activity which, as it grows, is likely to have serious consequences for distribution and productivity.

Figure 29: Holdings of South African government bonds



How large will this burden be? Debt service costs fell sharply during the 2000s, helping to create the fiscal space for expanded commitments to social policy (as discussed in Section 2). But by last year, 15c of every rand collected in revenue was allocated to bond holders. In the active scenario, National Treasury projects that debt costs will absorb 22 per cent of revenue by 2022. If the current trajectory does not change, this will increase to a third of revenue before the decade is out. In term of national income, South Africa allocates around 4 per cent of the output it produces to servicing public debt. This will grow rapidly, perhaps reaching towards 10 per cent by the end of the decade on current trends.

Figure 29 depicts the institutional identity of government’s creditors. Since 2006, bonds held by non-residents have increased dramatically, as part of a global flow of capital towards emerging markets. When non-residents own government bonds, the associated interest payment are an outflow that subtracts from national income. The resources are extracted from domestic production through taxation and diverted to non-residents. There is evidence that this cost becomes a drag on economic growth (Aizenman & Ito, 2020). However, since 2018, foreign ownership of government bonds has fallen, a process sharply accelerated by Covid-19.

As South Africa’s debt crisis intensifies, it can be expected that foreign exit from the domestic bond market will continue, and an increasing share of government bonds will be held domestically. “A domestically held government bond is simply a commitment for future taxpayers to pay future bondholders in the same economy” (Toporowski & Jump, 2020). But in an extremely unequal society such as South Africa, the concern should be not only the flow of income overseas, but also the impact these payments have on the distribution of income at home.

Interest payments can be thought of as a transfer of income from taxpayers to bond holders.¹⁶ Most bonds are held by financial intermediaries, such as pension funds and banks, and so the income does not go directly to households. However, the assets held in these institutions do ultimately benefit (affluent) households through their ownership of banks and their interest in pension funds.

¹⁶ The literature on fiscal incidence is inconclusive on the treatment of debt service costs (see the discussion in Lambert, 2001: 267), but if we neglect the intertemporal aspects of debt contracts and are concerned only with a snapshot of the allocation of income in a single year interest payments can be thought of as a transfer.

Figure 30 provides evidence that might help in grappling with the distributional consequences of rising interest payments in South Africa. Panel (a) shows an estimation of the incidence of taxation and spending in South Africa by three categories of household income, based on household survey data and reported in Inchauste et al. (2015). Spending is strongly concentrated on the poorest 50 per cent of the population, who are estimated to receive 59 per cent of the benefits created, including cash transfers associated with social grants and in-kind payments for education and healthcare. Taxation is strongly concentrated on the most affluent 10 per cent of households, which contribute 72 per cent of the taxes covered (including most taxes on personal income, payrolls and consumption but excluding taxes on corporate income and wealth).

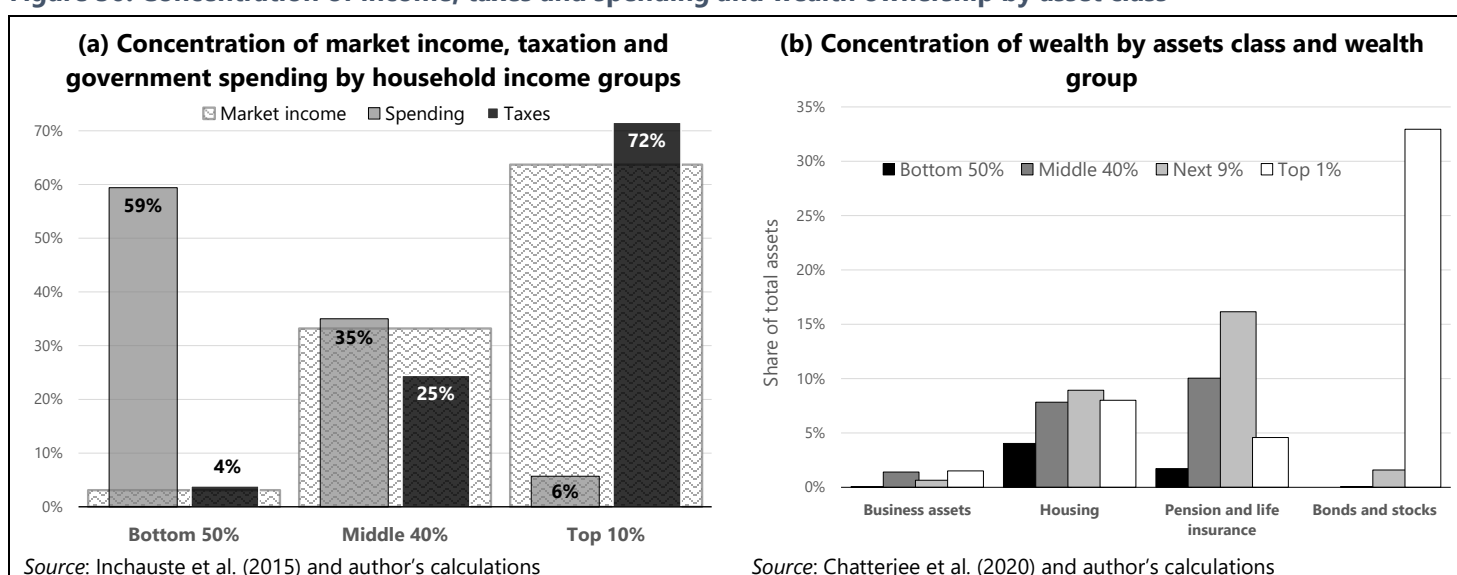
Panel (b) draws on Chatterjee et al. (2020) to illustrate the patterns of asset ownership across the distribution of wealth in South Africa. According to these estimates, two-thirds of South African wealth is held in the form of stocks, bonds, pension funds and life insurance assets. Ownership of stocks and bonds – through collective investment schemes and other vehicles – is strongly concentrated at the top, with the wealthiest 1 per cent of South Africans owning 95.2 per cent of these assets. The wealthiest 10 per cent of South Africans own 64 per cent of pension fund and life insurance assets.

This evidence suggests that if interest payments merit inclusion as part of evaluations of fiscal incidence (and my view is that they do), debt accumulation will erode the progressive character of South Africa’s fiscal structure by diverting an increasing share of tax revenue to domestic bond holders. Rising debt service cost has an even greater distributional impact as it crowds out expenditure, which in South Africa is well targeted at the poorest sections of the population. Over time, government will find itself facing an increasingly stark choice between forcing down expenditure on the poorest, continuously raising taxation or failing to honour its debt service obligations.

These distributional consequences of government debt accumulation are strongly related to concerns over debt sustainability, which John Maynard Keynes (2013: 54–58, also quoted in Dornbusch, 1996: 13) explains most lucidly in his 1923 *Tract on Monetary Reform*:

The active and working elements in no community, ancient or modern, will consent to hand over to the *rentier* or bond holding class more than a certain proportion of the fruits of their work. When the piled-up debt demands more than a tolerable proportion, relief has usually been sought... [If] the necessary adjustment is not made in one way, it will be made in another – probably by the depreciation of the currency. In several countries the existing burden of the internal debt renders devaluation inevitable and certain soon or later.

Figure 30: Concentration of income, taxes and spending and wealth ownership by asset class



5.6 Can the reserve bank bail out the treasury?

While financial conditions are easy in the USA, Europe and Japan, investors will continue the search for higher yielding assets. It is quite possible that South Africa will be able to ride in the wake of these global waves and finance high deficits for a time. However, fiscal policy is unsustainable and so the current position will come to end, one way or another. When and how this will happen is anybody's guess, but if South Africa does not correct its fiscal imbalance, it will be increasingly vulnerable to sudden reversals in capital flows or shifts in global monetary policy. These could force a disorderly and destructive resolution of the fiscal position. A precipitous collapse of rand-denominated asset prices might be followed by a bout of inflation, which would ease the debt burden (as alluded to in the quotation from Keynes above). However, depreciation of value associated with this kind of default will fall largely on those unable to move their capital into safer stores of value. In other words, immobile factors of production would see their pension fund wealth extinguished as capital shifts offshore, leaving in its wake an unsustainable fiscal position borne largely by workers, the poor and vulnerable.

But we live in extraordinary times. The central banks of the USA and European union are purchasing vast quantities of government bonds and other securities. The bonds issued by these countries are absorbed by global capital markets even when they offer negative real returns. Why should South Africa accept the destruction of its wealth, when it has monetary sovereignty and regulatory authority over domestic financial relations, including the debt market? In current global conditions, at least, the central banks of middle-income countries are able to engage in their own bond purchase programmes.

The balance sheet of central banks has long been a core policy instrument, with a clear relation to the structure and conditions for sovereign debt management.¹⁷ As an instrument, bond purchases are always on the table. The questions relate to the purpose and extent of the operation. As to the purpose, the central banks of middle income countries have been virtually unanimous in declaring the objective as “restore[ing] stability and liquidity in the bond market” (Arslan et al., 2020: 3).¹⁸ The SARB has followed the same script, buying bonds to ensure market stability and committing to doing so again if necessary:

By purchasing bonds in the secondary market, the SARB has helped restart price discovery and has encouraged the re-entry of private sector participants.

We continue to monitor the government bond market and to buy bonds where we observe signs of stress at different maturities of the yield curve. This will continue as needed to restore normal market functioning. Up to now, it appears our interventions have worked. Volatility has subsided, and bond yields have largely normalised. While we are not targeting yields specifically, the fact that the benchmark 10-year yield is back to where it was in February suggests that stress in the system has eased. (Kganyago, 2020b: 5)

Although the rhetoric is the same everywhere, the extent and design of these interventions vary widely. Some emerging markets are clearly attempting to ease a government's borrowing constraint, but in South Africa bond purchases have been limited and the central bank has argued explicitly that it “cannot take responsibility for solving a fiscal sustainability problem” (Kganyago, 2020b:7).

The policy question can be viewed in two ways. First, to what extent might the balance sheet of the central bank absorb financial liabilities created in the wake of the Covid-19 shock, with a view to unwinding these liabilities at a future date? Second, can South Africa rely on its monetary sovereignty to hold down the interest rates that government pays on its debt, thereby ameliorating the ghastly rise in debt service costs and avoiding a crisis of debt sustainability? In my view, the first is possible (see Sachs, 2020a), but the second is not.

¹⁷ The SARB itself acted as “market maker” in the creation of South Africa's secondary bond market (Kganyago 2020a:8; du Plessis 2013)

¹⁸ Indonesia the only country cited in Arslan et al. (2020) that explicitly states the purpose of bond buying to be “to assist the government finance the handling of the COVID-19 impact on financial system stability if the market is unable to fully absorb the [bonds] issued by the Government”

The SARB has accepted its role as “buyer of last resort” for sovereign bonds. This has already lowered bond yields (Arslan et al. 2020), and so lessened the fiscal constraint. Further “signs of stress” are likely, and actions to “restore market functioning” will continue to ease the conditions under which National Treasury auctions debt. Several observers suggest that, while global monetary conditions remain supportive, there is scope for more aggressive interventions (Benigno et al., 2020; Nagy-Mohacsi, 2020).

In my view, the SARB can and should continue acting to bring stability to the bond market and, in so doing, they will (whether they like it or not) ease government’s borrowing constraint. But the idea that central bank balance sheet operations can lower South Africa’s sovereign interest rate or offset the pressures for a correction to fiscal imbalances on a sustained basis, appears doubtful to me. “Functional finance” or modern monetary theory might have merit in the USA, Europe and Japan, but its logic has been strongly questioned outside the central core of the world economy (Aboobaker & Ugurlu, 2020; Epstein, 2020). One element of this criticism relates to the differentiated position of sovereigns in the global monetary system.

Mehrling (2013:394) reminds us that “always and everywhere, monetary systems are hierarchical”. This is particularly true of international monetary relations that exist in a complex, hierarchical and asymmetric system. (Eichengreen, 2019; Ocampo, 2019). Reserve currencies are issued by hegemonic powers at the centre of the system, and these “safe assets” are perennially in high demand in the rest of the world, giving their issuers distinct advantages in managing their international macroeconomic relations (Gourinchas et al., 2019). Where a sovereign can issue safe assets, market participants (i.e. the financial institutions, affluent elite and other sovereign governments that dominate global capital flows) respond to crisis by seeking out safe stores of value in which to deposit their wealth. This has the effect of complementing asset purchases by the central bank and eases fiscal constraints precisely at the time it is needed. As Adam Tooze points out:

[I]n this crisis, it has once again proved possible for large economies with credible central banks to borrow on an epic scale without suffering financial-market disruption. And this is because of a dirty little secret about very large holders of private capital: In moments of crisis, they’ve got to put that capital somewhere. And where they always end up putting it is government debt because that’s the safest port in a storm [...] so there is little difficulty in finding financing for government action. (quoted in Levitz 2020)

The result of this behaviour is that government’s action is complemented by financial capital in a manner that stabilises the economy. When the central banks of the US, UK and Europe announce large expansions in bond purchase programmes, or other means of effectively monetising the deficit, they “crowd in” private market participants. Their currencies strengthen, and their financing conditions ease on global markets. Until now, middle-income countries have been similarly successful and, in motivating an even more aggressive approach, Benigno et al. (2020) stress the “surprisingly favourable investor reaction” to emerging market bond purchases and the importance of central bank credibility in sustaining these operations.

But these responses have been differentiated. In South Africa’s case, investor confidence was very fragile in the aftermath of the Covid-19 crisis. Figure 31 shows changes in real exchange rates and bond yields between February and September in 2020. By and large, the USA, UK and European economies saw exchange rate appreciation and falling bond yields. The same pattern can be observed in several emerging markets, including those that have implemented strong bond buying programmes. South Africa faced a large exchange rate depreciation and a substantial increase in bond yields. In the midst of crisis, market participants did not regard South Africa as a safe port in the storm.¹⁹ Why might this be the case?

¹⁹ An alternative explanation might be that the world is enjoying a central bank bond buying bonanza and South Africa is alone in refusing to also print money. Such an interpretation is, in my view, not supported if we compare interest rate and bond yield movements in Figure 33 with the extent of bond purchases by emerging market central banks.

One factor that distinguishes South Africa is the extent of its fiscal crisis, indicated by an unstable debt path, which is discussed in Section 5.2. To reinforce the point in the current context, Figure 32 shows the debt path of several middle-income countries with extensive bond purchase programmes. Of these, only South Africa's debt is unstable, raising question marks about when (or if) it will stabilise, and what policy responses are likely to emerge in the face of debt distress.²⁰ More aggressive bond purchases by the central bank may improve matters in the short term, as “some bondholders would probably be enthusiastic about a large bond purchase programme so they could dump their bonds on the SARB and minimise their losses” (Kganyago, 2020b: 7).

But over time, the central bank is unlikely to be able to stabilise the value of sovereign assets, by absorbing a significant fraction onto its balance sheet, when the solvency of the sovereign is widely doubted. In order to conduct extensive unconventional monetary policy operations, the treasury needs to function as a backstop against potential losses that the central bank may face on its balance sheet (Bartsch et al., 2020). As concerns about sovereign insolvency mount, the balance sheet of the central bank is also placed in doubt, eroding the SARB's credibility and authority.

In this case, overly aggressive action by the central bank may increase, rather than diminish, the risk that rand-denominated financial assets (money, sovereign debt, equity and other obligations) will be subject to sudden crises of confidence and destructive depreciation in value. This is because they may well feed perceptions that that the state intends to act in a manner that would renege on its debt obligations.

5.7 Hello financial repression?

The discussion until now has assumed that the interaction between the sovereign debt issuer and market participants is purely voluntary. All governments raise compulsory revenues through taxation, whereas the cash garnered from debt issuance is ordinarily based on voluntary exchange. But government is both the largest borrower in most nations and the regulator of debt markets, a position that enables it to tilt property rights in its own favour (Betz & Pond, 2020).

The Second World War debts of Britain and the United States were not paid down by reducing expenditure. Instead, primary surpluses were achieved with high rates of taxation, complemented by inflation and various forms of compulsory financing or “financial repression” (Reinhardt et al., 2011). This included “directed lending to government by captive domestic audiences (such as pension funds), explicit or implicit caps on interest rates, regulation of cross-border capital movements, and (generally) a tighter connection between government and banks” (ibid:4). Similar means were employed in Japan and later the fast-growing Asian developmental states.

Post-war compulsory financing took place in a context of closed capital markets, an effective social compact, a capable state and the fastest pace of economic growth in recorded history. Policy action held interest rates low, while growth was rapid. Today, low interest rates are the natural consequence of “secular stagnation”, and policy action must face globalised financial markets and broken social compacts. If the current easing of monetary conditions is not followed with a revival in the pace of growth in the developed world, it further global financial turmoil is likely to follow (Aizenman & Ito, 2020).

²⁰ Interestingly, Chile – the only country that might be construed to have a debt path like South Africa's – has eschewed the purchase of government bonds. Its bond purchase programme is reserved for private sector corporate bonds.

Figure 31: Change in exchange rates and bond yields (Feb–Sep 2020)

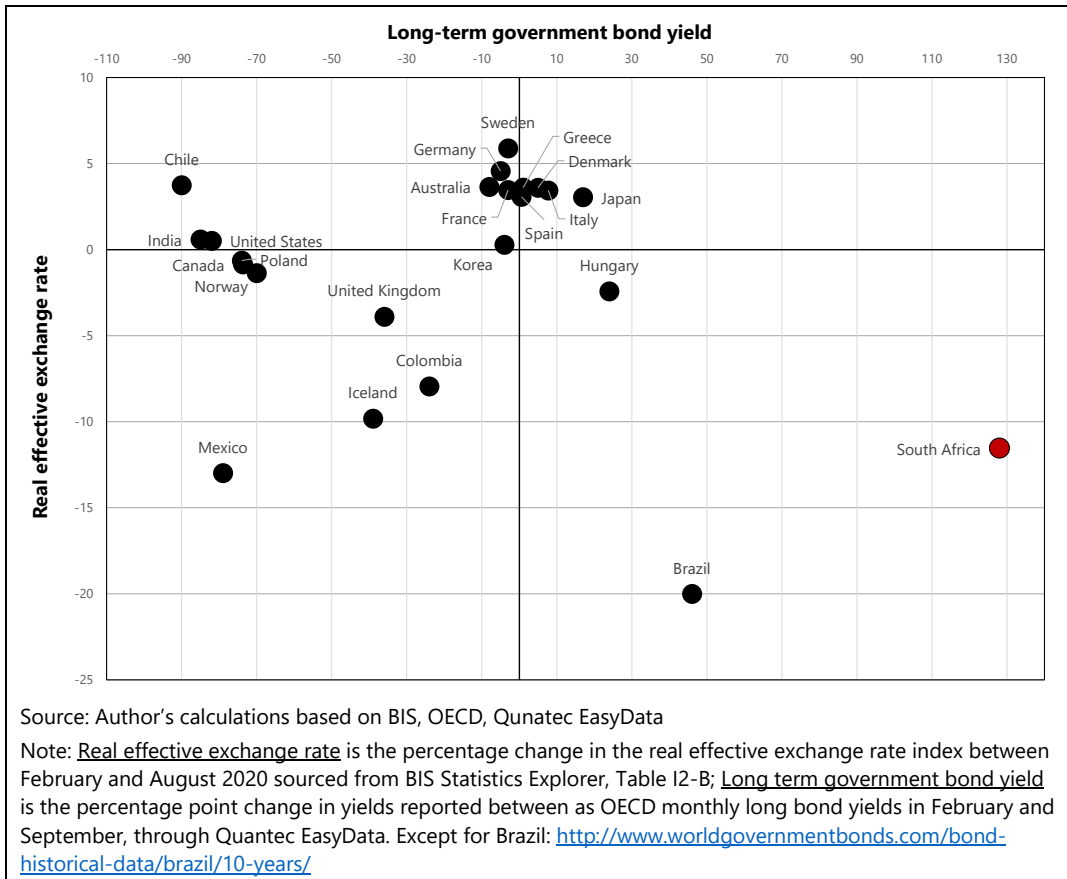
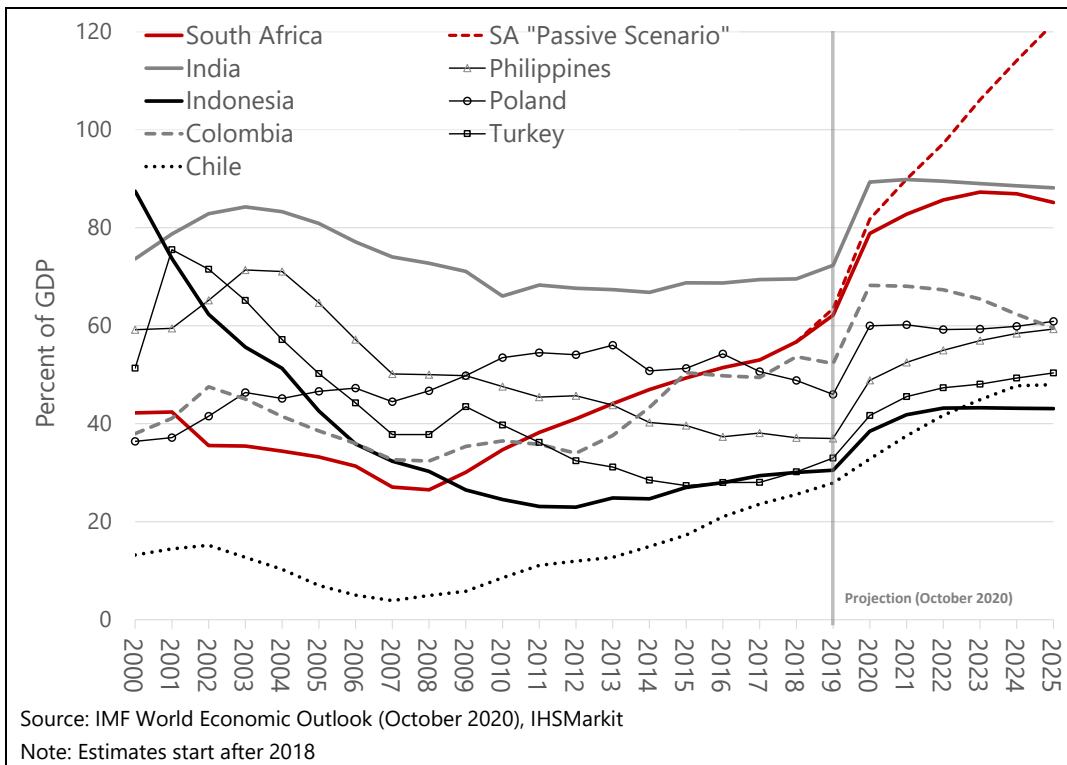


Figure 32: Debt-to-GDP ratios in selected emerging markets with bond purchase programmes



In South Africa, compulsory financing has been suggested in several forms, including asset prescription on pension funds, an expansion of the state banking sector, and various proposals for monetary easing and directed credit on the part of the central bank and development finance institutions. If South Africa were to go down this path, these or similar measures would be unlikely to succeed without a different approach to the regulation of the capital market. The current situation – where South Africa’s capital markets are strongly integrated and regulated with a light touch, and where South Africa is both an investor in overseas capital markets and reliant on foreign savings – is not compatible with the coercive direction of national savings behind public policy goals.²¹

Achieving the transformation of macroeconomic institutions to create conditions in which compulsory financing might work is not impossible. But it would be an exceedingly bold strategy under the best of conditions, given the strength of South Africa’s financial sector. In the face of stagnating economic growth and ballooning public debt, it is likely to intensify rather than alleviate the macroeconomic crisis that South Africa faces.

Economic stagnation and falling rates of capital formation can coexist with such attempts at “financial inflation” (see Toporowski, 2002). If this transpires, the likely result will be monetary disorder and financial instability, which would add to South Africa’s development challenges.

In the 1970s, African and Latin American nations took advantage of benign financial conditions to leverage government debt, but then faced crisis after 1980 when the USA switched its policy regime towards higher interest rates. Right now, South Africa and other middle-income countries can ride on easy global money, including through central bank bond purchase programmes. This breathing space should be seized to resolve the underlying imbalances.

History has not been kind to nations on the periphery of global capitalism that have attempted to sustain fundamental imbalances over a length period of time, including through monetisation of the deficit (a history documented in Eichengreen, 2019).

6. CONCLUSION²²

Two decades ago, South Africa was confident about its economic future. Public expenditure was expanded to deliver on social objectives that had been deferred at the outset of the democratic transition. The expansion of public sector commitments was deliberate, warranted and well-targeted. It included a permanent expansion of core public services (basic education, health and policing), an increase in pro-poor fiscal transfers, significant real improvements in the remuneration of public employees and a surge in public infrastructure investment.

Over the same period (between 2002 and 2012), taxes were lowered in the belief that economic growth would obviate the need for large sacrifices in return for these improvements. The same assumption informed the expansive policy framework mandated in the NDP. But the path of economic growth shifted to a permanently lower trajectory, mainly because of shifts in the global economy. An historic surge in South Africa’s terms of trade fed into economic growth and financing conditions, making the fiscal position appear sustainable. As China began to decelerate, the commodity price upswing dissipated. South Africa’s economic expansion stalled, and growth decelerated year after year. Even if South Africa had avoided electricity supply constraints or resisted the rising tide of corruption, these shifts would still have implied slowing growth and the need for significant adjustments to South Africa’s policy framework.

21 As Epstein (2020) points out, advocates of MMT characteristically neglect to specify institutional conditions and political-economy assumptions underlying their proposals.

22 A version of this section was published in *The Conversation* as Sachs (2020b)

But by then the domestic policy and governance landscape had changed. The ANC's 2007 Polokwane conference signalled the fragmentation of political power and a shift of policy authority from constitutional structures of government to opaque and diffuse processes within the ANC. Government committed itself to further expansions of public sector provision but did not agree on a fiscal programme to support these aspirations. As in the past, it was assumed that a revival in economic growth would generate the necessary resources without the need to raise taxes. But growth continued to slow and instead of facing up to the resulting contradiction, fiscal obligations were extended even as the capacity of the state was eroded and the flow of tax revenue dwindled. Although domestic constraints – including electricity supply and the disruption of government – were initially of secondary importance, they culminated in a second blow to economic growth after 2015. Macroeconomic policy tightened, export performance worsened, and private (and then public) investment collapsed in the face of incoherent policy, regulatory capture and intensifying fiscal crisis.

Over seven lean years of slowing growth between 2012 and 2019 South Africa contained public expenditure below a stable share of national income. But, in Lesetja Kganyago's (2020a:8) words, "aggregate spending [...] failed to decline as a share of GDP". This should not be surprising. From the Constitution to the NDP, the idea of a rising floor of social provision, backed by secular improvements in South Africa's economic fortunes, have been deeply embedded in policy designs. The social consequences of retrogression are so ghastly to contemplate that South Africa has convinced itself that economic progress is the only possibility. Yet it failed to chart a path of sustained economic expansion, and income per capita began to fall after 2011. National income is not the measure of all value, but as it falls the quality of life – and the real value of public consumption – is sure to follow.

A decade of expenditure containment has already degraded the quality of public services. Budgets for national and provincial departments were strictly controlled, but costs continued to rise. Budgets for capital and the procurement of goods and services were driven down to extract fiscal space. Moderate improvements in the salaries of public servants outpaced the growth of compensation budgets, forcing a reduction in employment of teachers, nurses, police officers and the public administration that supports these core public services. The real value of health, basic education and public security has been falling for some time. While these dynamics worsened the social crisis – directly through falling levels of employment and indirectly by eroding the consumption basket of the poor – the budget deficit has remained entrenched. Containment of social budgets has been fully offset by the rise of interest payments leading to an entrenched budget deficit. There was austerity without consolidation.

Although spending was constrained in national and provincial departments, public consumption continued to increase through local government and public agencies. Until 2016, public infrastructure spending leveraged off the balance sheets of state companies remained buoyant. But the quality of public investments deteriorated so severely that large additional subsidies were required to keep public utility systems afloat and offset the costs that these inefficiencies were imposing on society. Meanwhile, government continued to widen the scope of its fiscal commitments: New social programmes were agreed, including free university education, and these new obligations added to the pressure on core public services.

At first, government made progress towards a fiscal sustainability, notwithstanding the increase in debt. Despite the slowdown in growth, private earnings at the affluent end of the labour market continued to grow faster than the economy, leading to buoyant tax revenue. In the face of a seemingly inexorable decline in economic fortunes – and after the second blow to growth in 2015 – tax buoyancy finally succumbed, and fiscal consolidation went into reverse.

In the aftermath of Covid-19, the fiscal position is profoundly unsustainable. Growth rates are below interest rates and (in these conditions) the primary balance needed to stabilise debt is not feasible. As

Blanchard et al (2020: 5) point out “there are economic and political limits to how large a primary surplus a government can generate. When debt service requires a primary surplus that exceeds this limit [...] debt will explode.” If fiscal imbalances are not resolved, the burden of interest payments will quickly become intolerable, making the future ability and willingness of the state to honour its obligations questionable. South Africa is entering a period of fiscal distress.

The crisis cannot be resolved solely by fiscal consolidation, and the path of consolidation proposed by government is so extreme that it is neither possible nor desirable. The attempt at large fiscal adjustment would impose unsustainable social pressures and choke off the recovery, adding to the shock to livelihoods imposed by the Covid-19 catastrophe.

In this unenviable context, it is natural to look for innovative alternatives. Some hope that by inflating the value of rand-denominated assets (including sovereign debt), the central bank can avert the fiscal crisis and restore the momentum of growth. Such a path is fraught with danger. Short-term support to prevent the collapse of the bond market might continue, which will ease the fiscal constraint to some degree. If global monetary conditions remain easy, it will be possible to build on the SARB’s credibility, extending bond purchases and other support. But the SARB cannot resolve the structural imbalances in South Africa’s public finances. South Africa is a small, vulnerable, fiscally unsustainable economy on the periphery of global capitalism with five years of declining per capita output behind it, and an uncertain path ahead. It is a price-taker on the value of its sovereign liabilities, including its money and government debt. An attempt to resolve the fiscal imbalance by, for instance, monetising the deficit would invite financial disorder, worsening both the current crisis and South Africa’s future growth prospects.

Government believes growth can be revived through a renewed commitment to public infrastructure investment. Without action to restore the regulatory, policy and institutional weaknesses that have debilitated the public sector, this approach is unlikely to succeed. Achieving these reforms on the other hand will take time and political effort. In the short term then, the inertia blocking a resumption of growth can only be overcome with private investment in the lead. This will require policy commitments that back a stream of profit that is large, credible and long-lived enough to justify the upfront commitment of significant private resources. Such a move is unlikely to be popular, but the alternative is to allocate an even larger volume of public resources as guaranteed income to private capital in the form of debt service costs, in exchange for a pipeline of state-mediated mega-projects.

Stephen Gelb (2004) proposed that the first decade of South African democracy was underpinned by an implicit bargain. Private property rights would be protected in return for the redistribution of assets and ownership, and access to incomes through public sector employment and provision. The redistribution of assets, whether through land reform, housing policy or black economic empowerment, has not been successful. In its stead, greater reliance has been placed on the redistribution of income.

South Africa has been held together (just) by an implicit fiscal bargain that has two dimensions. First, high levels of taxation strongly concentrated on affluent households have financed social grants, universal access to basic education and healthcare, RDP houses, free basic water and electricity, real pay gains for public servants and a rising distribution of rent to the middle strata. All of this has sustained the income levels of the vast majority. Second, collective goods – pensions, education, healthcare, security and infrastructure – are delivered privately to the affluent minority through segregated systems of provision financed by fees, insurance premia and user charges.

Fiscal crisis will force changes in all these structures. The pace and distribution of the adjustment needs to be engaged, but the fiscal framework will have to change one way or another. If South Africa succeeds in raising its rate of economic growth it might stabilise debt but will be left with a huge burden of debt servicing – income sent overseas or redistributed to affluent households through interest payments. This debt overhang implies (logically and considering the evidence of history) a significant rise in the general

rate of taxation (redistributing income away from taxpayers). Without it, the debt cannot be serviced. Tax increases will need to be focussed on the most affluent and corporate capital, but there will also be implications for the middle strata. At the same time, the consumption of collective goods will be reduced to a level more consistent with South Africa's waning economic fortunes. The poor and lower middle class depend to a large degree on public consumption to sustain their living standards (whereas the affluent are protected in segregated systems), and the current contestation about public sector salaries are a first indication of a struggle to determine who will bear the brunt of this adjustment.

Since the 1970s, South Africa's macroeconomic fortunes have waxed and waned behind large swings in the commodity cycle and global financial conditions. The basic parameters of fiscal sustainability – interest rates and the rate of growth – are to a large extent determined by these external conditions. As is the case in any democratic society, political realities constrain the primary balance needed to stabilise debt. Debt is now unsustainable because growth is low, the interest rate is too high, and the primary balance needed to prevent a debt explosion is not politically feasible.

Several policy conclusions might be offered about fiscal and macroeconomic policymaking in South Africa arising from the foregoing analysis. First, the resolution of the fiscal crisis depends on faster economic growth, which will need to be led by private investment. Fiscal consolidation is necessary but debt will not stabilise without growth. Second, even if growth accelerates, the current structure of the public economy will have to change. This is likely to entail increased levels of taxation and reductions in public consumption.

Lastly, the institutions of macro policy coordination should be reconsidered with a view to a stronger focus on managing adjustments to long-lived shifts in external conditions, rather than short-term fluctuations around a domestic business cycle. Both fiscal and monetary policy is currently anchored around the concept of an "output gap". Inflation targeting and the commitment to countercyclical fiscal policy both entrench this focus. The more important macro policy function for a middle-income economy on the periphery of global capitalism is to manage long-lived adjustments to growth, the terms of trade and global financing conditions. This means targeting the real exchange rate, which is an objective that can only be realised through attention to growth and distribution of incomes and the composition of aggregated demand.

REFERENCES

- Aboobaker, Adam, and Esra Nur Ugurlu. 2020. 'Weaknesses of MMT as a Guide to Development Policy'. *UMass Amherst Economics Working Papers*.
- African National Congress. 1994. *The Reconstruction and Development Programme: A Policy Framework*. Johannesburg: Umanyano Publications.
- African National Congress. 2012a. *State Intervention in the Minerals Sector: Maximizing the Developmental Impact of the People's Mineral Assets*. ANC Policy Institute.
- African National Congress. 2012b. 'The Second Transition? Building a National Democratic Society and the Balance of Forces in 2012'.
- Aizenman, Joshua, and Hiro Ito. 2020. 'Post Covid-19 Exit Strategies and Emerging Markets Economic Challenges'. *NBER Working Paper Series Working Paper 27966*.
- Ajam, T., and A. Janine. 2007. 'Fiscal Renaissance in a Democratic South Africa'. *Journal of African Economies* 16(5):745–81. doi: 10.1093/jae/ejm014.
- Amra, Rashaad. 2020. *Assessing the Performance of National Treasury's Economic and Fiscal Forecasts*. Parliamentary Budget Office.
- Amra, Rashaad, and Brandon Ellse. 2018. *Assessing the Performance of National Treasury's Tax Revenue Forecasts. Technical Report*. Parliamentary Budget Office.
- Amra, Rashaad, Marek Hanusch, and Charl Jooste. 2019. 'When the Cycle Becomes the Trend: The Emerging Market Experience with Fiscal Policy During the Last Commodity Super Cycle'. *Policy Research Working Papers Working Paper 8712*.
- Arslan, Yavuz, Mathias Drehmann, and Boris Hofmann. 2020. 'Central Bank Bond Purchases in Emerging Market Economies'. *BIS Bulletin* 20:9.
- Barron, Chris. 2020. 'New Civil Service Key to New Dawn: Interview with Mavuso Msimang'. *The Sunday Times*, February 2.
- Bartsch, Elga, Agnes Benassy-Quere, Giancarlo Corsetti, and Xavier Debrun. 2020. *It's All in the Mix: How Monetary and Fiscal Policies Can Work or Fail Together*. Centre for Economic Policy Research.
- Benigno, Gianluca, Jon Hartley, Alicia Garcia-Herrero, Alessandro Rebucci, and Elina Ribakova. 2020. 'Credible Emerging Market Central Banks Could Embrace Quantitative Easing to Fight COVID-19'. *CEPR Policy Portal*, July 6.
- Betz, Timm, and Amy Pond. 2020. *Governments as Borrowers and Regulators*. Working Paper available from <http://people.tamu.edu/~apond/research.html>.
- Blanchard, Olivier. 2019. 'Public Debt and Low Interest Rates'. *American Economic Review* 109(4):1197–1229.
- Blecher, Mark, Aparna Kollipara, Adri Mansvelder, Jonatan Davén, Yasteel Maharaj, and Ogali Gaarekwe. 2017. 'Healthcare Spending at a Time of Economic Growth and Fiscal Constraint'. *South African Health Review* 2017(1):25–39.
- Bolt, Jutta, Robert Inklaar, Herman de Jong, and Jan Luiten van Zanden. 2018. 'Rebasing "Maddison": New Income Comparisons and the Shape of Long-Run Economic Development'. *Madison Project Working Paper* 10.
- Burger, Professor Philippe. 2020. 'South Africa's Debt: Has the Budget Overpromised?' *CDE Viewpoints* 2020(10).
- Cairncross, Sandy, Hervé Periès, and Felicity Cutts. 1997. 'Vertical Health Programmes'. *The Lancet* 349:S20–21.
- Céspedes, Luis Felipe, and Andrés Velasco. 2012. 'Macroeconomic Performance During Commodity Price Booms and Busts'. *IMF Economic Review* 60(4):570–99. doi: 10.1057/imfer.2012.22.
- Céspedes, Luis Felipe, and Andrés Velasco. 2014. 'Was This Time Different? Fiscal Policy in Commodity Republics'. *Journal of Development Economics* 106:92–106.
- Chabane, Collines. 2009. 'Media Briefing by Minister Chabane on the Macro Structure of Government (Transcript) | Government Communication and Information System (GCIS)'. Retrieved 9 October 2020 (<https://www.gcis.gov.za/content/newsroom/media-releases/media-briefings/transcript-macro-structure-government>).

- Chamber of Mines of South Africa. 2017. *What If? Mining Investment in SA in an Improved Policy and Regulatory Environment: Survey Findings Show Current Toxic Environment Is Severely Impacting on Mining Potential*. Chamber of Mines of South Africa.
- Chatterjee, Aroop, Leo Czajka, and Amory Gethin. 2020. 'Measuring Wealth Inequality in South Africa: An Agenda'. *WID Working Paper* 2020(6).
- Chipkin, Ivor. 2016. 'In Jacob Zuma, South Africa Has Found Its Gorbachev'. *Daily Maverick*. Retrieved 19 September 2020 (<https://www.dailymaverick.co.za/opinionista/2016-07-31-in-jacob-zuma-south-africa-has-found-its-gorbachev/>).
- Chipkin, Ivor. 2019. 'Provincial Elites Catapulted into the Cabinet Weaken State Capacity'. *Business Day*, February 22.
- Chipkin, Ivor, Mark Swilling, Haroon Borhat, Mbongiseni Buthelezi, and Sikhulekile Duma. 2018. *Shadow State: The Politics of State Capture*.
- Darracq, Vincent. 2008. 'Being a 'Movement of the People' and a Governing Party: Study of the African National Congress Mass Character'. *Journal of Southern African Studies* 34(2):429–49.
- De Ruyter, Andre. 2020. 'Eskom Key Strategic Priorities', May 21.
- Deaton, Angus. 1999. 'Commodity Prices and Growth in Africa'. *Journal of Economic Perspectives* 13(3):23–40. doi: 10.1257/jep.13.3.23.
- Dornbusch, Rudiger. 1996. *Debt and Monetary Policy: The Policy Issues*. National Bureau of Economic Research.
- Eichengreen, Barry J. 2019. *Globalizing Capital: A History of the International Monetary System*. 3rd edition. Princeton: Princeton University Press.
- Epstein, Gerald. 2020. 'The Empirical and Institutional Limits of Modern Money Theory'. *Review of Radical Political Economics* 0486613420912464.
- Fedderke, Johannes. 2014. 'South Africa's Growth Performance'. Pp. 39–50 in *The Oxford companion to the economics of South Africa*, edited by H. Borhat, A. Hirsch, S. M. R. Kanbur, and M. Ncube. Oxford, United Kingdom: Oxford University Press.
- Fedderke, Johannes. 2020. 'The South African - United States Sovereign Bond Spread and Its Association with Macroeconomic Fundamentals'. *South African Reserve Bank Working Paper Series* WP/20/09:36.
- Fine, B., and Z. Rustomjee. 1996. 'The Political Economy of South Africa: From Minerals-Energy Complex to Industrialisation C Hurst and Co'. *Witwatersrand University Press*.
- Flyvbjerg, Bent. 2014. 'What You Should Know about Megaprojects and Why: An Overview'. *Project Management Journal* 45(2):6–19. doi: 10.1002/pmj.21409.
- Frankel, Jeffrey, Ben Smit, and Frederico Sturzenegger. 2006. *South Africa: Macroeconomic Challenges After a Decade of Success*.
- Gelb, Stephen. 2004. 'An Overview of the South African Economy'. in *The State of the Nation (2004-2005)*. HSRC Press.
- Gelb, Stephen. 2007. 'The RDP, GEAR and All That: Reflections Ten Years Later'. *Transformation: Critical Perspectives on Southern Africa* 62(1):1–8. doi: 10.1353/trn.2007.0004.
- Gourinchas, Pierre-Olivier, Hélène Rey, and Maxime Sauzet. 2019. *The International Monetary and Financial System. Working Paper*. 25782. National Bureau of Economic Research.
- Government Technical Advisory Services, DNA Economics, and Mzabalazo Advisory Services. 2016. *Post School Education and Training (PSET) System: Executive Summary*. Government Technical Advisory Services.
- Gustafsson, Martin. 2020. 'Personal Communication'.
- Hassen, Ebrahim-Khalil, and Miriam Altman. 2010. *Public Service Employment and Job Creation in South Africa*. Human Sciences Research Council.
- Havemann, Roy, and Edward Kerby. 2020. *Reigniting Economic Growth: Lessons from Three Centuries of Data*.
- Herndon, Thomas, Michael Ash, and Robert Pollin. 2014. 'Does High Public Debt Consistently Stifle Economic Growth? A Critique of Reinhart and Rogoff'. *Cambridge Journal of Economics* 38(2):257–79. doi: 10.1093/cje/bet075.
- IMF. 2015. *World Economic Outlook: Adjusting to Lower Commodity Prices*. S.l.: International Monetary Fund.

- IMF. 2016. *South Africa: Staff Report for the 2016 Article IV Consultation*. International Monetary Fund.
- IMF. 2020. *Fiscal Monitor: Policies for the Recovery*. International Monetary Fund, Fiscal Affairs Department.
- Inchauste, Gabriela, Nora Lustig, Mashekwa Maboshe, Catriona Purfield, and Ingrid Woolard. 2015. *The Distributional Impact of Fiscal Policy in South Africa*. World Bank Group.
- Jacks, David S. 2019. 'From Boom to Bust: A Typology of Real Commodity Prices in the Long Run'. *Chimetrica* 13(2):201–20. doi: 10.1007/s11698-018-0173-5.
- Janse van Rensburg, Theo, David Fowkes, and Erik Visser. 2019. 'What Happened to the Cycle? Reflection on a Perennial Negative Output Gap'. *South African Reserve Bank Occasional Bulletin of Economic Notes* OBEN/19/01.
- Joubert, Deon. 2019. *Quasi Fiscal Deficits and the Price of Electricity*. Departmental Seminar Series, Pretoria: UNISA Economics Department.
- Kaplinsky, Raphael. 2010. 'China, Commodity Prices and the Terms of Trade'. Pp. 91–111 in *China and the World Economy*, edited by D. Greenaway, C. Milner, and S. Yao. London: Palgrave Macmillan UK.
- Keller, Sonja, Sthembiso E. Nkalanga, Saad Siddiqui, and Sean T. Kelly. 2020. 'South Africa: No Squaring the Fiscal Circle'. *J.P. Morgan Economic Research: Global Data Watch*.
- Keynes, John Maynard. 2013. *A Tract on Monetary Reform*. Vol. IV. Cambridge [England] ; New York: Cambridge University Press for the Royal Economic Society.
- Kganyago, Lesetja. 2020a. 'Opening Address at the Fourth Annual Distributed Sovereign Debt Research and Management Conference'.
- Kganyago, Lesetja. 2020b. 'The SARB the Coronavirus Shock and the Age of Magic Money'. in *Lecture at the Wits School of Governance*.
- Klein, Matthew C., and Michael Pettis. 2020. *Trade Wars Are Class Wars: How Rising Inequality Distorts the Global Economy and Threatens International Peace*. Yale University Press.
- Lequiller, François, and Derek Blades. 2014. *Understanding National Accounts: Second Edition*. OECD.
- Levitz, Eric. 2020. 'A Historian of Economic Crisis on the World After COVID-19'. *Intelligencer*. Retrieved 24 September 2020 (<https://nymag.com/intelligencer/2020/08/adam-tooze-how-will-the-covid-19-pandemic-change-world-history.html>).
- Makgetla, Neva. 2018. 'South Africa's Exports and Inclusive Industrialisation'.
- Mano, Koketso. 2020. 'Measuring Public Sector CPP'. *South African Reserve Bank Occasional Bulletin of Economic Notes* 2001.
- Martin, Isaac William, Ajay K. Mehrotra, and Monica Prasad, eds. 2009. *The New Fiscal Sociology: Taxation in Comparative and Historical Perspective*. Cambridge ; New York: Cambridge University Press.
- Mauro, Paulo, and Jing Zhou. 2020. 'R-G<0: Can We Sleep More Soundly?' *IMF Working Paper* WP.20/52.
- Mehrling, Perry. 2013. 'The Inherent Hierarchy of Money'. in *Social fairness and economics: economic essays in the spirit of Duncan Foley*, edited by L. Taylor, A. Rezai, and T. R. Michl. New York: Routledge.
- Merrino, Serena. 2020. *Measuring Labour Earnings Inequality in Post-Apartheid South Africa*. Vol. 2020. 32nd ed. UNU-WIDER.
- Morema, Kgotso, Jeffrey Rakgalakane, Theresa Alton, and Pamela Mjandana. 2019. 'A Novel Supply-Side Approach to Estimating the Impact of Load Shedding on GDP'. *South African Reserve Bank Occasional Bulletin of Economic Notes* OBEN/19/02.
- Nagy-Mohacsi, Piroska. 2020. 'The Quiet Revolution in Emerging-Market Monetary Policy'. *Project Syndicate*, August 18.
- Naidoo, Vinothan. 2019. 'Transitional Politics and Machinery of Government Change in South Africa'. *Journal of Southern African Studies* 45(3):575–95. doi: 10.1080/03057070.2019.1622309.
- National Planning Commission. 2012. *National Development Plan*.
- National Treasury. 2004. *Estimates of National Expenditure, 2004*. Pretoria: National Treasury.
- National Treasury. 2013. *Budget Review, 2013*. Pretoria: Government of South Africa.
- National Treasury. 2014. *Budget Review, 2014*. Pretoria: Government of South Africa.

- National Treasury. 2016a. *Budget Review, 2016*. Pretoria: Government of South Africa.
- National Treasury. 2016b. *Estimates of National Expenditure, 2016*. Pretoria: National Treasury.
- National Treasury. 2020. 'Historical Government Bond Holdings September 2020'. Retrieved 21 October 2020 (<http://investor.treasury.gov.za/pages/default.aspx>).
- Nene, Nhlanhla. 2015. 'Speech on the Tabling of the Medium Term Budget Policy Statement'.
- Nowak, Michael. 2005. 'The First Ten Years After Apartheid: An Overview of the South African Economy'. Pp. 1–10 in *Post Apartheid South Africa: The First Ten Years*, edited by M. Nowak and L. A. Ricci. Washington, D.C.: International Monetary Fund.
- Ocampo, José Antonio. 2019. 'The International Monetary System and Economic Development'. Pp. 799–832 in *The Palgrave handbook of development economics: critical reflections on globalisation and development*, edited by M. Nissanke and J. A. Ocampo.
- van Onselen, Gareth. 2009. *Political Musical Chairs: Turnover in the National Executive and Administration Since 2009*: South African Institute of Race Relations.
- Oosthuizen, Morné. 2019. 'Inequality and the Generational Economy Race-Disaggregated National Transfer Accounts for South Africa'. *WIDER Working Paper* (2019/24):54.
- Perotti, Roberto, and Yianos Kontopoulos. 2002. 'Fragmented Fiscal Policy'. *Journal of Public Economics* 86(2):191–222. doi: 10.1016/S0047-2727(01)00146-3.
- du Plessis, Stan. 2013. 'A Stone under the Ocean: How Money Did Not Disappear and What We Now Need to Do about It'. *Monetary Policy and the Challenge of Economic Growth* 235.
- Pritchett, Lant. 1999. 'The Tyranny of Concepts: CUDIE (Cumulated, Depreciated Investment Effort) Is Not Capital'. doi: 10.1596/1813-9450-2341.
- Pritchett, Lant. 2000. 'Understanding Patterns of Economic Growth: Searching for Hills among Plateaus, Mountains, and Plains'. *The World Bank Economic Review* 14(2):221–50.
- Reinhardt, Carmen M., and M. Belen Sbrancia. 2011. 'The Liquidation of Government Debt.Pdf'. *BIS Working Papers* (363).
- Reinhardt, Carmen M., and Kenneth S. Rogoff. 2010. 'Growth in a Time of Debt'. *American Economic Review* 100(2):573–78. doi: 10.1257/aer.100.2.573.
- Republic of South Africa. 1996. 'Growth, Employment and Redistribution: A Macroeconomic Strategy'.
- Republic of South Africa. 2010. 'The New Growth Path: The Framework'.
- Republic of South Africa. 2013. 'White Paper for Post-School Education and Training: Building and Expanded, Effective and Integrated Post-School System (as Approved by Cabinet on 20 November 2013)'.
- Republic of South Africa. 2017. 'National Health Insurance for South Africa: Towards Universal Health Coverage'.
- Ritchie, Gemma, and amaBhungane. 2020. 'What's Left of Prasa's Rail Infrastructure?' *Daily Maverick*, October 2.
- Roubini, Nouriel, and Jeffrey Sachs. 1989. *Government Spending and Budget Deficits in the Industrial Economies. Working Paper*. 2919. National Bureau of Economic Research.
- Sachs, Michael. 2020a. *Macro-Fiscal Considerations in Response to the COVID-19 Crisis*. Covid19 Economy Group.
- Sachs, Michael. 2020b. 'South Africa's Waning Economic Fortunes Demand Harsh Policy Adjustments: Who Will Bear the Brunt?' *The Conversation*. Retrieved 23 February 2021 (<http://theconversation.com/south-africas-waning-economic-fortunes-demand-harsh-policy-adjustments-who-will-bear-the-brunt-149019>).
- Saez, Emmanuel, and Gabriel Zucman. 2019. *The Triumph of Injustice: How the Rich Dodge Taxes and How to Make Them Pay*. WW Norton & Company.
- Saul, John S., and Stephen Gelb. 1981. *The Crisis in South Africa: Class Defense, Class Revolution*. New York: Monthly Review Press.
- Schick, Allen. 2006. 'Sustainable Budget Policy: Concepts and Approaches'. *OECD Journal on Budgeting* 5(1):107–26. doi: 10.1787/budget-v5-art5-en.
- South African Reserve Bank. 2017. 'Institutional Section Classification Guide for South Africa'.
- South African Reserve Bank. 2020. 'Tax Chronology of South Africa: 1979-2020'.

- Spaull, Nic, Adaiiah Lilenstein, and David Carel. 2020. 'The Race between Teacher Wages and the Budget: The Case of South Africa 2008-2018'. *Research on Socioeconomic Policy Group (RESEP), Stellenbosch University*.
- Stone, Christopher. 2006. 'Crime, Justice, and Growth in South Africa: Toward a Plausible Contribution from Criminal Justice to Economic Growth'. *SSRN Electronic Journal*. doi: 10.2139/ssrn.902387.
- Toporowski, Jan. 2002. *The End of Finance*. 0 ed. Routledge.
- Van der Heijden, Tracy. 2013. 'Why the Lights Went Out: Reform in the South African Energy Sector'.
- Von Holdt, Karl. 2019. 'The Political Economy of Corruption: Elite Formation, Factions and Violence'. *Society, Work & Politics Institute Working Paper 2019(10)*.
- Wyplosz, Charles. 2011. 'Debt Sustainability Assessment: Mission Impossible'. *Review of Economics and Institutions* 2(3):37. doi: 10.5202/rei.v2i3.42.