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The state of South African public finance: How close are we to a debt trap?

Authors: Futuregrowth Interest Rate Team @ Futuregrowth

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"What triggered me was the realisation that a) wars leave countries with unsustainably high debt loads, and b) countries get OUT from those debts by inflation and/or financial repression. And I'm realising a) COVID-19 is a war, with war-like consequences, and b) there is no visible way out of the debt trap for SA (it's not like we are magically going to improve our export ability in a competitive world)."

Rigorous internal debate is part of the investment process at any reputable asset management firm. Within Futuregrowth, the intensity of an already robust investment process has gone up a notch or two over the past few months. The quote above is an extract from one of our many daily internal email messages. Penned by Andrew Canter, our Chief Investment Officer, this offers a great analogy and sets the scene for this article.

The objective of the article is to share our view of the road ahead for South African public finance. Although much of what follows is already in the public domain, we thought it wise to share in more detail our own thoughts about the possibility of a public sector debt trap and its most likely consequences. In order to do that, we have reverted to economic theory, selected as many appropriate indicators of the state of public finance as possible and carefully applied the data in an attempt to map the most likely road ahead. Of course, the unknowns, of which there are plenty, have been covered by well-reasoned assumptions. For further reading, alternative takes on public sector debt are provided in the Annexure at the end.

It is important to note that the content that follows has been baked into our investment theme, view and strategy. Our long-held concern about the dire fiscal backdrop and the roles that the desperately weak economic and social backdrop play are well telegraphed. Even before the COVID-19 related developments, whispers of a lurking "debt trap" were shared at our investment discussions.

Lessons from history

The COVID-19 pandemic, and more specifically the extensive lockdown, led to an exponential worsening of the already fragile state of the vulnerable South African economy and deteriorating state of public sector finances. Even though each crisis, just like children growing up in the same household, tends to have its own "personality", there are also similarities to historical events, and therefore lessons to learn. With this in mind, and looking for good reference material, the interest rate team stumbled upon a South African Reserve Bank paper written by Dr E J van der Merwe in 1993 (on the cusp of the "New South Africa"), titled "Is South Africa in a debt trap?".

Reading this paper raised striking similarities between the public finance debate at that time and the debate raging today, even though the backdrop could hardly have been more different. Looking back, very few if any analysts at the time expected the fairy tale developments that followed about a decade into the new dispensation when government not only managed to avoid the proverbial fiscal cliff, but actually generated small budget surpluses which enabled the significant reduction of the public sector debt. Of course, the fledgling democracy benefitted from a number of strong tail winds at the time, including a very strong global economy. Equally important, though, was the role that prudent, sound fiscal management played at the time. Our in-house Fiscal Strength Indicator unsurprisingly confirms a very healthy fiscal situation at that time.



The indicators

Where are we today? Could we face a similar surprise in the next five to ten years, or is South Africa already at a point of no return and on a path to self-destruction due to an unsustainable public sector debt burden? Let's start the discussion with a look at the more important indicators of the state of public finance.

a) The current/capital expenditure ratio

In 2012 National Treasury introduced the main budget expenditure ceiling in an attempt to arrest the ever-growing expenditure bill and ultimately stabilise the level at which public sector debt was increasing. In response to sustained weak economic growth and resultant tax revenue under-collection relative to budget targets, the expenditure ceiling was continually reduced in the period 2013/14 to 2018/19.

The half-hearted application of the expenditure ceiling over this period failed to materially rein in the speed at which government accumulated debt. And the increase in debt accumulation, and resultant increase in interest payments, has come at the expense of productive capital investment. The reallocation of capital expenditure - potentially instrumental in contributing to much-needed future economic growth - is too big a price to pay, especially in the case of a structurally weak Gross Domestic Product (GDP) backdrop.

This trend is clearly visible in Figure 1 below and is deeply disturbing. The already small allocation of 11.6% to capital expenditure in fiscal 2011/12 is expected to have dwindled away to a level just above 8% by next year.

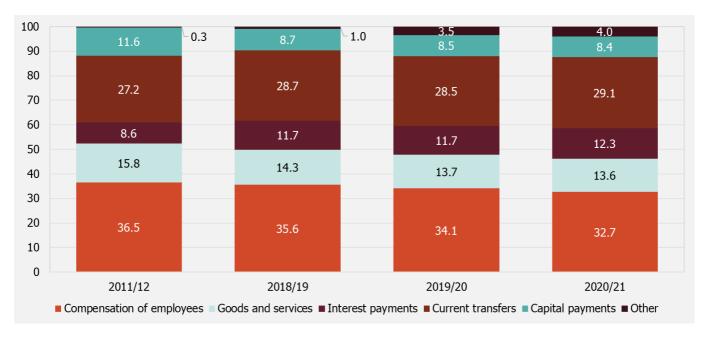


Figure 1: Composition of government expenditure (current versus capital)

Source: National Treasury, Futuregrowth



b) The public sector wage bill

The crowding out of investment expenditure by current expenditure could have largely been avoided if the public sector wage bill had been kept under control. The wage bill is by far government's largest expenditure item, comfortably accounting for over a third of total consolidated expenditure. The rapid rise in the wage bill has mainly been due to a combination of the increase in the size of the public sector workforce and the above-inflation increases in average public sector salary levels over time.

Figure 2 below is a stark reminder of the impact of the latter. Using 2003/04 as a base year, it is quite clear that the increase in the wage bill has far outstripped inflation, despite sustained poor service delivery over the same period. Allocating more spending towards the wage bill has in turn meant less funding available for critical capital expenditure projects such as the construction or upgrading of hospitals, schools and other infrastructure which would assist in addressing the structural shortcomings of an economy that is operating below potential. For example, in the current fiscal year, wages for the 1.3 million public servants (around 2% of the country's total population) will absorb 51.4% of all tax revenue (compared with about 40% in a normal year). This is clearly not a sustainable situation.

700 Billions 600 500 400 300 200 100 2009/10 2011/12 2012/13 018/19 002/06 2007/08 5008/09 2010/11 2013/14 2014/15 Equivalent CPI adjusted wage bill Public Sector Wage Bill

Figure 2: Organised labour is serving its members well, but this comes at a grave cost

Source: National Treasury, Futuregrowth

c) Ratio of budget deficit before borrowing to gross domestic product

They say a picture is worth a thousand words. This certainly is the case with Figure 3. The shortfall between total revenue and expenditure, which first started drifting into wider deficits during the 2009/10 tax year, has accelerated significantly of late. In February this year, government estimated that the consolidated budget deficit will widen to 6.8% for the current fiscal year, a result of a combination of the sharp increase in expenditure and an expected decrease in tax revenue collection due to the weak economic environment. This estimate now seems a distant and almost sad memory. Due to the COVID-19 induced recession, this has more than doubled to 15.7% with the tabling of the Supplementary Budget in June. South Africa now finds itself in a situation that is significantly worse than that of the early 1990's when the possibility of a debt trap was initially discussed.

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4% 40% %9.0 2% 35% 0% 30% -2% -3.6% -3.5% -4% -3.6% -3.8% 25% -4.1% -4.0% 4.2% -6% -6.3% 20% -8% 15% -10% -12% 10% -14% -13.6% -14.6% 5% -16% -15.5% -18% 0% 2001/02 2002/03 2003/04 2005/06 2006/07 2016/17 2018/19 2020/21 1992/93 2008/09 2009/10 2017/18 2004/05 2007/08 2012/13 2013/14 2014/15 26/9661 2000/01 Consolidated Budget Balance/GDP -Revenue/GDP (RHS) Expenditure/GDP (RHS)

Figure 3: The consolidated budget, revenue, expenditure and the budget balance (% of GDP)

Source: National Treasury, Futuregrowth

d) The primary balance is pointing in the wrong direction

The unsustainability of the fiscal situation is even better illustrated when one takes a look at the primary balance (budget balance, excluding interest payments). Figure 4 shows that the South African public sector is in the red, even prior to servicing its fast-rising debt burden. In other words, it has to borrow more to not only fund the revenue shortfall, but also to service outstanding debt that is being accumulated to bridge the shortfall in the first place. This is similar to a consumer tapping into the credit limit of one credit card to service the interest cost of the outstanding balance on another. Clearly, an unsustainable and dangerous situation.

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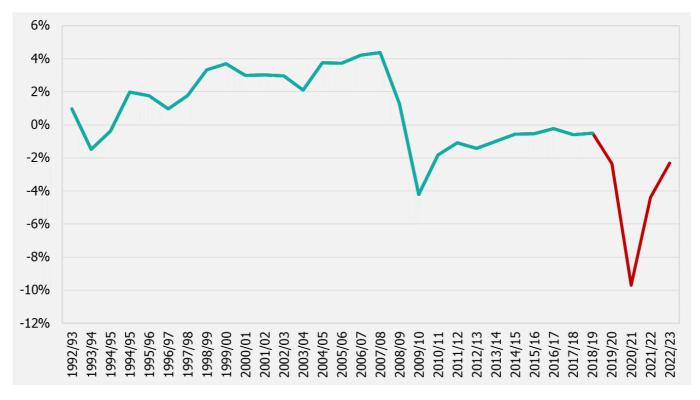


Figure 4: The primary balance (% of GDP)

Source: National Treasury, Futuregrowth

e) Ratio of outstanding government debt to gross domestic product

Two important measures to consider when assessing the sustainability of a country's debt burden are the primary balance and the level of its outstanding debt relative to the size of the economy, i.e. the debt-to-GDP ratio. A rising debt-to-GDP ratio can be seen as the consequence of the inability to consolidate the budget balance. This inability, in the case of South-Africa, has meant that the debt-to-GDP ratio has been increasing consistently since 2009 (as seen in Figure 5 below), with little to no prospect for stabilisation in the near term. The primary balance has also failed to reach a surplus, further evidencing the extent that South Africa's fiscal position has deteriorated.

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100 90 80 Debt Burden (% of GDP) 60 50 40 30 20 10 0 Mar-62 Mar-70 Mar-72 Mar-78 Mar-80 Mar-82 Mar-84 Mar-86 Mar-88 Mar-90 Mar-92 Mar-96 Mar-98 Mar-00 Mar-02 Mar-76 Mar-94 SA Gross Debt Ratio

Figure 5: Gross outstanding debt (% of GDP)

Source: National Treasury, Futuregrowth

f) Ratio of interest payments to total government expenditure

The significant increase in debt issued by the government has naturally led to an increase in the government spending that is allocated to debt servicing costs (illustrated in Figure 6 below). In the 2020 February Budget, government acknowledged that debt servicing costs have become the fastestgrowing category of expenditure. Debt-servicing costs also inevitably increased as a result of a larger credit risk premium being priced into both domestic and foreign currency-denominated debt. This is of particular concern as it is one more line item that is taking away resources from much needed and potentially more productive capital expenditure.

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Figure 6: Interest payments (% of total expenditure)

Source: National Treasury, Futuregrowth

g) The profile of outstanding public sector debt

While the increase in the debt burden has been a worrying development since the 2008 Global Financial Crisis, National Treasury's prudent debt management strategy over many years has been instrumental in preventing a liquidity crunch. Here, the combination of currency exposure, instrument type and the collective maturity profile proved to be prudent. Over time, National Treasury's strategic portfolio risk benchmarks helped to ensure that the debt structure is configured to minimise hard currency, inflation, redemption and other related risks. One of several characteristics that distinguished South Africa from other emerging market countries that were forced, hat in hand, to approach the International Monetary Fund (IMF) for assistance is the fact that the largest share of outstanding debt is denominated in rand. Of course, government did approach the IMF recently, but like many other countries, this was specifically related to the COVID-19 pandemic and not to fund the budget deficit *per se* (yet). Further to this, the country's debt redemption profile (as illustrated in Figure 7 below) is relatively well staggered and stretched out to as far as thirty years, rendering concentration risks minimal from both a domestic and foreign currency debt perspective.

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100% 90% 80% 70% 60% 50% 40% 30% 20% 10% 0% 2009/10 2012/13 2004/05 2005/06 2007/08 2008/09 2010/11 2011/12 2013/14 2014/15 2018/19 2002/03 2003/04 2006/07 2019/20 Short-term Domestic ■ Foreign debt ■ Long-term Domestic

Figure 7: Composition of outstanding public sector debt

Source: National Treasury, Futuregrowth

That said, even this long-standing bastion of strength is showing signs of cracking. Of late, the share of domestic currency debt of total outstanding debt has decreased, while short-dated treasury bill issuance and a reliance on foreign currency-denominated debt has increased. Even on the domestic long-term debt side, primary issuance has been shifting from a concentration in longer to shorter-dated bonds in a desperate effort to lure more buyers and avoid the higher cost of funding in light of the steep positively sloped yield curve (see Figure 8 below). However, it would be amiss to not mention that National Treasury has set prudential limits for short-term debt, inflation-linked domestic debt and foreign-currency denominated debt, with the aim of minimising each instrument's respective risk. Even so, these will be rendered useless if the speed at which debt is accumulated is not arrested.

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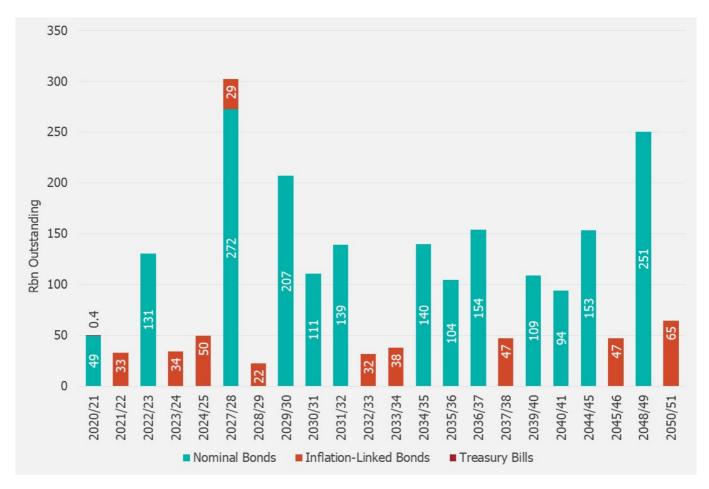


Figure 8: Public sector debt profile (Domestic only)

Source: National Treasury, Futuregrowth

South African Fiscal Strength Score (1996 – 2023)

In order to get a more holistic picture of the indicators discussed above, we constructed a metric that consists of a number of public sector and a few relevant macroeconomic indicators. These are scored individually, based on historical data points as well as estimates for the next three years. The end result is our Fiscal Strength Score, illustrated in Figure 9 below. It clearly shows the deteriorating trend that started around the Global Financial Crisis and has since progressively worsened, having now reached the worst level since 1996. There is hardly any scope for this to drop more.

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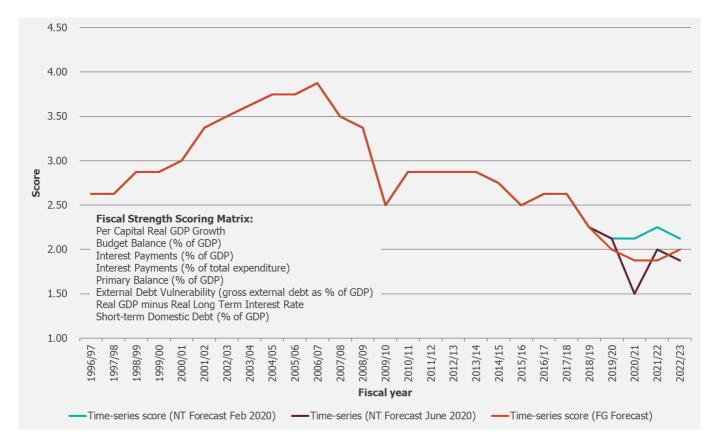


Figure 9: South African Fiscal Strength Score (1996-2023)

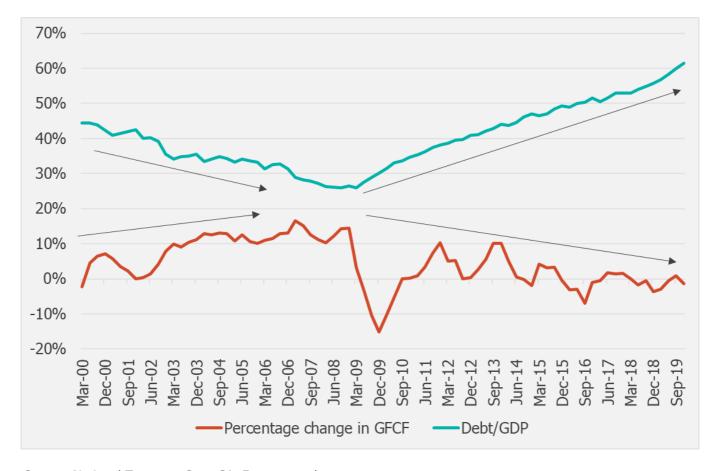
Source: National Treasury, Stats SA, Futuregrowth

Consequences of rapidly rising public sector debt

Increases in public sector debt can either be positive or negative, depending on the cost associated with the debt as well as the returns realised once the debt is spent. In theory, debt accumulation stimulates aggregate demand in the short run, but tends to crowd out long-run capital investment, which in turn impedes longer-term growth. The argument holds that government borrowing that is used to finance a budget deficit causes interest rates to rise. Higher interest rates, in turn, reduce or 'crowd out' private sector investment and consequently impair long-run GDP growth.

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Figure 10: Increases in public sector debt have coincided quite closely with lower fixed capital investment



Source: National Treasury, Stats SA, Futuregrowth

In South Africa's case, the debt ratio increased quite rapidly following the 2008 Global Financial Crisis as the country, like many other countries, adopted expansionary fiscal policies in order to offset the negative economic impact of weaker growth brought about by the financial crisis. However, instead of a higher sustainable economic growth rate, what followed was a decade of lacklustre GDP growth coupled with a persistent increase in the debt burden. This is illustrated in Figure 10 above.

Given South Africa's generally low saving rates, funding for public expenditure has had to come via external sources. As the debt burden increased, so did foreign ownership of local currency bonds. At its peak in May 2018, foreign investors held just under 43% of all issued local currency South African government bonds, as can be seen in Figure 11 below.

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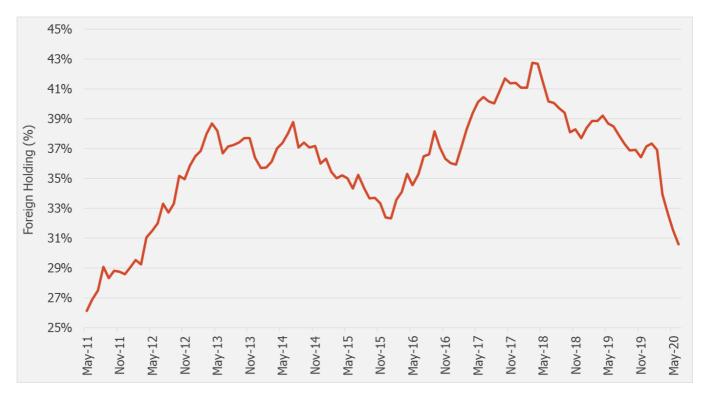


Figure 11: Foreign ownership of local currency government bonds

Source: National Treasury, JSE, Futuregrowth

The increase in foreign-owned local assets contributed to a structural deficit in South Africa's financial account, owing (in the case of the bond market) to large coupon payments being paid to non-resident investors. It follows that higher debt burdens, specifically those funded by foreigners whether in local currency or foreign currency, tend put pressure on maintaining a current account surplus. The implication of a twin deficit, whereby both the current account and the budget balance are in deficit, puts pressure on the local currency and, in turn, forces monetary authorities to maintain a higher level of real interest rates in order to protect the currency from depreciating materially and negatively impacting inflation.

The negative implications of COVID-19 on the real economy will in all likelihood be much more severe than those following the Global Financial Crisis, with many economists forecasting double digit declines in real GDP growth and double digit increases in South Africa's budget deficit. Our very own forecasts predict the debt burden to increase to 93% of GDP over the coming three years. These grim figures triggered Moody's to become the last major credit rating agency to downgrade South Africa's local and foreign currency credit rating to sub-investment grade (and further downgrades are foreseeable). This, in addition to the risk off-environment that ensued due to COVID-19 panic, which resulted in mass selling of South African government bonds during March 2020. Approximately R60 billion in foreign capital flowed out of the bond market during that month. As at June 2020, foreign holdings of local currency government bonds had decreased to 30.6% - the lowest level since 2013. This has had the effect of impeding liquidity quite severely.

Quantitative easing and debt monetisation

The lack of liquidity in the market at the peak of the COVID-19 crisis led the South African Reserve Bank (SARB) to introduce additional measures such as daily repurchase agreements and discretionary purchasing of government bonds in the secondary market. Many see the purchasing of government bonds by the SARB as a form of quantitative easing (QE). However, it is important to note that QE is generally implemented once conventional monetary policy becomes ineffectual at influencing short-term

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rates, which in most cases only happens once short-term rates near the zero percent level. South Africa's repo rate still sits quite comfortably above this level at 3.5%, implying that further rate cuts could be used to help anchor short-term rates lower. The SARB is also prohibited under its legal framework to lend directly to government or print money to finance the budget deficit. This is not to say that the SARB will not purchase government bonds to help generate liquidity in the market. It merely puts the onus on market participants to finance government's funding requirements via primary market issuance.

The debt trap

The deterioration of the South African fiscal position is signaling the possibility of a public sector debt trap. Such a debt trap is considered to arise from an unsustainable fiscal position. In turn, an unsustainable fiscal position implies a situation where the increase in outstanding public sector debt can no longer be slowed by higher taxation and/or a decrease in discretionary expenditure (total expenditure excluding debt servicing costs). A failure to turn the tables will require the issuance of more debt in order to finance the repayment of maturing bonds and the payment of interest on outstanding debt, thereby forcing government into a catch-22 situation. Our analysis regarding the state of public finances increasingly points to a situation where the country has entered this twilight zone.

Additional red flags are raised in a scenario where the average interest rate payable on its outstanding debt exceeds the nominal rate at which the economy is growing. Failure to restructure the economy in general and the role of government specifically, for instance by cutting current expenditure sufficiently to turn the ship, will increase the probability of this debt being monetised. As indicated before, this is something that has to be avoided at all cost. Debt monetisation will eventually destroy the ability of the central bank to exercise its primary function, i.e. maintaining price stability – thereby running the risk of hyperinflation in an extreme scenario.

Market valuation

What is the potential impact of all of this on market valuation? Here, we shall focus on the domestic nominal and inflation-linked bond markets.

Nominal Bonds:

The combination of monetary policy easing in response to the recession and strong disinflationary forces and the fiscal deterioration discussed above, is likely to sustain the forces of bull/bear yield curve steepening in the coming months. Our fair value estimates indicate that the yield curve should steepen (where the measurement for steepness is the 30-/10-year spread) by more than 100 basis points (bps) in the next 12 months. This means that the 30-/10-year spread could reach levels as high as 275bps to 300bps from around 200bps at the time of writing. Our pre-pandemic forecast for this same point indicated a spread of only 150bps.

Inflation Linked Bonds:

Unfortunately, inflation-linked bonds (ILBs) are unlikely to get any reprieve from either the strong disinflationary backdrop or the dire fiscal outlook and thus face the threat of increased primary issuance. The back end of the ILB curve has been notoriously flat of late. However, we foresee the same fate as for nominal bonds: bull/bear steepening. Our latest fair value estimates suggest that the 10-year point will range between 2.0% and 2.6%. The 30-year point is estimated to range between 4.0% and 4.8% for an implied yield curve slope ranging from 2.0 to 2.2%. This differs from just three months ago when our forecasts for the fair value estimates of the yield curve points implied a 10/30 yield curve spread of around 70bps.



KEY TAKE-AWAYS

- South Africa's fiscal strength score is at its lowest point in decades.
- This is the result of a combination of macroeconomic developments and years of poor fiscal management by government and a number of state-owned enterprises.
- From the above, it is clear that the country has entered the debt trap twilight zone.
- The inability to arrest the speed at which public sector debt is accumulated will force the country deeper in this debt trap.
- More sovereign rating downgrades deeper into sub-investment territory are inevitable (rating agencies still tend to follow the data as opposed to respond in advance).
- The significant jump in net new issuance will have a negative impact on the funding cost of treasury bills and nominal and inflation-linked bonds.
- The respective yield curve slopes are expected to at least retain the current steep positive slopes or even steepen more.
- The central bank should stick to its mandate and avoid the significant accumulation of government securities. Purchasing government bonds, even in the secondary market, is best avoided in order to minimise the risk of the monetisation of public sector debt.

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Annexure: Alternative takes on public sector debt

1. Statement: The burden of interest payments merely represents a shuffle of money from one group of South Africans to another

A higher level of outstanding debt gives rise to higher interest payments and this will lead to a rising tax burden or simply more net new bond issuance, if the speed at which this debt is accumulated is not reduced significantly and swiftly. This is a well-established fact.

What is less clear is how much of a burden this rising interest payment is on the current and, more importantly, next generation. If the bulk of the national debt is denominated in local currency, in this case rands, one could argue that one group of South African citizens will be making interest payments to another group who own government bonds. So, at a national level, this statement argues that money is merely shifted from one group of South Africans to another, implying that in the end this does not constitute a burden on the nation due to the net effect. This certainly appears to apply to some developed nations like Japan. Japan has been accumulating a mountain of public debt since the early 1990's. This did not lead to inflation. In fact, for many years, the nation had to put up a fight to fend off deflation. With long-term market rates anchored at near zero levels due to the absence of inflation, this accumulation of public sector debt also failed to crowd out private sector investment. So much for economic theory, the proponents of this statement would argue.

This statement also assumes that all outstanding South African government debt is owned by South Africans. Although a relatively small portion of the South African government debt liability is denominated in foreign currency, it is also true that foreign investors own a significant share of rand denominated government bonds. At the end of June 2020, the share of nominal and inflation-linked bonds in the hands of foreign investors was about 30.6%, or roughly about R700 billion. In that sense, it clearly represents a burden on current and future generations since this is money owed to non-South Africans, who would remit the interest payments on these bonds, and eventually the principal, when paid to their respective home countries.

2. Statement: Public sector debt can be rolled in perpetuity
It is custom for a government to continuously roll its debt. In other words, each time the principal of a bond is due, it simply repays lenders by issuing more debt in the primary market. While no bank or other lending institution will extend credit to an individual in perpetuity, since that person will simply not live long enough to repay it, the same argument does not necessarily apply to governments or even some large corporations. Unlike individuals, the entity "government" will be around for, well, as long as the planet remains fit for human habitation.

This argument holds some water when the size of the outstanding debt is at a manageable level. However, in most countries, and more so in the case of developing nations, the true burden of a high and fast rising national debt load will eventually cap the extent to which the outstanding debt can be rolled.

3. Statement: Unlike private sector borrowers, a government can avoid defaulting on its debt
It is certainly true that individuals and any private firms, irrespective of size, have a limited capacity
to borrow. In the end, it is about economics. An entity can only borrow what it is able to service,
or else it becomes insolvent and risks bankruptcy.

In contrast, governments have enormous powers. This, at least, weakens the statement above. A government has alternative options at its disposal that might, at least temporarily, offer a back door should it become a borrower in distress. It can avoid a default on its obligations by drawing on its power to raise taxes or, in an extreme case, simply print money. Of course, this is easier when its liabilities are denominated in the home currency.



Perhaps most governments can buy some time with this approach, but the reality is that at some point the myriad of consequences of irresponsible spending alluded to earlier will catch up with them. This includes the impact of the Laffer curve effect (the idea that people will adjust their behaviour in the face of the incentives created by income tax rates). Moreover, a country that borrows extensively in foreign currency markets to fund an unsustainable deterioration of fiscal balance, will eventually be forced into a cull de sac. Ask Argentina's many lenders whether they would subscribe to a statement that claims a sovereign default is a foolish concern. Some of those who invested in the country's 100-year bond probably did – prior to the most recent default saga.

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