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Thought Leadership

22 July 2022

What funding options are possible for BIG?

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As the debate around a basic income grant advances, the funding of it has received relatively little credible attention, despite, as we show in this report, the profound consequences of different approaches. We analyse in detail the funding options, especially tax but also debt issuance – viewing wider expenditure reprioritisation at this scale as unfeasible. The political economy of a large BIG will be a significant factor in the run up to national elections in 2024. At the heart of the issue is that there are much larger spending demands for a broader social wage of as much as ZAR500bn/year. Whatever funding is allocated to a BIG (or any form of larger, permanent, successor to SRD) will then not be available for other social wage spending. There will need to be clear and well communicated political choices made understanding the consequences, trade-offs, and risks.

Lead Analyst
Peter Attard Montalto
peter@intellidex.co.za

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Executive Summary

The basic income grant (BIG) debate has shifted markedly in the past nine months since our first report on the topic. The political economy has shifted forward as the social relief of distress grant (SRD) has been extended and is now viewed politically as exceptionally hard to remove (and seems likely to be extended next year). Yet "what" the SRD is, is still very much in question – it is still not anchored to any kind of poverty bound line, nor has it changed despite now rapidly rising (official) consumer inflation (though inflation rates for those on the SRD are likely double the official CPI rate). As such the political case made by both onshore NGOs and think tanks and increasingly by offshore interest groups for shifting it higher and/or with a broader base has become increasingly louder.

Numerous design problems remain as to how a broader and more generous grant would work, not to mention the issue of grant creep and the political economy cycles in which the country would be placed. Still, the shorter-term policy dynamic appears to be that of National Treasury and the Department of Social Development (DSD) numbers at a lower level. These technocratic instincts however might well be overridden at a cabinet level as the threat to the ANC in 2024 becomes increasingly apparent together with the sticky "something must be done" view and the president looking for a legacy project.

Attention therefore must in such an environment turns to funding options. The starting point here must be that the underlying current fiscal situation is unsustainable and whilst on a path *towards* sustainability it is not there yet and may well not get there. There are of course only three options to fund a BIG (or even an SRD extension beyond the current year given there is currently no expenditure pencilled in from next year and beyond): cutting other expenditure, issuing more debt (deficit financing it), or raising taxes.

Cutting other expenditure is simply not a viable political or technocratic option. There is no "free fat" available anymore and the impacts of widespread "top trimming" as seen in the past few years, though necessary given a lack of difficult political will or decisions being made, has ended up being negative for service delivery especially at lower levels of government. Treasury could force down spending cuts, but this would not be positive if we assume that government still doesn't take difficult prioritisation decisions on the budget framework either practically or politically.

Raising debt may well have been easy in recent years when global and local interest rates were low, but this is no longer the case and with an unsustainable debt profile which has little chance of being rescued, we believe, by GDP multiplier effects. We therefore believe, and reflect in this paper, that debt financing would cause a much more rapid acceleration in the debt trajectory. This would be compounded if there was to be an associated negative risk premia shock from the markets worrying about a BIG's effect on fiscal sustainability.

This report undertakes debt to GDP modelling scenarios. We also show that even if there are positive growth and revenue effects from a BIG that, given their multiplier effects, this would be less than one – therefore it is exceptionally difficult even to get the debt profile under a BIG back to our current (already unsustainable) baseline. In the most optimistic, goldilocks modelling scenario we present, debt as a share of GDP would rise by

around 6ppGDP. In the worst case however, it rises by around 30ppGDP. We therefore view debt financing as non-viable.

The meat of this paper delves into the tax options in more detail given that this is the only theoretically viable option. There are two tax options – the first being organic tax taken from faster growth as an upside to ongoing reforms which can be directed towards BIG spending (of which the SRD spending now benefiting from the terms-of-trade commodity boon is the most obvious example, yet unfortunately unsustainable given the lack of mining investment ongoing and the inability to boost volumes of outputs given the logistics constraints on mining export companies). A rise in growth would expand the tax base and make spending on a BIG sustainable.

The other option is to try to take more tax from the existing tax base through higher rates or new taxes.

We look at a wide variety of individual tax hike options in this paper. The issue with tax options is that they can simplistically be hiked continually of course until they hit the required level of revenue, yet such a strategy is not credible given the negative consequences – behaviourally on taxpayers, on the economy at large (both at a microeconomic level and a macroeconomic level) – and therefore eventually over the peak of the Laffer curve when more and more collateral damage would be done. Whilst there could be a technocratic argument that there is a theoretical optimal level where tax hikes are just enough to raise the most money and the spending impacts of a BIG are optimal, this sort of strategy seems to us to lead to a fallacy of over belief in assumption-based modelling outcomes.

The vast majority of tax options are simply far too small in their existing size, their potential tax base and also how they, or their tax base, have behaved dynamically in the last decade. This is true for instance of corporate tax which has been shrinking because taxable onshore profits of companies have been shrinking. With corporate, personal and other taxes we find that there is a remarkably small tax base in terms of absolute numbers of firms or individuals paying tax and behavioural changes are all the more acute in tax systems with such characteristics. Tightening capital controls or preventing tax emigration are simply not viable options.

Tax hikes would need to be broad-based, and as we show in this report would have to be paid by the middle and even lower middle classes in order to be able to have some broad sense of sustainability given how narrow the overall tax base is. This is particularly true if one starts to move up towards ZAR100bn type levels for a BIG which would start to be reflective of lower poverty bounds for a broader group.

We have a broader concern with funding based on tax (or indeed debt raising or expenditure cuts) – that BIG is just the *first* issue on the social wage in front of the fiscus. Any choice here on any funding front will simply not be available in future for other social wage policy choices such as NHI and comprehensive social security reform (to grants and pensions more broadly). This issue is simply listed in the current BIG debate without exploration. The government may well want a BIG, but it also wants NHI and comprehensive social security reform. This is not to mention the president's desire for more spending on the jobs programme. All this could be around an additional ZAR500bn/year. The social positives of a BIG in poverty alleviation, whilst clear, are not obviously better than a broader set of

choices balanced off each other including better health care (which might be, though isn't clearly, NHI).

Much of the modelling in this paper looks at just trying to raise an additional ZAR50bn or ZAR100bn of revenue. Given the newest propositions for a BIG are more like ZAR300bn the sheer impossibility to fund this within the current tax base becomes all too apparent. This is equally true regardless of what the social wage spending option is.

A key takeaway we think here is that there is precious little room for any additional spending at all – and so what it is and why it is chosen is exceptionally important. This of course is not to say that the proceeds of reform and future higher potential growth causing the tax base to expand cannot be spent on the social wage – including even a BIG if that is the political choice (though still balancing it vs healthcare etc would be a key choice). One must be realistic however on when such tax base expansion will credibly happen.

Findings summary

Tax type	% increase represented by R50bn	% increase represented by R100bn	Impact on economic growth	Comments
Personal income tax	9%	19%	Significant	• PIT rates are relatively high and progressive; • Tax base is very narrow; • Higher taxes will lead to behavioural responses that reduce taxable income and narrow the tax base further; • Raising PIT would reduce household savings, with macroeconomic implications.
Value-added tax	14%	29%	Modest	• The least distortionary of the major tax instruments, and, by developing country standards, levied at a relatively low rate; • Politically very difficult to raise because it is the least progressive of the major taxes; • Raising VAT would immediately translate into higher inflation, with macroeconomic implications, especially in the short-term.
Corporate income tax	24%	47%	Severe	• CIT rate is relatively high; • Tax base is very narrow, and only a minority of companies pay any tax; a few hundred by 60%; • The most distortionary tax with greatest impact on growth because of its impact on investment.
Fuel levy	62%	125%	Severe	• Fuel levies are deliberately distortionary, because they are intended (at least in part) to reduce CO_2 emissions; • Raising fuel levies to fund a BIG would be regressive, given the high proportion of household income that is spent on transport in poor households; • The effect of raising fuel levies would also be immediately inflationary, with macroeconomic implications, especially in the short-term.
Tax on internation al trade	89%	178%	Severe	• Very distortionary, with significant adverse effects on growth in short and long term; • Immediately inflationary, with macroeconomic consequences, especially in the short-term.
Excise duties	107%	214%	Significant	• Excise duties are highly regressive (because a larger share of household income is spent on these products in poor households); • Impact would be severely negative for affected sectors (alcohol, tobacco, retail and leisure),

First report

As a reminder, this is the second report produced by Intellidex for organised business drawing on a team of analysts and associates. The first report looked in detail at what was being proposed by some of BIG's proponents (in particular the IEJ) as well as critiquing the analysis of others within NEDLAC (in particular the Deloitte report). This first report can be found here.

Note

In this report we use the term BIG (basic income grant), but its meaning is interchangeable with BIS (basic income support) and perhaps some notion of SRD+ (i.e., broadening and increasing the existing social relief of distress grant). The DSD utilises the term BIS. We believe however that BIG is broadly popularised and understood. When referring to BIG in this report we do not mean something that is universal (a so called UBIG), but instead a broadly applicable grant to many millions of people that is anchored around various notions of poverty bounds and acts as a quasi-unemployment benefit.

We do not mean in this report that BIG is the same as the SRD. A BIG may well emerge from the SRD over time as the SRD is steadily extended but a BIG is an order of magnitude larger in size, coverage (of people and of the poverty need of individuals that it is covering) than SRD.

Section 1 – Background and introduction

Why the BIG debate has emerged now and why it matters

Although there have been calls for the introduction of something like a basic income grant (BIG) since the early 2000s, these have recently become significantly louder. They have also begun to attract more support from a widening range of social actors, including wider groups of NGOs, business leaders and some essentially mainstream economists. One reason for this is that proponents of a BIG have become more effective at making their case to the public. But the main reason these calls resonate more is that there is a deepening sense in the public and among leaders from all walks of life – including the president – that levels of poverty and inequality in SA poses a threat to social stability and to the foundations of its democracy. This has combined with a sense that the existing growth (and reform) trajectory (while advancing) is not making sufficient progress in reducing poverty and inequality. Indeed, there is increasing concern that it may never do so. The result is that enormous, pressure has built up for government to do something dramatic to address poverty directly by implementing a BIG.

Covid-19 is a critical reason for the build-up of pressure for a BIG, both because of its effect on employment and poverty, and because the "massification" of the social relief of distress (SRD) grant of R350/month has convinced many that this arrangement can and should be made permanent (though most proponents of a BIG also think that R350pm is too low). It is also true that the R350 figure has little anchoring it in relation to poverty levels and appears to be the outcome of an assessment of what is affordable rather than what is necessary from the point of view of beneficiaries. Also significant to the impetus for a BIG was the violence of July 2021 which was driven, at least in part, by the desperation of people in poor communities. This idea has resonated with political actors. It is not just in society that pressure for a BIG has been mounting: the ANC has become more alive to the fact that its constituency is deeply unsatisfied with its performance while internal voices as well as alliance partners have made more demands for a broader grant for the poor and for the unemployed.

Important as all these issues are, however, it needs to be clear that the debate about a BIG is not just about the merits of the idea in a vacuum; it is also a debate about the extent to which the existing social contract – in its broadest context – is appropriate for SA.

Many proponents of a BIG see its absence as a symptom of an approach to growth and social policy that is too pro-market and that is over-friendly to business. They think that that model, and the social contract on which it is based, does not redistribute enough of the country's income, which is, as a consequence, more unequally distributed than that of any other country in the world. They argue also that the reason growth rates have been so disappointing is that, in line with its overly-conservative, pro-business orientation, government policy has tended towards "austerity". Thus, while they may agree that state capture and the attendant decline in the quality of governance played a role in the very poor economic outcomes of the past 15 years, a basic premise for them is that the state and its social policies have always been too miserly. Which is why many of them have been calling for a BIG since the early 2000s.

The call for a BIG is embedded in an analysis that asserts that SA's developmental path was failing because it was too business-friendly. This creates a complication for business. On the one hand, it is true that the developmental path was not reducing poverty quickly; on the other, it is *not* true that government policy was business friendly. If anything, the opposite is the case: policies that have raised the cost of doing business, reduced long-run expected returns and generated profound policy uncertainty have all led to weakening business confidence and reduced investment – and with-it weaker economic and employment growth, as well as higher inequality. The recent pickup in the pace of structural reforms shows the fact that the previous stance was indeed not business-friendly (or indeed employment friendly). One set of challenges, in this regard, relate to the dramatic decline in the quality of governance after 2008, but others were the result of deliberate policy choices, including dramatically higher government borrowing, tightening regulation of business, and rising uncertainty about property rights.

It is our view that the case needs to be made that the failure to reduce poverty is not the result of policies that are alleged to have been excessively business-friendly. This is key because it is also our view that, far from reducing poverty, a BIG of any meaningful size that is beyond SA's means would weaken SA's medium- and long-run economic prospects and, hence, make it harder to reduce poverty and inequality sustainably. The principal reason for saying this is that a BIG is being debated in a specific context: it occurs at the end of a long period of poor governance, one of the most important legacies of which is that our public finances are on a path that government itself acknowledges is unsustainable, with a large, structural deficit having opened in 2008/9 and the ratio of debt to GDP rising relentlessly since then. It is all but certain that the introduction of a BIG into this unsustainable fiscal situation would worsen that. Equally this is not the only demand on social wage reform – and this is a point regularly forgotten in the debate on BIG. Comprehensive social security reform (covering state pensions, disability and other grants) is also in the works and has been an active front of constructive discussion and interaction by business in Nedlac. And there are other demands and commitments that have been or are being made such as for the implementation of NHI and for higher public sector wages. In this broader context of wider social wage changes and associated spending commitments, the introduction of a BIG is very likely to *lower* long-run expected growth. The rest of this report seeks to show how these risks arise and fit into the broader context.

It was for these reasons that, when BUSA released the first report on a BIG prepared by Intellidex, it laid out three conditions which business believed had to be met for a BIG to be successfully and sustainably implemented:

- It is phased in only as deep structural and regulatory reforms such as (but not limited to) those outlined by Operation Vulindlela, labour market reforms and reducing the barriers to entry for SMMEs, are successfully implemented and result in faster GDP growth and faster tax revenue growth from an expanded tax base;
- Fiscal sustainability is not compromised, and a grant does not cause a widening of the long-term trajectory of the deficit which should remain on a path toward debt reducing levels that can help reduce funding costs for government and business;
- It is not universal but is targeted at those in need.

This report argues that the ideas currently being circulated for the implementation of a BIG would not meet the first and second of these conditions, and that implementation thereof would undermine fiscal sustainability and worsen SA's growth prospects, perhaps dramatically.

It is important to restate what the proponents of a BIG say they want.

There is no dispute that giving money to the poorest in our society is positive for those individuals and their households. Nor do we make arguments around the nature of incentives regarding willingness to access work or any potential for "misspending" of grants received. Instead the issues to clearly understand here are the effects of choices about the specific type of BIG and its funding.

What do proponents of a BIG say they want?

As noted in our previous report[1] on a BIG, there are a large number of proposals for a BIG with divergent parameters relating both (a) to the eligibility of recipients and, therefore, the size of the population of recipients (would the grant be means tested or universal? Would some other eligibility rule be applied?), and (b) to the value of the grant. The previous report set out the range of proposals and estimates of the cost of a BIG, which is repeated in Table 1. Here, we do not repeat all the details of the various proposals but offer the summary solely to show the range of cost estimates offered for various permutations of a BIG.

Table 1 also highlights estimates of the BIG that are close to the estimates used in a report commissioned by the DSD, but which appeared after the publication of our last report. That report, which we will call the "DSD Expert Panel report", is somewhat cagey about precisely what it is proposing in relation to the medium- and long-term vision for a BIG, but the highlighted cells in Table 1 are roughly the combination of eligibility rules and grant values that the DSD Expert Panel report uses in the various scenarios that they model, though the actual values in the report are slightly different from ones that appear here.[2] It proposes that in the short-term, however, the social relief of distress (SRD) grant should be made permanent.

[1] *See Intellidex (2021)* Is a basic income grant sustainable? *Available at https://www.intellidex.co.za/reports/is-a-basic-income-grant-sustainable/*

[2] *The DSD Panel report uses an estimate of the various poverty lines that is updated by inflation, for example, leading to higher aggregate costs. In addition, some of their estimates of the population of eligible recipients differ from those that appear elsewhere.*

Table 1: Annual cost of BIG (in R billions) depending on monthly payments and eligible pop (millions).[3]

		Monthly payment								
	Eligible pop. (mn)	**R260**	**R350**	**R460**	**R585**	**R840**	**R1 268**	**R1 980**	**R2 500**	**R3 500**
Universal	**60,1**	R188	R252	R332	R422	R606	R914	R1 428	R1 803	R2 524
Universal (adults only)	**38,4**	R120	R161	R212	R270	R387	R584	R912	R1 152	R1 613
Adults under upper-bound poverty line (R1268pm)	**18,3**	R57	R77	R101	R129	R185	R279	R435	R549	R769
Adults (19-59)	**33**	R103	R139	R182	R232	R333	R502	R784	R990	R1 386
Adults w/o formal employment	**22,3**	R70	R94	R123	R157	R225	R339	R530	R669	R937
Adults under lower-bound poverty line (R840pm)	**13,2**	R41	R55	R73	R93	R133	R201	R314	R396	R554
Adults w/o any employment	**17,3**	R54	R73	R95	R121	R174	R263	R411	R519	R727
Adults under food poverty line (R595pm)	**8,3**	R26	R35	R46	R58	R84	R127	R198	R249	R349
Child support grant beneficiaries	**13,8**	R43	R58	R76	R97	R139	R210	R328	R414	R580
Caregivers of child support grant beneficiaries	**7,2**	R22	R30	R40	R51	R73	R110	R171	R216	R302
Original SRD recipients	**6,5**	R20	R27	R36	R46	R66	R99	R154	R195	R273
	Possible exclusions									
Prisoners	***-0,16***	*R0*	*-R1*	*-R1*	*-R1*	*-R2*	*-R2*	*-R4*	*-R5*	*-R7*
Students	***-1***	*-R3*	*-R4*	*-R6*	*-R7*	*-R10*	*-R15*	*-R24*	*-R30*	*-R42*
Students on NSFAS	***-0,43***	*-R1*	*-R2*	*-R2*	*-R3*	*-R4*	*-R7*	*-R10*	*-R13*	*-R18*

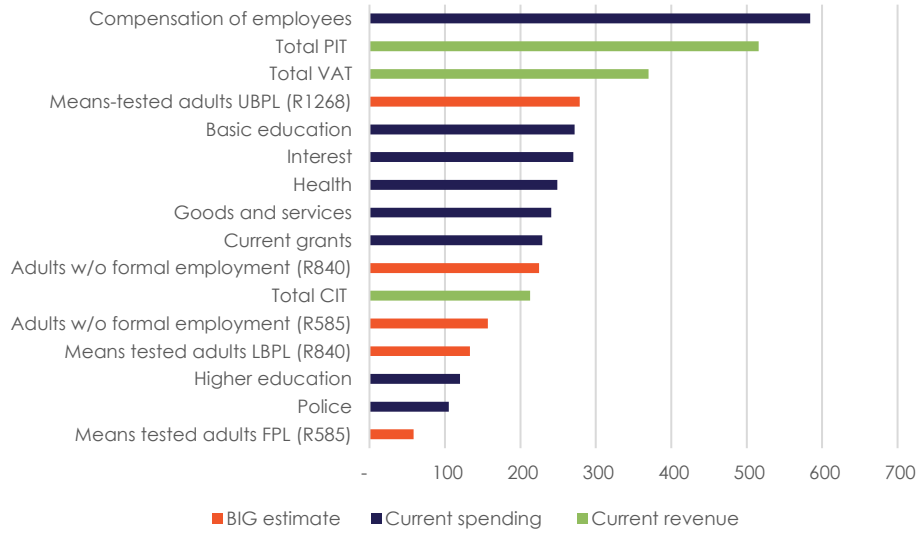
Source: Intellidex, 2021

As can be seen, estimates of the cost of a BIG range from R20bn a year to R2tn (i.e. from about 0.3% to 30% of GDP), with most of the proposals coming in a narrower range of between R60bn (roughly the cost of expanding the SRD to more people) and R250bn (about R800pm for all unemployed adults). Though there is no fixed set of proposals onto which everyone who favours a BIG has signed up, in our estimation most proponents are probably thinking about a grant costing something like R200bn a year or about 3% of GDP. These numbers are material, as reflected in a chart prepared for the 2021 Intellidex report which compares various estimates of the cost of a BIG to other areas of public spending/taxation.

More recently proponents seemed to have upped demands further still for something closer to R300bn.

[3] *The highlighted squares reflect combinations used in the DSD Expert Panel report, although the actual figures in that report are slightly different as population estimates and poverty lines have been updated.*

Figure 1: Comparing a BIG to other spending and revenue line items



Source: Intellidex, 2021

Obviously, the impact of a grant on SA's public finances depends enormously on how much it costs. Given the range of possible outcomes and the lack of any real consensus about where the true figure will land, we cannot meaningfully estimate what will happen. Various modelling efforts are ongoing in NT, SARB and elsewhere and provide only limited assistance in this regard. The sheer scale of what is being proposed on spending, taxation and/or borrowing renders existing models, which, at best, provide guidance as to the effects of incremental changes to policy, somewhat irrelevant. In any event, to the extent that the economic effects have been modelled by their proponents, those models are deeply flawed. In this report, we aim to provide a sense of the orders of magnitude involved in the discussion of a BIG and how different approaches to its financing it would affect macroeconomic stability and economic growth.

It is important to note up front that obstacles to quantifying these effects accurately are insurmountable given the uncertainties involved and the limitations of both the economic models available and the data on which these rely. Nevertheless, it is the intention to provide guidance on the direction of the relevant effects and, as far as possible, informed estimates of the quanta involved. In forming these estimates, we have used R50bn and R100bn as the indicative costs of a BIG. This number is, as Table 1 shows, quite a lot smaller than most proponents of a BIG would hope to spend, and it is, therefore, a conservative estimate of the costs. To the extent that a BIG is more generous and it costs more than R50bn or R100bn, the effects we describe below will understate the actual effects of a BIG. The cost estimate we consider of between R50bn and R100bn does seem to us to be what Treasury might plausibly consider implementing. Nevertheless, we would advise treating our estimates as indicative only and they should provide a frame for thinking about the effects of a BIG if it were to cost more than R50bn or R100bn a year. Importantly, however, because some of the effects are non-linear with respect to the size of the BIG, the actual effects of a BIG that costs R150bn or R200bn (say), may be greater than simple multiples of the estimates offered here. This would be particularly true, for instance, of issues like risk premia and funding/market related

sentiment. Throughout the report, we will indicate where we think this might be the case.

What, then, are the key issues that must be considered when thinking about the benefits, costs and consequences of implementing a large BIG?

Box 1: Why modelling the macroeconomic effects of a BIG is impossible

Although some reports on a BIG include results of modelling exercises, no models can cope with the complexity of the challenge presented by a BIG in our context.

Problems with BIG's proponents' models

Overwhelmingly, proponents of a BIG who show results of "modelling exercises" are reporting the results of models that are static in character, in the sense that they use estimates of existing relationships between macroeconomic variables. At best, they simply increase estimates of consumption of poor households (that benefit, clearly and without dispute, from a BIG) and lower consumption of higher-income households (whose taxes must rise). Having done this they report that aggregate demand increases, especially for the goods and services consumed by poor households, and that growth rates are marginally raised. Such models do not factor in the effects of decreased savings on investment, nor do they provide any estimates of any effect on interest rates (short term and long term with a yield curve, in particular factoring in risk premia) the current account or exchange rate (because higher consumption implies an increase in imports) or inflation (because an increase in household demand in the context of supply constraints could raise prices). Such models also do not have parameters estimating plausible kinds of behavioural change – especially increased tax avoidance and evasion by various income deciles (not just the rich).

Where the model makes no assumption that a BIG will be fully paid for through increased taxes, the problems are even more serious because the effect on interest rates of the increased borrowing needed to fund the BIG is not modelled. Nor do such models assume any crowding out of private sector investment as government absorbs more of the economy's total savings. In effect, these models assume an increase in aggregate demand that is costless and for which there is no funding constraint. One model that does incorporate the current account is the DSD Expert Panel's, but it does so in a very odd way, assuming, effectively, that SA can borrow unlimited amounts from the rest of the world with no adverse effects on interest rates and no increased vulnerability to changes in capital flows. More broadly, their model says nothing about the impact of higher taxes and more borrowing on interest rates because it does not include equations for capital markets, and simply assumes interest rates and the exchange rates do not change.

Overall, however these modelling exercises do not seem to pass any reasonable form of "giggle" test.

Why not build a better model?

Given these problems, it might be asked why a more plausible model cannot be built. The problem, however, is that for many of the key issues, the requisite data do not exist and, even where the data do exist and where relationships have previously been modelled, the estimates of the size of the relevant coefficients in those relationships is generally calibrated to small incremental changes of the relevant variable. These may, in any event, have been estimated in quite different macroeconomic circumstances. Their utility for estimating the effect of a change as large as the introduction of a BIG in the context of deep, structural imbalances in our public finances is highly questionable.

An example will help clarify the problem. Kemp (2020) estimates that a 1 percentage point increase in the top marginal rate leads to behavioural changes among the top 10% of taxpayers that reduce aggregate taxable income by 0.37%. Thus, if the top rate rises from 45% to 46%, you might expect that total taxable income will fall marginally as taxpayers adapt to changing incentives. The estimate of the relationship between top marginal income tax rates and total taxable income (-0.0037 or -0.37%) was generated using very small changes in real marginal tax rates as a result of changes in tax brackets and marginal rates. It is very unlikely that a very large change in top marginal rates (as might be needed to fund a BIG, see below, of several percentage points) would have proportional effect on taxable income as Kemp's estimate because the sheer size of the tax shock might drive a very different set of behavioural responses from tax-payers than did the small changes that Kemp studied and which are the basis for the estimate he comes to. The sheer scale of a BIG-related shock, in other words, means that even if we did have estimates of the key coefficients of key relationships, we would not be confident in them.

Overall, we are deeply sceptical that modelling provides any kind of "answer". It can however provide support for making judgement-based decisions and inform the debate. But the limitations should be well understood.

The key questions that a BIG poses to the sustainability of SA's public finances

The possibility that SA might implement a BIG raises many critical questions, the two most important of which are (i) what impact would it have on poverty? and (ii) is it affordable? This report addresses only the second of these two questions, but it is worth pausing to offer a few comments on the first.

Will a BIG reduce poverty?

Like most questions in economics, the answer to the question of whether a BIG would reduce poverty is "it depends". Indeed, it depends on two variables:

- The size of the BIG (i.e., how many people and how much it is worth); and
- Whether it induces a withdrawal by beneficiaries from the labour market (e.g., by creating "dependency").

We take as self-evident the claim that the transfer of money to a poor household will tend to increase their consumption and reduce their poverty. How much it will do so depends straightforwardly on how generous it is: the larger the number of people who are in poverty that receive the grant and the greater its value, the larger the overall effect on poverty. This is mathematically obvious, but it has two implications: (i) the value of the grant matters and (ii) much depends on who is eligible. We do not agree, however, with the way these two self-evident points have been interpreted by proponents of a BIG.

The size of a grant and its effect on poverty

It is obviously true that the larger a grant, the greater its effect on household income and the larger the potential effect on poverty. We do not agree with proponents of a BIG who argue that this means that the grant has to be meaningfully large or is not worth doing. This translates often into an argument that the value of a grant should be set at the level of one of SA's poverty lines (preferably the upper-bound poverty line) on the basis that anything less would leave recipients in poverty. This is not correct: a grant that does not raise everyone who receives it out of poverty will still raise many people above the poverty line because not everyone who is poor is equally poor (i.e., has an income that is equally far from the poverty line). Importantly also, even if a grant does not lift a beneficiary above the poverty line, it would still close the gap between their current income and a level at which they are deemed no longer to be poor – a level that is, in any case, defined somewhat arbitrarily. Technically, this is described as reducing the depth of poverty. Thus, it is not true that a grant has to be equal to or greater than a poverty line – say the food poverty line – in order to meaningfully reduce poverty and desperation. This point should not be lost in engaging with proponents of a BIG or with government.

Eligibility for a grant and its effects on poverty

The second observation relates to the eligible population: from the point of view of its effect on poverty, the key issue is not the absolute number of people who receive the grant, but the number of ***poor*** people who receive it. In our view, the preference of some proponents of a BIG for a universal grant (which they argue is administratively easier to implement and avoids excluding anyone who ought to receive it) is counterproductive from the

point of view of the effect of a BIG on poverty. Rand-for-rand, a well-targeted grant would have a bigger impact on poverty than a universal grant. The case for SARS "sweeping up" universal income given to those who are not poor – has not been made in our view and we believe SARS itself is sceptical of such a role.

Grants and dependency

One response to the claim that cash payments to poor households will reduce their poverty is that it may depend on whether or not the unearned income induces a withdrawal from the labour market. Do beneficiaries quit their jobs? Do they stop looking for work? Do they become more discriminating in the jobs they would be willing to take? These claims are sometimes made in SA, including, recently, by the minister of finance, who raised concerns about whether a BIG would induce dependency.

Our view of the literature on this subject is that, while it is possible that there are circumstances in which a grant such as a BIG might induce these kinds of responses, those circumstances are **not** really relevant to local realities where low levels of employment are a result of a range of factors, the most important of which is that slow economic growth has generated far too little demand for labour. We do not see compelling evidence that the problem lies in an unwillingness for unskilled people to look for work. In any event, the value of any plausible BIG will simply not be high enough to reduce labour supply except at the extreme edge of the margin. Indeed, it is entirely possible (and probably more likely) that the incremental increase in household income obtained from the grant will be used to facilitate more job searches.

We are, in other words, optimistic that a BIG would reduce poverty, and, in general, that its effect on poverty will be proportional to its size (though a targeted scheme would have larger positive effects per rand spent). There is, however, a critical proviso to this conclusion: **a BIG will reduce poverty only to the extent that it is affordable and that its positive effects are not offset by any negative effect on the stability of SA's public finances or on the pace of economic growth and job creation, especially when considered alongside other social wage spending pressures (and, indeed, other areas in which public spending is needed such as infrastructure)**. Here, we are much less optimistic about a BIG. It is, in our view, entirely possible that the implementation of a BIG could induce so severe a set of second-round effects that its full effect will be to deepen poverty by making it harder for SA's economy to grow.

Can SA afford a BIG?

The single most important question SA needs to address if it is to implement a BIG is whether it is affordable. Importantly, in the context of public and macroeconomic policy, the definition of "affordability" is not straightforward, unambiguous and uncontroversial. What is "affordable" depends on an evaluation of the costs of a policy, a judgement that is partly subjective and political. A society may decide, for example, that it will pay whatever is necessary to ensure that everyone has access to world-class medical care, and that it will raise whatever sum of taxes is needed to ensure that that goal comes to pass; another society may choose to offer less extensive healthcare and to tax its citizens less. Each of these choices is a potentially legitimate assessment of what that society can "afford".

Affordability, in other words, is sometimes a matter of judgement about which it is possible for reasonable people to disagree. That disagreement is, however, much more complex in societies that are highly unequal, if only because the portion of the population that pays the bulk of taxes is small and the portion that derives the bulk of the benefits of public spending is large. In these circumstances, it is inevitable that divergences in judgements about what is affordable will be large. Having said that, the issue of the affordability of a BIG in SA can be stated with much less ambiguity and in a way that admits of a much clearer and more decisive answer. This is because it is widely acknowledged (including by government) that our public finances are already on an unsustainable trajectory, a reasonable interpretation of which is that current spending is already not affordable. Once that is accepted, the question of whether a BIG is affordable is much more straightforward, and amounts to this: "Will a BIG make SA's public finances even more unsustainable?"

Our view on this issue is unequivocal: **a BIG of any meaningful size will make SA's public finances even more unsustainable than they are now and, in the context of high interest rates and a steep yield curve, is likely to slow growth.** Given that the world is entering a period of "quantitative tightening" or the normalisation of monetary policy, these constraints are likely to become even more certain. What is less certain is how much more unsustainable and unstable our public finances will become after the implementation of a BIG. The answer to this depends on two factors: how large the BIG is and how it is financed.

Because there is no way to realistically estimate the full cost of a BIG, and because the effects of a BIG on the debt ratio are likely to be non-linear, it is not possible to make definitive predictions. What we can say is that whether a BIG is financed through higher taxes or by taking on more debt, it will make it much harder to rein in SA's ratio of debt to GDP which is stubbornly refusing to stabilise despite numerous predictions that it would. Importantly, this is true even if the BIG is wholly funded through new taxes (an outcome we regard as improbable, for reasons to be explained below).

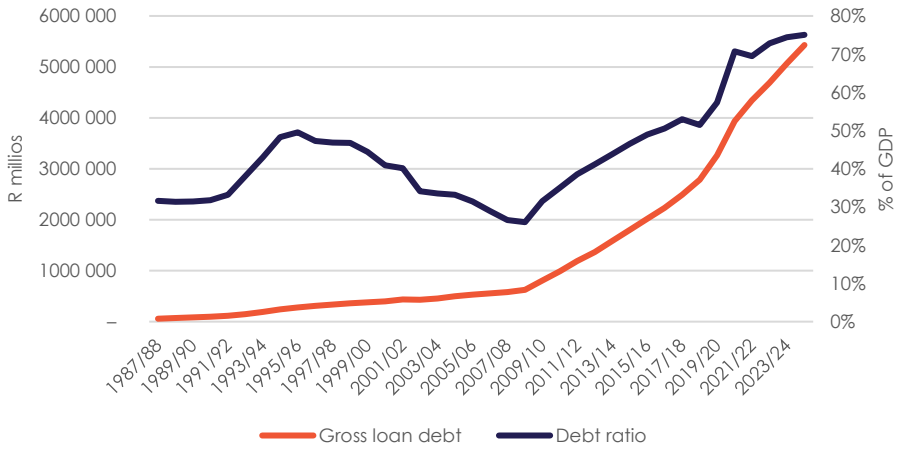
"But can we afford <u>not</u> to do it?"
When concerns are raised about the affordability of implementing a BIG, its proponents will frequently respond by asking whether SA can afford **not** to implement it. This is a neat, if clichéd, rhetorical device. But it is also disingenuous. If a BIG worsens SA's macroeconomic performance and destabilises our public finances, leading to default on debt or to rising inflation (see table below), the consequences for everyone – the poor, very much included – will be very adverse. As one example the poor would be particularly strongly impacted by any inflation induced shock of such a policy, or if other grants had to be cut back (indeed we can see this at the moment with true inflation rates for the poorest running some 8pp higher than the headline inflation rate – so eroding grants and SRD by 10% and 14% respectively in real terms spending power for the poorest).

Confronted by the question of whether SA can afford not to implement a BIG, therefore, an appropriate response would be, "Can South Africans – especially the poor – afford for the country to default on its debts, face a financial crisis or endure rapidly increasing inflation?"

Evidence that SA's public finances are on an unsustainable trajectory is readily available (indeed it is National Treasury's view) and can be most easily demonstrated by looking at the long-term rise in the ratio of sovereign debt to GDP. This has risen from around 30% of GDP in 2006/07 (having fallen from a previous high of 50% in the mid-1990s), to over 70% today. Over

the same period, the quantum of outstanding debt has risen from R280bn to over R4tn (Figure 2). If one considers that these numbers do not take account of the debts of state-owned companies (SOCs) and a range of other contingent liabilities (government guarantees to the SOCs, the commitments of the Road Accident Fund, rising liability risk for medical negligence, etc.) – all of which amount to nearly R1.2tn or around an additional 15pp of GDP, all of which have also grown rapidly in recent years, it is clear that Figure 2 understates the true picture of SA's deepening indebtedness. (The issue of the sustainability of SA's public finances will be covered in more detail in Section three – Debt financing of social spending and its impact on fiscal sustainability).

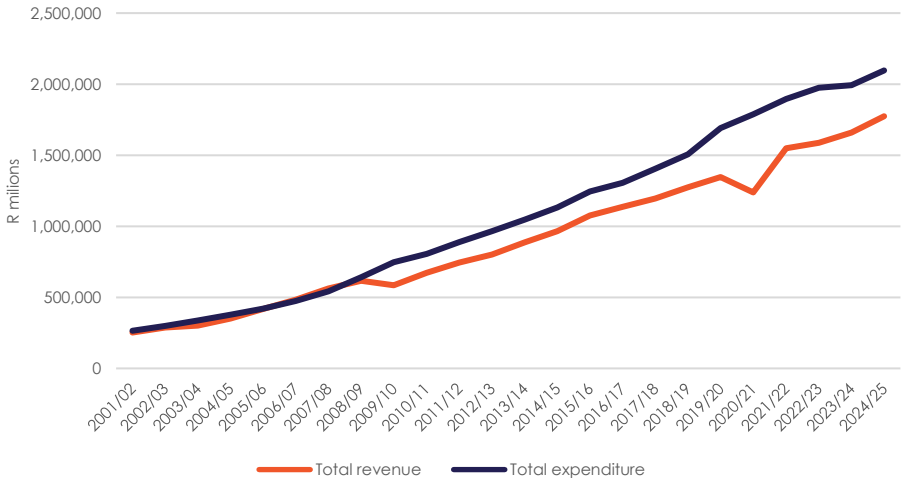
Figure 2: Gross loan debt, absolute value and as a % of GDP: 1987 to 2023



Source: National Treasury, budget documentation

The rise in the debt ratio since the late 2000s is a mechanical consequence of the fact that since 2008/09, a large, structural gap opened up between government's spending and its revenues. Measured in absolute terms, that gap has also tended to grow each year, as reflected in Figure 3. The effect of Covid-19 on revenues in 2020/21 greatly widened the gap, the closure of which in 2021/22 is largely as a result of the temporary effects of the commodity boom.

Figure 3: Revenue and spending, consolidated budget: 2000 to 2021



Source: National Treasury, budget documentation

While there are countries with higher debt ratios, three factors make SA's trajectory particularly worrisome. The first is that the rate of increase in the ratio was unusually rapid even before Covid-19. The second is that the gap between spending and revenues is structural in nature and is not driven by the business cycle. The third is that SA pays an unusually large premium on its debt. The combination means that debt service costs (which are around 5% of GDP) are both very high by international standards and are rising exceptionally quickly. (Again, there is more detail on these issues in Section three – Debt financing of social spending and its impact on fiscal sustainability, below).

The long-run consequences of rapidly growing debt and increasingly onerous debt service costs are all adverse, and some have already materialised in slower economic growth. These include:

- Rising borrowing costs as country risk rises and as government crowds out private borrowing (a consideration that is particularly relevant at a time where private sector funding of infrastructure and the Just Energy Transition is also required);
- Debt service costs crowding out spending on more socially and economically productive spending by government;
- Increased risks of higher levels of inflation and/or default;
- Slower growth as investment rates fall and as the government (which is generally a less efficient user of scarce capital) displaces the private sector in the deployment of national savings;
- Retrenchment of business and household spending as the expectation of future tax increases rise.

These are all symptoms of the fact that SA's public finances are already unsustainable and have already begun to grind the economy onto a lower growth path. In the remainder of this report, we will argue that the available evidence shows that the implementation of a BIG risks worsening this, with the only question being the extent of the deterioration. It is for this reason that we conclude that a BIG (by which we mean a meaningful step up in permanent spending by the fiscus) is unaffordable. The next section shows that this is the case even if the implementation of a BIG is accompanied by the introduction of new taxes, and that this is so even if the additional revenues are sufficient to pay for the BIG because the higher taxes will lead to lower growth. In the section after that we look at the consequences of financing a BIG through increased borrowing.

SA's modern monetary theorists

There are proponents of a BIG who argue that there is no affordability constraint on government, and that it would be possible to implement a BIG of almost any size without raising taxes and without causing any other adverse macroeconomic effects. Advocates of this view have adopted Modern Monetary Theory (MMT), a faddish set of ideas that hold that a government that (a) issues its own currency and (b) borrows predominantly in that currency, can never default on its debts and can, therefore, finance a deficit of any size simply by printing more money. The only constraints on policy-makers so this theory holds, are those imposed by an economy's endowments of the factors of production (land, labour, capital and technology). These, not supposedly arbitrary financing norms and constraints, set hard limits on what can be produced and in what quantities, and the only hardship that will be experienced by a country that overspends (but which enjoys monetary sovereignty) is that inflation will rise. When that does, all that policy-makers need do is reduce spending to restore balance.

Imported from the USA to SA, the weaknesses of MMT as a framework for thinking about SA's challenges are apparent and need not delay us. Suffice it to say that even if MMT did describe the world accurately, the fact that inflation is already rising, and the fact that SA has a well-known hard constraint on the amount of electricity that can be generated (not to mention other constraints such as the skills deficits and state capacity and a completely dysfunctional DMRE to allow anyone to exploit endowments), mean that any pressing of the monetary accelerator will quickly translate into higher inflation rather than into growth.

Equally important, though SA currently borrows in its own currency, it pays very high interest rates for that privilege, suggesting that demand for these assets is much more constrained than would be the case for a country with the full monetary sovereignty that application of the recommendations of MMT requires. High interest rates on government debt imply that lenders need to be enticed into accepting rand-denominated debt because they already expect some combination of default, inflation and exchange rate depreciation to impact on the value of the asset over time. One way in which these expectations/fears might be actualised is precisely if government did begin printing money to pay for a BIG (or infrastructure or anything else that has been suggested by proponents). If this were to happen, it would imply that government's fiscal deficit determines SARB's policies, which would, in turn, mean the end of inflation-targeting and of Reserve Bank independence. Since a world in which the SARB has lost its independence would have such enormously adverse and unpredictable consequences for all economic variables (as seems to be far more the consensus now than after NASREC in 2017), we will assume that monetary financing of the deficit is off the table, leaving only two others: financing the BIG through higher taxes or financing it through greater borrowing.

Indeed, it is worth stating that this SARB leadership and any even remotely likely future leadership of this independent institution simply would not touch MMT with a very long bargepole in our view, nor other related conceptions like undertaking QE (quantitative easing) to somehow buy only bonds to fund a BIG or similar.

Grant design challenges

Should we find ourselves in the realm of second best where a basic income support is inevitable and cannot be avoided, then managing the design and implementation of the system will be important to limit the negative economic consequences and get the greatest impact from the grant.

Policy priority of the grant

The current debate about extended basic income support presumes a number of policy priorities to be addressed. These include reducing food poverty, reducing inequality, promoting participation in the labour market, demand stimulus for the economy, and reducing absolute poverty.

The policy landscape across all governments, including our own, includes many important and expensive expenditure programmes that have failed as a result of trying to address too many priorities. Attempting to prioritise too many areas results in confusion, overlap and badly designed instruments that aim to achieve too much and deliver on too little.

For a reform of this size and risk, the government should be absolutely expected to clearly identify the policy priority that this reform is looking to address, describe how it will directly do so, and explain how it will also impact indirectly on other policy priorities.

Eligibility

Given the size of this reform and the existential economic and public finance risks that it generates, a well-designed extension of basic income support should be matched with an effective architecture for targeting support towards its intended recipients. Designing this reform to address a particular policy priority means that the target group should be relatively easy to identify. Implementation systems and capacity should be developed to ensure that the reform addresses its intention and does not become an indiscriminate injection of wealth across society.

Proponents of increased basic income support have tended to support a universal approach, or at least an extremely broad one. Often this is based on the difficulties in developing appropriate systems of targeting the grant, which may result in delays in its introduction and the unwanted exclusion of deserving recipients due to administrative failure. This should be unacceptable. A functional state should have the capacity to administer the distribution of public services to deserving communities with minimal failure. The costs of developing the capacity should never be a reason for universality as the financial and economic savings resulting from a well targeted grant system would always outweigh the administrative costs except in the most absurd of scenarios. If it is rather the case that we don't believe the state is administratively and/or politically sophisticated enough to administer a system of eligibility, then perhaps we face deeper existential faults that even universal basic income support will not be able to address.

Grant creep

It is not uncommon for governments (including our own) to deal with spending requests in a nominally compliant way that doesn't actually address the underlying pressure. There is a temptation to commit to a version of the grant which creates the optics of restraint and sustainability but does not satisfy underlying demands and is a de facto commitment towards something unaffordable. A minimal version of the grant might appear to be sustainable but have little meaningful impact on poverty. As a result, what we will likely see is ad hoc and regular escalations in the grant size (coverage) towards some significant level. At the same time, the fiscal and economic damage the government may be attempting to avoid remains inevitable.

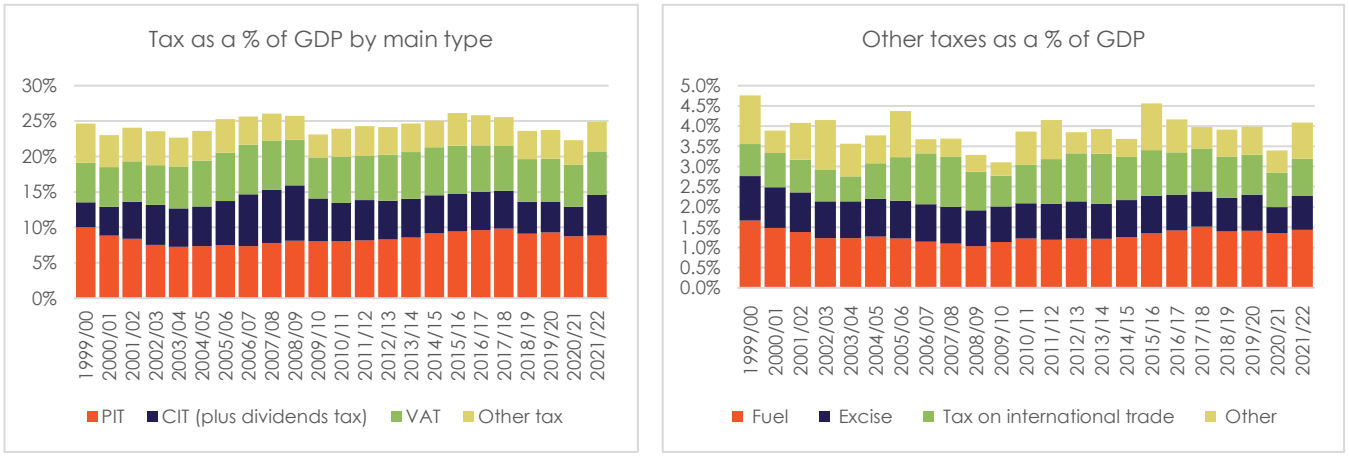
Section two – Could a BIG be financed through higher taxes?

Governments finance themselves in two principal ways: by taxing their citizens and by borrowing money. Here, we look at whether and to what extent a BIG can be financed through increased taxes. In order to do so, we set out how SA's government raises revenues and whether it is plausible to think that it could raise something like R100bn in additional taxes to pay for a BIG. The short answer is that, while it is possible to raise additional revenues at this kind of scale, this will be difficult because SA is already a relatively high-tax society and, more importantly, will have significant negative effects on economic growth. The combination would almost certainly mean that even if the absolute value of new taxes raised was large enough to cover the full costs of a BIG, there are good reasons to worry that doing so will slow growth sufficiently so that the debt ratio will rise even if the borrowing requirement does not.

The composition of SA's taxes

Government raises taxes equivalent to about 24% of GDP, a figure that has been rising steadily since 2009/10 when the collapse of corporate income tax (CIT) after the global financial crisis lowered the tax ratio to 21% of GDP. Last year, as a consequence of the relatively low level of economic activity and the very large increase in CIT as a result of the commodity boom, taxes were the equivalent of almost 25% of GDP (Figure 4).[4]

Figure 4: Taxes raised in SA by tax type as a % of GDP: 1999 to 2021

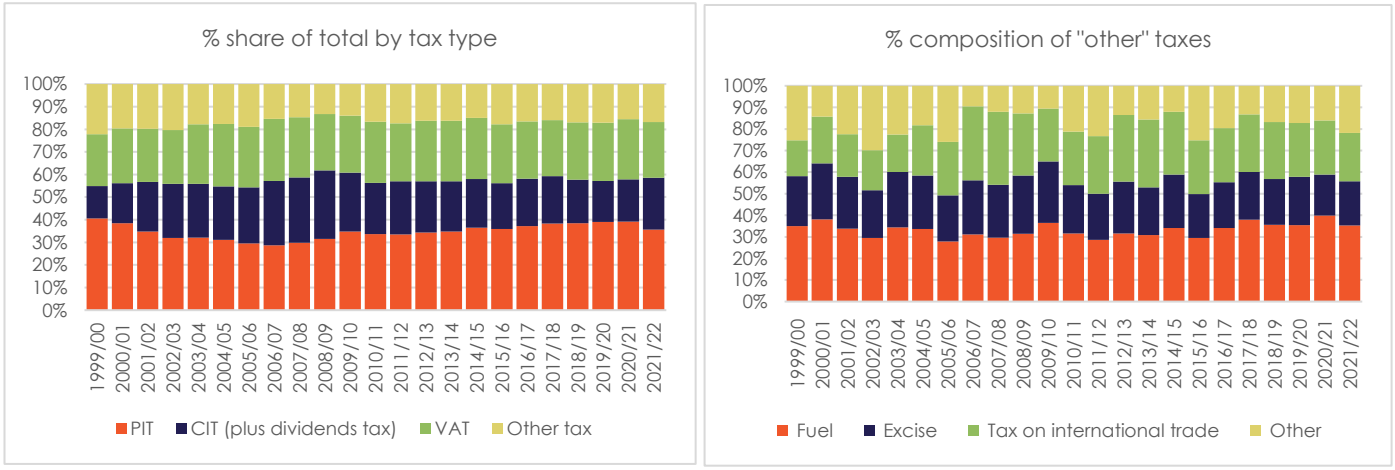


Source: National Treasury, budget documentation

Three taxes account for almost 85% of all tax revenues: personal income tax (PIT), value-added tax (VAT) and corporate income tax (CIT). All other taxes, of which there are many, account for the remainder, with the fuel tax, excise and customs duties making up between 70% and 80% of the total of taxes other than PIT, CIT and VAT (Figure 5).

[4] *Taxes raised by government are not government's sole claim on household and firms income: local rates, a variety of user charges, and payments made to state-owned companies all represent different kinds of income for government. A BIG would be financed through taxes and/or the issuing of sovereign debt, however, so this section places it in the context of taxes. It is worth bearing in mind, however, that government does make additional financial claims on the country's residents.*

Figure 5: The composition of SA taxes by tax type: 1999-2021

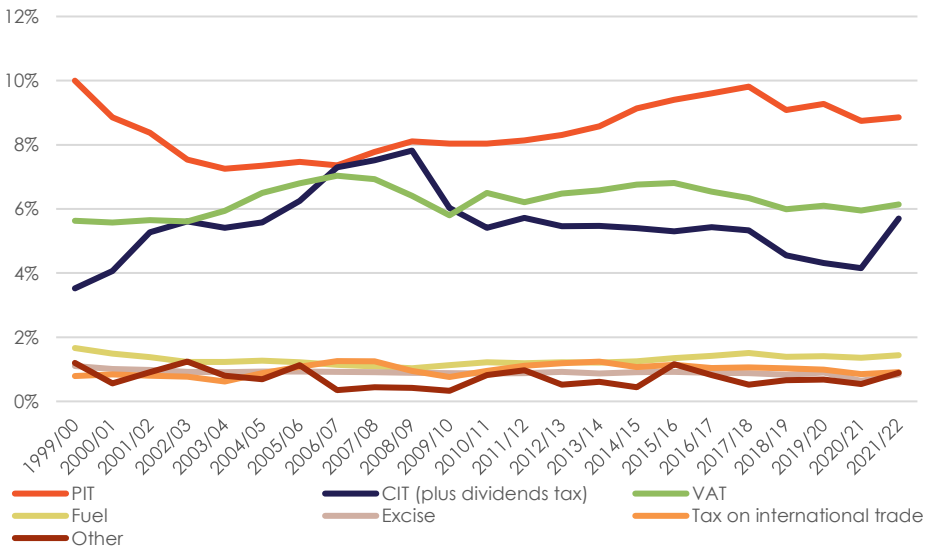


Source: National Treasury, budget documentation

Although there is some year-on-year variation in the breakdown of taxes, their composition has been broadly stable over the past 10 or 12 years. Prior to that, the most significant change was the rapid rise in in CIT (both in absolute terms and as a share of total taxes) in the fast-growing years before the global financial crisis in 2008/09. The other significant trends (Figure 6) are:

- Over time, taxes have risen as a share of GDP;
- Between 2000 and 2010, this was driven by the rise in CIT as a share of GDP and a rapid decline of PIT, but, since 2010, CIT has fallen as a share of GDP (apart from in 2021/22, when the commodity boom boosted CIT), while PIT has risen;
- VAT has been broadly stable as a share of GDP despite the increase in the VAT rate in 2017/18.

Figure 6: Main taxes as a % of GDP: 1999 to 2021



Source: National Treasury, budget documentation

From the point of view of this report, the dominance of PIT, VAT and CIT – which together generally account for about 80% of taxes collected – means that any estimate of the increase in taxes needed to pay for a BIG should focus on how much the rates of these taxes might have to rise. This was the approach taken by Deloitte in a report for Nedlac and which Intellidex analysed in our 2021 report. Even the most simplistic calculations of this kind show how difficult it would be to raise R50bn or R100bn in new taxes, however. Thus, in 2019/20, the last year before the Covid-19 shock, PIT raised R528bn, VAT raised R347bn, and CIT raised R212 bn. To raise R50bn in total from those three taxes would require an increase of just under 5% while R100bn would imply an increase of just over 9%. We will return below to the plausibility of raising revenues of this scale using these taxes. Before we do so, however, it is important to recognise that the effect of raising tax rates is not entirely mechanical, where a 10% increase in a **tax rate** (e.g., raising the effective rate of PIT from 24% to 26.4%) would result in a 10% increase in **tax revenues** (e.g., raising PIT from R528bn to R580bn). This is because the effect of increasing tax rates depends not just on the amount by which the rate rises, but also on (i) the macroeconomic effects of the increased taxes (especially its impact on GDP growth) and (ii) behavioural responses by taxpayers, who may adapt their economic and commercial activities in order to minimise the effect of the higher taxes on their after-tax income.

We would generally expect, therefore, that any given increase in the **tax rate** would generate a less-than-proportional increase in the quantum of **tax revenues** that are generated. In thinking about the relationship between changes in the rate of taxation and the value of the revenues brought in, a key issue is the current baseline tax rate because the higher it is, the more likely it is that an increase in it will generate less-than-proportionate increase in revenues. And, as will be demonstrated below, the fact that there is a diminishing marginal return on increased tax rates is evident in SA's own tax data.[5] This is important because, as the next section shows, SA's tax rates are already high by international standards.

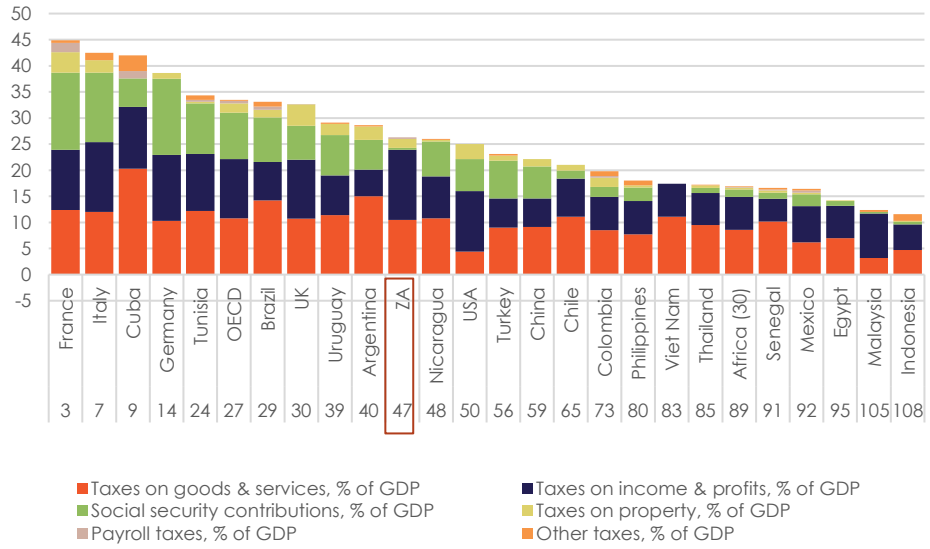
Box 3: The revenue anomalies of 2019/20 and 2021/22
In thinking about tax policy and revenue collection, we have generally used figures from 2019/20 because these are unaffected by Covid-19 (which lowered tax revenues considerably) or by the recent, but temporary, surge in CIT as as result of the commodity price boom. While both Covid-19 and the commodity boom may have medium- and long-run consequences for revenue collection, it is too early to say how significant these effects will be. In our estimation, the negative effects of Covid-19 are likely to last a lot longer than the positive effects of the commodity price boom.

[5] The failure to recognise these effects is one of the principal concerns that the 2021 Intellidex report in a BIG raised with the work done by Deloitte and Touch as well as by the INstitute for Economic Justice.

By most metrics, SA's taxes are already high

SA is a high-tax society already. Data collected by the OECD show that in 2019 SA's ratio of tax-to-GDP ranked 47th out of 118 countries when all taxes were included. If social security taxes are excluded from consideration (on the basis that SA does not have a contributory national pension system), its ranking in the list of countries with the highest tax:GDP ratios rises to 24th. Finally, because the VAT rate is low by international standards, if one looked only at taxes on personal and corporate income, SA's tax:GDP ratio was 14th highest on the list.

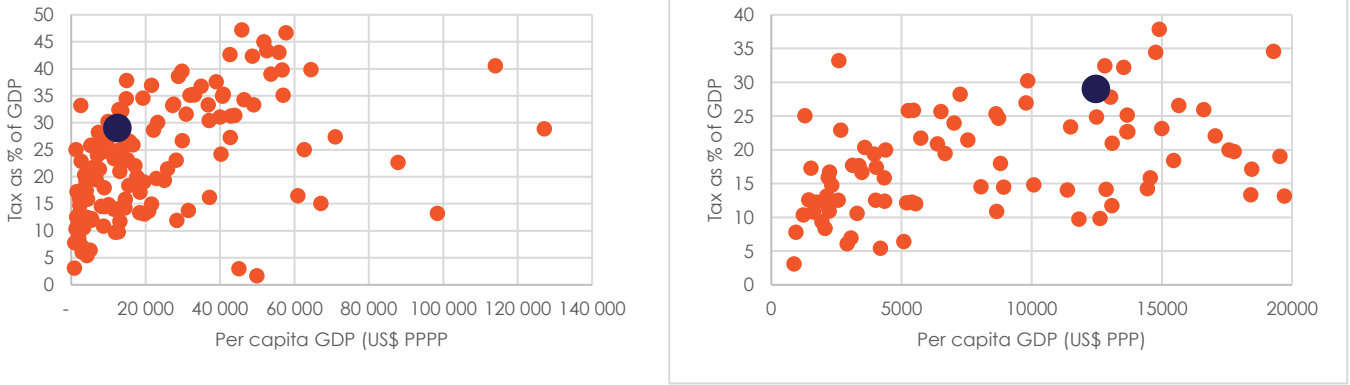
Figure 7: Taxes as a % of GDP by tax type, select countries: 2019



Source: OECD tax database

A key trend visible in the data is that richer countries tend to have higher ratios of tax to GDP, largely because the state takes on additional responsibilities as countries get bigger, but largely because of the contributory pension schemes that are in place in most rich countries (though not in SA). Thus, SA's ratio of tax to GDP is especially high for a country of its level of development. Among the nearly 90 countries with per capita GDP of less than USD20,000 in 2019 (measured in purchasing power parity terms), average tax ratios were 18.5% of GDP. South Africa's was over 28%, and only seven countries had a higher ratio.

Figure 8: Tax as a % of GDP and income per capita, South Africa highlighted (2019)



Source: OECD tax database

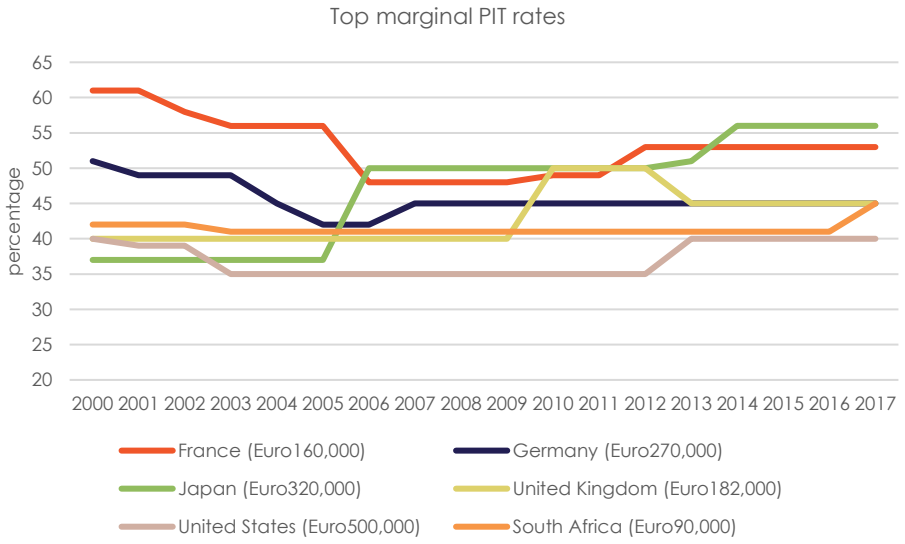
Tax rates are high

It is not just the case that the total value of **tax revenues** is high relative to SA's GDP, the **tax rates** applied to raise these taxes (i.e., the percentage of the taxable income relevant to a particular tax base that must be paid over in taxes) is also high. This is especially true of direct taxes – personal and corporate income tax. As will be seen, the main reason tax rates are high is because the tax bases are narrow, with a large proportion of taxes paid by a very small proportion of taxpayers across all tax instruments.

The rates applied to tax income (personal and corporate) are high

SA's corporate and personal income tax rates are high by international standards. One way to see this is that SA's highest marginal PIT rate is 45% and applies to incomes above about R1.6m a year, having been raised from 41% in 2017/18. This rate is comparable to those of rich countries, where top marginal rates have ranged between 35% and 60% depending on the year and the country under review (Figure 9). What distinguishes SA from these other (much richer) countries is that the top marginal rate is applied at much lower levels of income. Thus, while France, Germany, Japan, the UK and the US all have top marginal rates between 40% and 55%, these apply to incomes that are the equivalent of about EUR160,000, EUR270,000, EUR320,000, EUR182,000 and EUR500,000. In SA, they apply at the equivalent of EUR90,000.

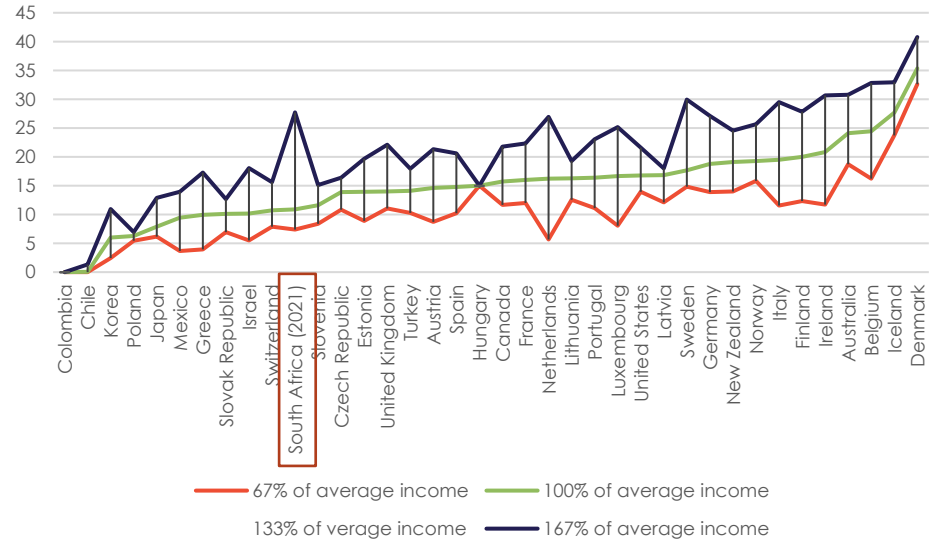
Figure 9: Top marginal rates, selected countries: 2000-2017



Source: OECD tax database and National Treasury, budget documentation

Because SA has a high top marginal rate, and because that rate is applied at quite a low level of income, SA's personal income tax regime is very progressive. Indeed, it is so progressive that effective rates on incomes that are 67% higher than average salaries in the formal sector are higher than most OECD countries effective rates for incomes that are 67% higher than average incomes in those countries, even though the effective rate of PIT on incomes at the average formal sector income is actually relatively low (Figure 10).

Figure 10: Effective tax rates, OECD and SA at various levels of income relative to national averages: 2020 or 2021



Source: OECD tax database and Intellidex

The progressivity of SA's PIT system is also evident from 2019 tax data. These show that, while the average effective rate (i.e., the proportion of taxable income paid in taxes) was 25.4%, it was well under 20% for taxpayers whose income is under R500,000, but it rose rapidly to nearly 30% for taxpayers earning between R750,000 and R1m, and further still for the very top earners. Indeed, the top 1.5% of income earners (45,000 people) earned 13% of all taxable income and paid 22% of all taxes, while the top 7.5% (206,000) earned 30% of taxable income and paid 44% of all taxes. These data, it should be noted, are not for the full population of taxpayers, but only those whose taxes were assessed by SARS in the 2019 tax year, when there were 5.3 million registered taxpayers. It does, however, represent about 62% of all PIT paid in 2019, so the remaining 2.5 million taxpayers contributed about 70% of the average taxes paid by these taxpayers (R80 000 versus R115 000 each). Even if one assumes that none of the 3.5 million taxpayers whose data are not recorded here earned more than R1m in 2019, the 200,000 taxpayers with taxable incomes above that level contributed nearly 30% of all PIT.

Table 2: Data on personal income tax: 2019

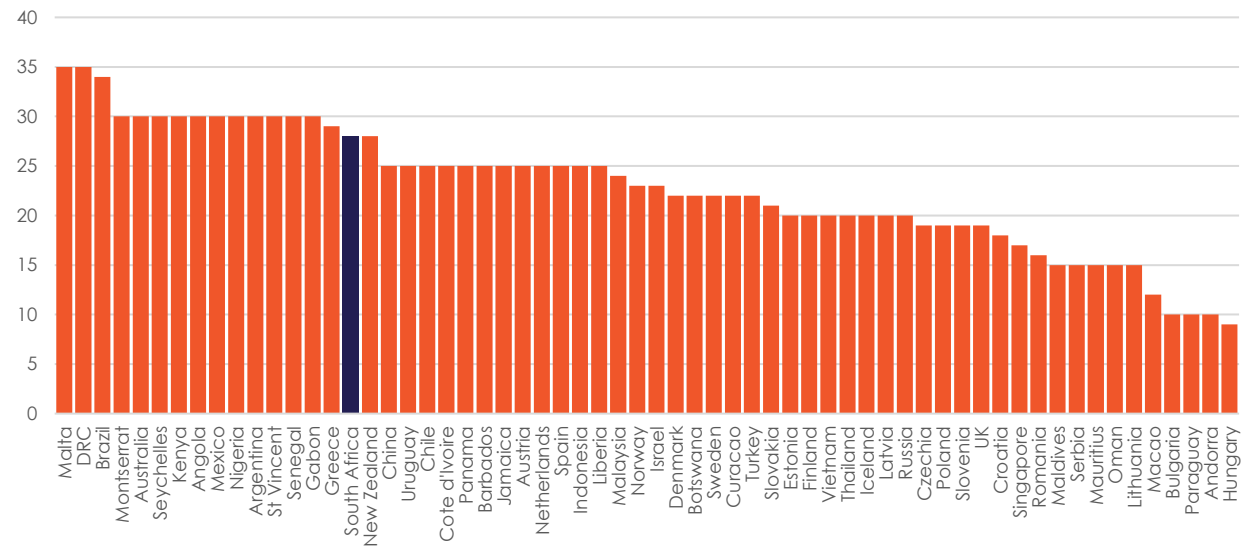
	Tax-payers	% of tax-payers	Taxable income (R million)	% of taxable income	Average tax bill	% of taxes assessed	Effective rate
<R1	88 326	3%	-17 328	-1%	4 980	0%	NA
R1-R70k	151 331	5%	5 410	0%	5 227	0%	14,6%
R70k-R350k	1 242 393	44%	272 035	21%	25 239	10%	11,5%
R350k-R500k	557 257	20%	232 947	18%	79 062	13%	18,9%
R500k-R750k	414 921	15%	251 133	20%	147 805	19%	24,4%
R750k-R1m	177 617	6%	152 525	12%	250 482	14%	29,2%
R1m-R2m	161 197	6%	212 829	17%	444 082	22%	33,6%
R2m-R5m	38 018	1.3%	107 840	8%	1 125 297	13%	39,7%
R5m +	7 040	0.2%	68 389	5%	4 233 037	9%	43,6%
Total	**2 838 100**	100%	**1 285 781**	100%	**115 088**	100%	**25,4%**

Source: SARS, tax statistics

Corporate income tax rates

The corporate income tax rate is also high relative to global norms. In 2018, the average CIT for 62 countries for which the OECD had data was just under 23%, compared to 28% in SA (a rate, it should be noted, that was reduced to 27% in 2022). It should be noted that these are nominal rates on taxable profits: because "taxable profits" is more a legal concept than an economic one, and because governments (including SA's) provide rebates and exemptions for various reasons, comparing effective rates is not really possible.

Figure 11: Corporate income tax rates (2019)



Source: OECD tax database

Data from SARS reflected in Table 3 show that the tax base for CIT is exceptionally narrow. The data, which reflect assessed returns that constitute nearly 90% of the tax revenues accruing from CIT in 2019, reveal that:

- Of the more than 360,000 companies assessed, only 120,000 made any taxable profit, 110,000 made no profit and 134,000 made assessed losses;
- The aggregate of assessed losses of loss-making businesses (nearly R1tn) exceeded the aggregate of assessed profits of profitable businesses (R670bn), so that, taken as a whole, the business sector had an aggregate taxable loss of over R330bn;
- 350 large businesses (0.1% of those assessed) accounted for more total profit than the rest of the tax base put together, and together paid 58% of all CIT collected;
- There is very little progressivity in the system: while businesses that earned profits between R0 and R500,000 paid average rates of under 20%, the rate rises quickly to around 27% above R500,000.

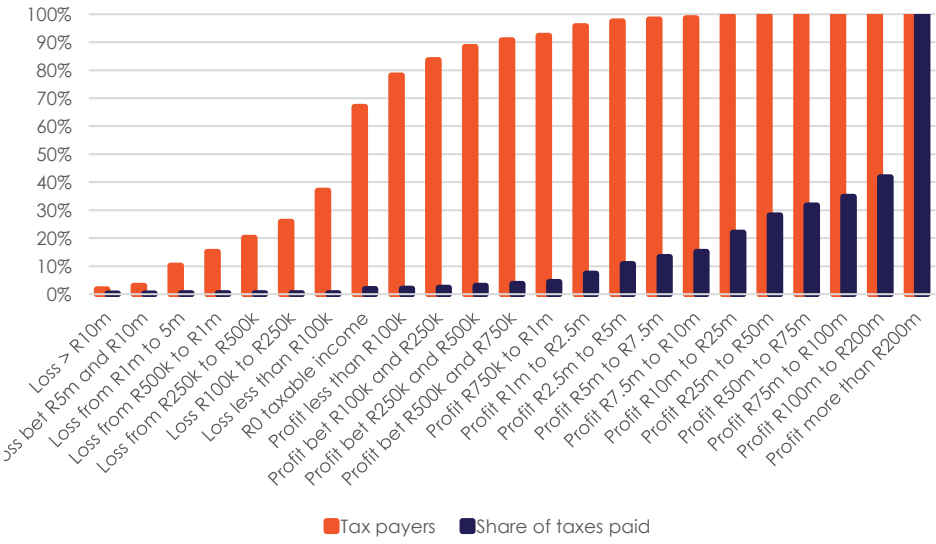
Table 3: Corporate income tax statistics, 2019

	Tax-payers	Taxable income (R millions)	% of total taxable income	Tax assessed (R millions)	% of total taxes paid	Effective rate
Loss > R10m	6 151	-R877 241	-264%	R547	0%	-0,1%
Loss bet R5m and R10m	4 936	-R34 523	-10%	R1	0%	0,0%
Loss from R1m to 5m	26 106	-R57 609	-17%	R19	0%	0,0%
Loss from R500k to R1m	18 045	-R12 932	-4%	R9	0%	-0,1%
Loss from R250k to R500k	18 331	-R6 641	-2%	R1	0%	0,0%
Loss R100k to R250k	20 698	-R3 453	-1%	R2	0%	-0,1%
Loss less than R100k	40 533	-R1 357	-0%	R37	0%	-2,7%
R0 taxable income	109 322	R0	0%	R2 678	1%	
Profit less than R100k	40 867	R1 621	0%	R282	0%	17,4%
Profit bet R100k and R250k	19 992	R3 303	1%	R652	0%	19,7%
Profit bet R250k and R500k	16 825	R6 062	2%	R1 226	1%	20,2%
Profit bet R500k and R750k	9 084	R5 556	2%	R1 296	1%	23,3%
Profit R750k to R1m	5 596	R4 868	1%	R1 251	1%	25,7%
Profit R1m to R2.5m	12 510	R19 868	6%	R5 479	3%	27,6%
Profit R2.5m to R5m	6 214	R21 789	7%	R6 266	3%	28,8%
Profit R5m to R7.5m	2 654	R16 233	5%	R4 590	2%	28,3%
Profit R7.5m to R10m	1 422	R12 281	4%	R3 453	2%	28,1%
Profit R10m to R25m	2 899	R44 955	14%	R12 636	7%	28,1%
Profit R25m to R50m	1 155	R40 367	12%	R11 332	6%	28,1%
Profit R50m to R75m	391	R23 613	7%	R6 584	4%	27,9%
Profit R75m to R100m	224	R19 480	6%	R5 551	3%	28,5%
Profit R100m to R200m	332	R46 250	14%	R12 932	7%	28,0%
Profit more than R200m	342	R394 905	119%	R107 144	58%	27,1%
Total	**364 629**	**-R332 605**	**100%**	**R183 968**	**100%**	

Source: SARS, tax statistics

The reliance of the fiscus on a small number of corporate taxpayers is evident if we compare the cumulative distribution of assessed companies and of the payment of CIT. This shows that nearly 60% of CIT revenues accrue from 342 companies, barely 0.1% of all assessed companies.

Figure 12: Cumulative distribution of CIT taxpayers and of CIT receipts (2019)



Indirect taxes

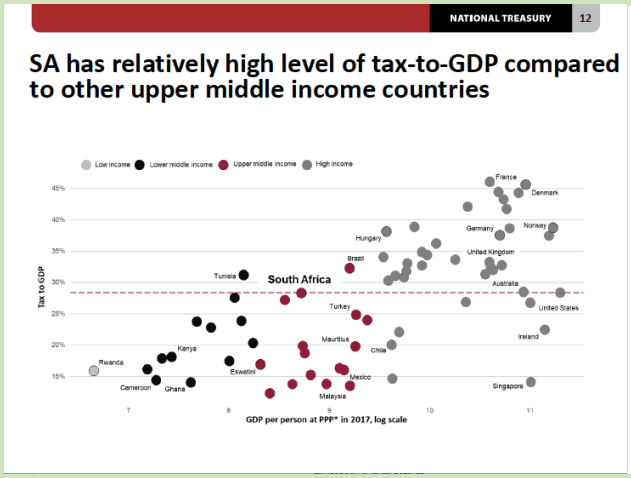
A range of indirect taxes raise substantial revenues for government in SA, with the largest being VAT and the fuel taxes, followed by excise and customs duties. Together, these four taxes generated R520bn in 2019, with most of that attributable to VAT (nearly R350bn) and the fuel levy (R80bn).

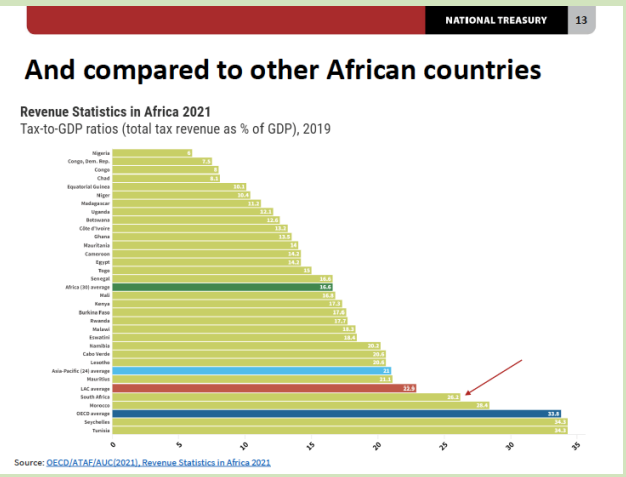
Compared to other developing countries, SA generates an unusually small proportion or total revenues from indirect taxation, largely because, at 15%, the VAT rate is lower than it is in many other countries, where the high level of informality makes direct taxation inefficient as a means to raise revenue. But SA's low VAT rate is also a political choice, reflecting the fact that consumption taxes tend to be less progressive because they are proportional to levels of consumption, while the rate of taxation on income (especially personal income) can rise as income rises. This is the reason for the greater political reluctance to raise consumption taxes, which affect everyone, relative to raising income taxes, the incidence of which falls more heavily on those with higher incomes.

Box 4: Treasury's view on the level of taxation in SA

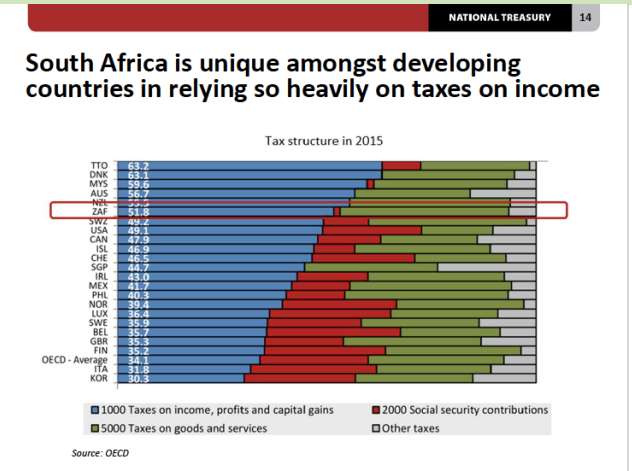
Over the past few years, National Treasury has made it increasingly clear that it believes that tax rates in SA are high. That this is their view is evident from a presentation made to the Portfolio Committee on Public Accounts on 22 March 2022, available at https://static.pmg.org.za/220322_FINAL_SCOF_Rates_Bill_presentation.pdf. The presentation includes some versions of many of the graphs and data presented above, some of which are reproduced below. The slides show:

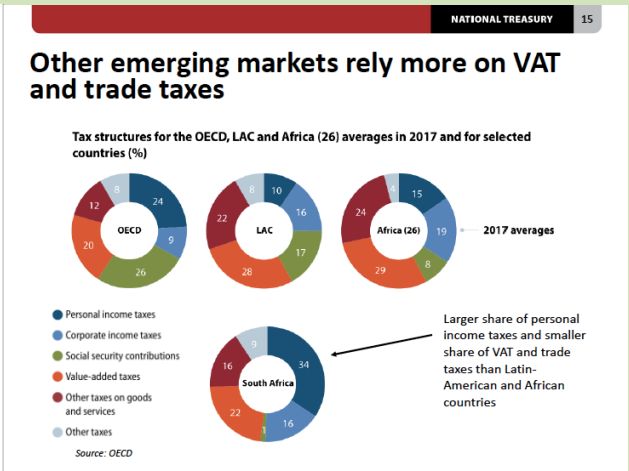
- SA's taxes are high in comparison to other countries'



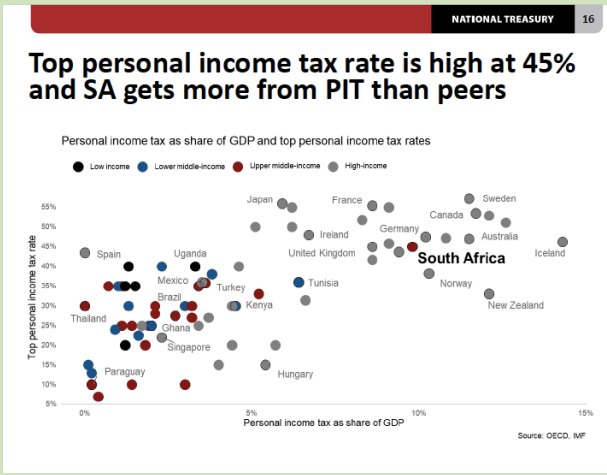


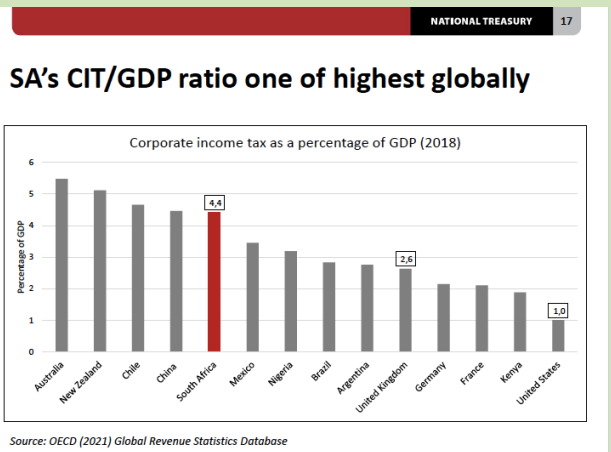
- SA relies less on indirect taxes than other countries do for **tax revenues**



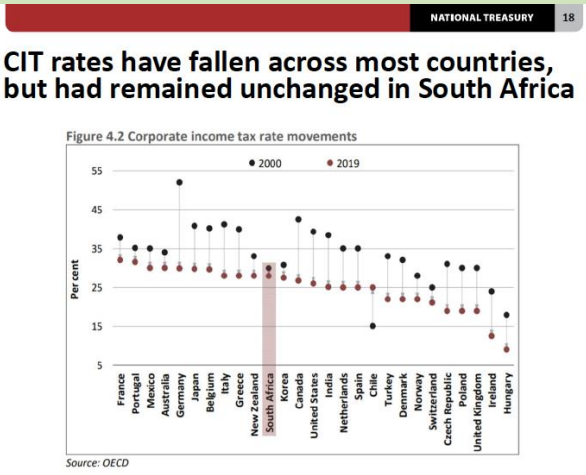


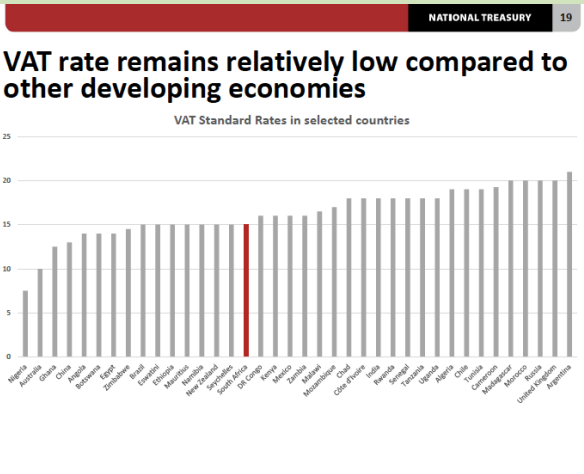
- Direct **tax rates** are high





- CIT levels have fallen elsewhere, but not in SA and the VAT rate is low





Implications of high tax rates for raising taxes further

Tax rates in SA are high, especially in comparison to peers. In addition, they consist, to a degree that is unusual in the developing world, of taxes on income – personal and corporate – rather than of indirect taxes. The CIT rate is high by global standards, and, while the top marginal rate for PIT is similar to that of rich countries, the income threshold at which it applies is considerably lower. The result is a system of taxation in which direct taxes make up an unusually large share and in which those taxes are unusually progressive in their structure.

Given the exceptionally high levels of income inequality, a case can be made that the basic structure of taxation is reasonable. There are, however, important caveats, the most significant of which is that high taxes tend to result in slower economic growth, and there is at least some evidence that tax rates in SA have generated distortions that have reduced overall economic performance. For the purposes of this report, however, a more important implication of the fact that taxes are already high is that, when this is the case, it is increasingly difficult to generate additional revenues by raising tax rates even further. This is because doing so can result in one or more of four different kinds of off-setting effects, each of which tends to reduce the revenue-raising potential of the relevant tax instrument:

1. Changes in the make-up of a taxpayer's economic activity in response to changes in relative costs of different activities, resulting in a shrinking of the tax base applicable to the tax instrument whose rate has been raised;
2. Changes in tax morality resulting in increased tax avoidance and evasion (which can have negative implications for all tax instruments, not just the one whose rate was raised);
3. Withdrawal from the tax system through emigration;
4. Changes in key macroeconomic aggregates (especially consumption, savings and investment), with adverse implications for economic growth and for revenue collection.

1. Changes in the level/composition of tax-payer activities

One of the effects of changes in tax rates is that it reduces the rewards or raises the costs of some kinds of activity relative to all other activities. This is the explicit goal, for example, of "sin taxes" and carbon taxes (one goal of which is to reduce consumption of certain kinds of products), as well as import tariffs and customs duties (which encourage consumers to use locally produced goods). Taxes on income can have a similar effect: by reducing the rewards of work or investment, they can lead to less work/investment taking place.

In practice, the effect of raising tax rates on the amount of tax revenues accruing to the fiscus depends on the balance of two forces: an income effect that encourages people to engage in the more highly taxed activity in order to offset the decline in income that a higher tax implies, and a substitution effect, that encourages people to do something other than the activity on which a higher tax is now being levied because the relative value of other activities (including leisure) increases. While these two effects push in opposite directions, the higher the tax rate, the stronger the substitution effect. The net effect is that, if the goal is to increase the value of **tax revenues** collected from a particular tax by 10%, for example, the **tax rate** will have to be raised by more than 10% of the existing base rate to achieve that goal. At the limit, when tax rates are very high, raising them even higher may actually reduce tax revenues.

2. Changes in tax morality

Apart from changes to the mix of activities in which taxpayers engage as a result of changes in some tax rates, higher rates can also impact on tax morality, encouraging taxpayers to seek more aggressively to avoid (legally) or evade (illegally) taxes. This is partly because, at higher rates, the rewards for avoidance and evasion increase, but it is also because taxpayers may feel "over-taxed" and may question the legitimacy of the tax system. For obvious reasons, this problem is especially acute if taxpayers feel that they personally do not get very much in return for their taxes and/or that spending by government is wasteful or corrupt.

3. Withdrawal from the tax system

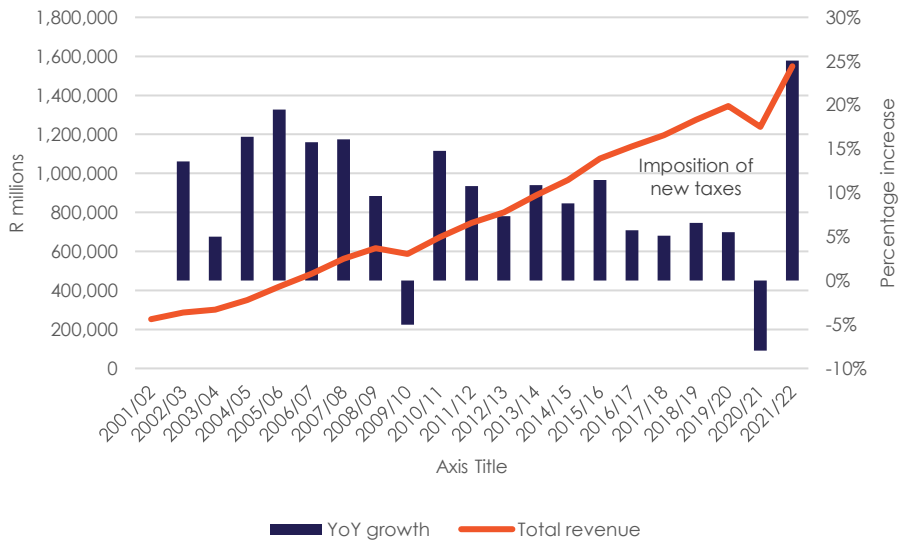
Some taxpayers may withdraw from the tax system altogether by relocating to jurisdictions where taxes are lower and/or where they feel they may receive a better return on the taxes they pay. In the context of a tax system that is heavily reliant on the PIT paid by a small minority of income-earners (whose consumption also makes up a large share of the VAT tax base), emigration is a potentially serious threat to the medium- and long-run stability of the tax system. Anecdotal evidence suggests that an increasing number of high-income households have begun to think that the balance of costs and benefits of staying in SA are now such that other jurisdictions have become more attractive. Higher taxes, which imply lower disposable income, would potentially increase this.

4. Changes in macroeconomic aggregates

The three effects described above all directly affect revenues generated by changes to particular tax rates. These are, in a sense, partial equilibrium effects: a single price changes, and it changes the way taxpayers behave. There are, however, also **macroeconomic** or **general equilibrium** effects that are the consequence of all of these individual decisions. Thus, when taxpayers reduce the amount of time they devote to earning taxable incomes or reduce the level of investment in a business as a result of a higher CIT rate, the direct effect is to lower revenues relative to what might have been expected had no such changes in decision-making occurred. Collectively, however, the effect of all these decisions may be magnified by their combined effect on the level of economic activity and the rate of overall economic growth. If that is the case, not only do revenues obtained from the specific tax instrument fall relative to previous expectations, but all taxes are affected by the general reduction in economic activity across the economy. It is also possible that raising taxes may impact on interest rates, which might price in the consequences of lower growth for the overall risk of default. Interest rates might also rise if higher taxes translate into lower savings rates. Rising interest rates would have further, second-round adverse effects on growth, which would also impact on the revenue-raising effects of incremental increases in tax rates.

These considerations are by no means purely theoretical: in 2018/19, government sought to raise tax revenues significantly, by increasing the VAT rate to 15%, adjusting the PIT tax brackets by less than inflation, and sharply increasing fuel levies. The moves were expected to raise an additional R36bn in revenue. In practice, there is little evidence of any deviation from the long-run growth in aggregate taxes after these new rates were implemented. Indeed, the annual increases in revenue in 2018/19 and 2019/20 were lower than in most previous years.

Figure 13: Year-on-year growth in tax revenues



Source: National Treasury, budget documentation

Tax options for a BIG

Although the efficiency of a tax instrument with respect to its ability to raise revenues declines at higher tax rates (so that increases in a tax rate that is already high will generate a less than proportionate increase in revenues), higher tax rates will still tend to increase tax revenues. It is possible, therefore, to raise rates sufficiently high that they do generate increased revenues on the order of R50bn or R100bn. Thus, while a 10% increase in the **effective average PIT rate** (from the 2019 level of 25.4% to 28%, say) may not increase **PIT revenues** by 10%, it will nevertheless generate some increase in those revenues. If, therefore, a 10% increase in the effective tax rate only generates a 7% increase in revenues, then raising the effective rate by 14% (i.e., from 25.4% to 29%) may be sufficient to increase revenues by 10%.[6]

Our assessment is that government could raise R50bn or R100bn if it were willing to raise tax rates sufficiently high. The real question is not whether this could be done, but whether it would be wise to do so. In this section, we look at how that might be done and what the implications would be. In this regard, it is worth pointing out that in a 2021 report, the Institute for Economic Justice (using work they'd previously commissioned from DNA Economics), argued that it would be possible to raise more than R300bn in new taxes (R250bn) and reduced wastage in government (R50bn) within three years (Table 4). The bulk of the new taxes would be raised by a social security tax (R66bn), a new wealth tax (R59bn), a new financial transactions tax (R41bn), a resource rent tax (R38bn), and by making pension fund contributions non-deductible for taxpayers at the top of the income distribution (R23bn).

As documented in the 2021 Intellidex report, the figures offered by the IEJ are beset by significant flaws and misconceptions, and the estimates of the

[6] *At the extreme, it is possible to imagine that an increase in tax rates would lower total revenues raised (i.e. that the return in new taxes is not just falling, but that it is below zero). This is the possibility famously raised by Arthur Laffer. While we do not think that SA is at that point on the "Laffer curve" yet, it may be possible that we will get there are some point.*

quantum of new taxes that their proposals would generate are not credible: were all these policy changes implemented, the net increase in revenues would be a fraction of that anticipated by the IEJ. This view is shared by the authors of the DSD Expert Panel report, and have been implicitly acknowledged by the IEJ itself in a response to the Intellidex report.

Table 4: IEJ proposals on how to generate new revenues to fund a BIG

Billions	2022/23	2023/24	2024/25	Notes
Income Taxes:				
Social Security Tax (SST)	R62.20	R63.90	R65.60	• 1.5% of taxable income for income between R0 and R80 000 per annum; • 2% of taxable income between R80 000 and R350 000 per annum; • 2.5% of taxable income between R350 000 and R 1 million per annum; • 3% of taxable income more than R1 million per annum.
Resource Rent Tax	R38.80	R38.40	R38.30	Assuming a tax that can extract 25% of the Natural Resource Rent value in South Africa in line with Ghana and Zambia.
Selective removal of pension fund contribution deduction	R22.04	R22.64	R23.25	Removal of deduction for those with taxable income of more than R1 000 000 per annum.
Selective removal of Medical Aid Tax Credit	R6.03	R6.23	R6.36	Removal of tax credit for main member and main dependent for those with taxable income > R500 000 per annum.
Dividends Tax	R7.70	R8.10	R8.60	Increase rate from 20% to 25%.
Consumption Taxes:				
Implementing a Luxury VAT	R8.41	R8.78	R9.17	25% VAT rate on luxury goods.
Increase in Excise duties	R3.36	R3.56	-	14% annual increase; temporary measure.
Carbon Tax	R2	R2	R2	Increase to one-quarter of EU standard.
Wealth and Property Taxes:				
Wealth Tax	-	-	R59	1% tax rate for top 1% and 3% tax rate for top 0.1%. Evasion rate of 30% and 20% stock depreciation assumed.
Estate Duty Tax	R1.79	R1.87	R1.93	• Estates valued between R3.5 million and R30 million are taxed at a rate of 36%. • Estates valued between R30 million and R146.89 million are taxed at a rate of 41%. • Estates above R146.89 million are taxed at a rate of 45%.
Currency Transaction Tax[12]	R3.68	R3.75	R3.88	0.005% tax on all onshore currency transactions.
Securities Transfer Tax (STT)	R1.37	R1.41	R1.45	Increase rate from 0.25% to 0.3%
Financial Transaction Tax (FTT)	R41	R41	R41	0.1% tax rate.
Removal of corporate tax breaks:				
Reduce profit shifting of MNCs	R5.75	R5.75	R5.75	Target of 25% reduction.
Cancel Employment Tax Incentive (ETI)	R4.8	R4.93	R5.06	
Reverse Corporate Income Tax (CIT) reduction proposal	7.6	8.2	8.2	Reverse proposed reduction of CIT from 28-27%.
Reduce wasteful and irregular expenditure:				
Reduce irregular expenditure	36.4	42.5	48.5	Target of 30% of R121.3 billion, reported by Auditor-General in 2021.
Reduce wasteful expenditure	R1.85	R1.85	R1.85	A further 2.7% reduction of R68.4 billion spent on "General Public Services".
Total	**R249.03**	**R261.12**	**R329.90**	
Recouped via VAT	R24.2	R24.85	R25.52	12 % of total expenditure on UBIG. Average provided, but this depends on amount of UBIG. Reference Table 24.

Source: IEJ, 2021

These issues notwithstanding, it is appropriate to ask how government might raise significant new revenues. One way to do this is to look at the existing structure of taxes and ask by how much each tax rate would have to be raised in order to generate a given quantum of new revenues. Using 2019 tax numbers (largely because these reflect the pre-covid "norm"), we show that raising R50bn in new taxes using only PIT would necessitate a 9% increase in average effective tax rates, while a R100bn in new revenues would require a 19% increase in the effective tax rate. Thus, because the average effective rate of PIT was 25.4% in 2019, raising R50bn in additional revenue would require raising rates by nearly 2.5 percentage points at each tax bracket, while raising R100bn would require an increase in tax rates of nearly five percentage points at each bracket. Because we believe, for the reasons set out above, that the efficiency of raising tax rates declines when base rates are already high, these calculations should be regarded as the minimum required increase in tax rates; in reality, the increase in the effective rate would likely have to be significantly higher if it is to generate the targeted increase in revenues.

Similarly, a R50bn increase if funded solely through an increase in VAT would require an increase in the VAT rate of at least 14% (i.e., an increase of just over two percentage points in the VAT rate from 15% to 17%), while an increase of R100bn would require a four percentage point increase in the VAT rate from 15% to 19%. Again, these are minimum increases because of the declining marginal efficiency of rising tax rates.

Finally, the figures for CIT, suggest that raising R50bn in new taxes in 2019/20 would have required a CIT rate that was 24% higher than the 28% rate (i.e., the CIT rate would have had to be a minimum of 35% rather than 28%), while R100bn would have required a near-50% increase in the rate (i.e., from 28% to 41%).

As is evident in Table 5, because other types of tax constitute a much smaller share of total tax revenues, the increases needed in base rates are exceptionally high if they are to deliver R50bn or R100bn in additional revenue.

Table 5: Estimated increases in tax rates needed to fund R50bn or R100bn in additional revenue, 2019/20

Tax type	Value (R thousands)	% of total	Increase of R50 billion	Increase of R100 billion
Personal income tax	527 632 509	39%	9%	19%
Value-added tax	346 760 767	26%	14%	29%
Corporate income tax	211 522 203	16%	24%	47%
Fuel levy	80 175 160	6%	62%	125%
Tax on international trade	56 322 406	4%	89%	178%
Excise duties	46 826 574	3%	107%	214%
Dividend tax	27 929 888	2%	179%	358%
Taxes on use of goods	11 949 861	1%	418%	837%
Taxes on payroll/workforce	10 174 611	1%	491%	983%
Transfer duties	7 119 627	1%	702%	1 405%
Securities transfer tax	6 240 209	0%	801%	1 603%
Interest on overdue tax	5 003 687	0%	999%	1 999%
Ad valorem excise duties	4 124 241	0%	1 212%	2 425%
Health promotion levy	2 446 184	0%	2 044%	4 088%
Estate duty	2 047 843	0%	2 442%	4 883%
Interest withholding tax	596 498	0%	8 382%	16 765%
Donations tax	572 281	0%	8 737%	17 474%
Total	**1 355 766 258**	**100%**	**4%**	**7%**

Source: Intellidex

An alternative approach to raising all the desired new revenue from either PIT or CIT or VAT would be to share the load between all three. Since these collectively raised R1.1tn in 2019/20, a R50bn increase would require an average increase of 5% on the rates of all three tax types (raising PIT by 1.2 percentage points at each bracket, raising CIT to 29.5%, and raising VAT by 0.75 percentage points). Using the same approach, raising R100bn would necessitate increases of twice these amounts. Again, these are minimum increases in the tax rates that are needed, given declining returns from the incremental increase in tax rates when base rates are already high.

Finally, it is also possible to raise R50bn or R100bn by increasing tax rates by 4% or 9% (for additional revenue of R50bn or R100bn respectively)

Evaluating the tax options available

As noted above, while it is possible to raise taxes to levels that would generate significant new revenues, the real question is whether it is wise to do so. What would be the effect of raising taxes in an economy that grows slowly and confronts very significant structural constraints to growth? Would the benefits of increased revenues and redistribution be outweighed by the costs of foregone growth? These are difficult questions – empirically and politically – so we do not offer final, definitive assessments. At the same time, it is clear that proponents of a BIG greatly underestimate the costs and risks of its implementation, sometimes to the point of complete denial that such costs exist. That position is untenable, and business needs to push back vigorously against it.

In the next few sections, we will review what is known about the effects of raising tax rates using the tax instruments currently deployed by SARS, as well as some of the more exotic proposals that have been offered by the IEJ. These comments are, in a sense, no more than an account of the partial equal effects of raising these taxes. In the subsequent section, we will look at the general equilibrium effects of raising taxes on the economy as a

whole. As will become apparent, these general equilibrium effects of tax increases will tend to reduce revenue growth because they will tend to slow economic growth. Obviously, slower economic growth affects revenue collection as a whole, not just revenue collection from the specific tax instrument whose rate is increased, so a deep slowdown in growth might mean that total tax revenues end up being lower than is currently being estimated.

Partial equilibrium effects of raising PIT

There are many different ways to raise average effective PIT rates: in 2015/16, the tax rate applied at each tax bracket was raised by one percentage point; in 2017/18, a new top bracket was created for incomes above R1.5m, with a marginal PIT rate of 45% for every rand above the first R1.5m earned. The differences in the precise effects of these approaches are hard to estimate, but the one percentage point across-the-board increase (which was accompanied by a below-inflation adjustment of brackets) appears to have raised PIT collection by about R10bn. The same was not true, however, of the increase in the top rate in 2017/18, which, according to the 2022 Budget Review "generated significantly less than the projected R4.4bn per year."

The failure of the introduction of a new top rate to raise the expected quantum of new revenues the Budget Review explains, is because taxpayers responded to the increase in a manner that slowed the rate of growth of taxable income at the top of the income distribution. Thus, while total taxable income of people earning more than R1.5m had been growing by nearly 9% a year in real terms before the increase in rates, in the immediate aftermath of the change in the top rate, income growth above R1.5m dropped to under 4% in real terms. Importantly, this drop was not matched by a drop in the growth in incomes between R1.25m and R1.5m, suggesting that the change in the top rate affected taxpayer behaviour, rather than reflecting some macroeconomic factor.

More generally, a review of historical data by Johan Kemp (2020) found that a one percentage point increase in the top marginal rate resulted in a 0.4 percentage point *decline* in taxable income among the highest earning taxpayers. He estimated that the revenue maximising top rate for the top 10% of taxpayers was 40%.[7]

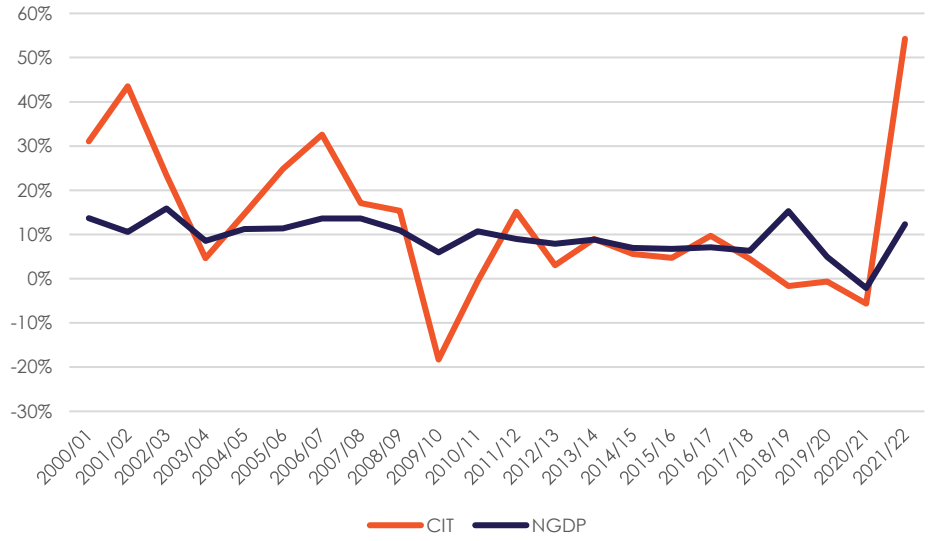
Partial equilibrium effects of raising CIT

As noted above, the CIT rate at 27% (having been reduced by one percentage point this year) is high relative to the rates applied to corporate profits in other jurisdictions. Because the taxation of corporate profits affects the return on investment, higher rates of CIT raise the hurdle rate for investment decisions and are, therefore, associated with lower levels of investment. We will return to this below. Here we ask only what the effects of raising the rate at which profits are taxed has on the collection taxes. In this regard, three points are worth making:

[7] *Kemp, JH (2020) The Elasticity of Taxable Income: The case of South Africa. ERSA Working Paper. It should be noted that the top marginal rate applies to fewer than 10% of all tax-payers, so at least some proportion of this group is being taxed at close to the optimal marginal rate. It may also be that 45% is optimal for the very top of the distribution, but Kemp's method was not able to identify optimal rates for a group smaller than the top 10%.*

- While CIT makes up an unusually large proportion of total taxes in SA relative to the practice in the rest of the developing world, CIT is an exceptionally volatile tax that tends to collapse during downturns, but which also sometimes grows much more quickly than the economy as a whole (as it did in 2021/22 when profits in the mining sector drove a huge acceleration in CIT collections). The volatility of CIT makes it inappropriate as a source of funding for a permanent new spending commitment;

Figure 14: Year-on-year growth of CIT and nominal GDP: 2000 to 2021



Source: National Treasury, budget documentation

- As noted above, payment of CIT falls very heavily on a tiny minority of firms. Indeed, a large fraction of firms have zero or negative taxable income each year, which means they have no tax liability. Indeed, firms that make an assessed loss in one year can use that to reduce their tax liability in subsequent years when they do make a profit. Of the firms that report taxable profits, an exceptionally small number pay the majority of collected CIT: in 2019, fewer than 350 large businesses paid nearly 60% of all CIT. The narrowness of the tax base is a potential risk to the fiscus, and higher rates of CIT would potentially increase this risk.

Apart from the narrowness of the CIT tax base, a larger question about the incidence of CIT presents itself. It is assumed by many participants in the debate about how to fund a BIG that taxes on profit are paid by the owners of capital. In fact, while it is true that some portion of CIT is paid for by lower returns on capital, there is plenty of evidence to show that, over the medium and long terms, the effect of higher taxes on profit can be passed on to others. In Germany, for example, where corporate taxes vary by region, firms that pay higher taxes tend to pay lower wages and have followed a path of slower wage growth.[8] Further, evidence from the EU suggests that firms operating in industries in which competitive pressures are

[8] *Fuest, Clemens, Andreas Peichl, and Sebastian Siegloch. 2018. "Do Higher Corporate Taxes Reduce Wages? Micro Evidence from Germany." American Economic Review, 108 (2): 393-418. (summary available at: https://voxeu.org/article/incidence-corporate-taxation-and-implications-tax-progressivity#:~:text=The%20incidence%20of%20corporate%20taxation%20is%20a%20key%20issue%20in,corporate%20tax%20is%20highly%20progressive.))*

relatively weak, and where they enjoy some pricing power, are often able to pass increased corporate taxes on to customers. The bottom line is that it does not follow from the fact that firms make CIT payments to SARS that it is only their owners on whom the burden of corporate taxation falls: in reality, that burden is shared (in various proportions) between owners, workers, and customers.

The partial equilibrium effects of raising VAT

VAT is widely regarded as the least distortionary of the major tax instruments, and, as noted above, by the standards of the developing world, SA collects an unusually small proportion of total taxes from VAT (albeit that this reflects the difficulties of using direct taxes in economies in which a high proportion of economic activity is informal in character). VAT, however, is also less progressive than direct taxes, even if one factors the zero-rating of essential goods and services into the equation. For this reason, most proponents of a BIG envisage financing it with almost anything but an increase in VAT. The one exception to this is the authors of the DSD Expert Panel report who very explicitly favour using VAT to fund a BIG because it is transparent, relatively efficient, easy to implement, and the least distortionary of tax instruments. Politically, however, as the experience of raising the VAT rate by one percentage point in 2018 showed, it is exceptionally controversial.

An important consideration in relation to using VAT to finance a BIG is that a two or four percentage point increase in VAT would immediately be reflected in higher consumer inflation, which would have implications for interest rates, particularly in the short-term.

The partial equilibrium effects of raising the rates of other kinds of taxes

Because PIT, CIT and VAT account for over 80% of taxes raised, generating substantial new revenues without raising the rates of any of these key taxes is implausible, necessitating either unrealistically large increases in tax rates on all other taxes (something that would inevitably result in significant behavioural responses and other distortions) or the creation of wholly new tax instruments. The latter approach – creating new tax instruments – has been a core focus of the IEJ in its advocacy for a BIG. The most significant of the new instruments they propose are a resource rent tax (R38bn a year) and a wealth tax (R59bn a year within three years).[9] These were reviewed in the 2021 Intellidex report and we will not repeat all the serious concerns that were raised there, but the main issues are:

- **Resource rent tax**
  Using data from the World Bank that estimates the value of the resource rents accruing to the SA economy, the IEJ proposes that a resource rent tax of 25% be imposed on extractive industries. This proposal, however, is premised on a misunderstanding of the World Bank's metric. The IEJ interprets this to be a measure of something equivalent to "super-profits" being earned by the mining sector, whereas in fact it is a measure of the difference in the value of mining income accruing to the SA economy and the costs of extracting those minerals using global average costs of production. In effect, what the World Bank is measuring includes the totality of profits accruing to the mining industry as well as the wages and

[9] *The other instruments are generally extensions or variations of existing instruments.*

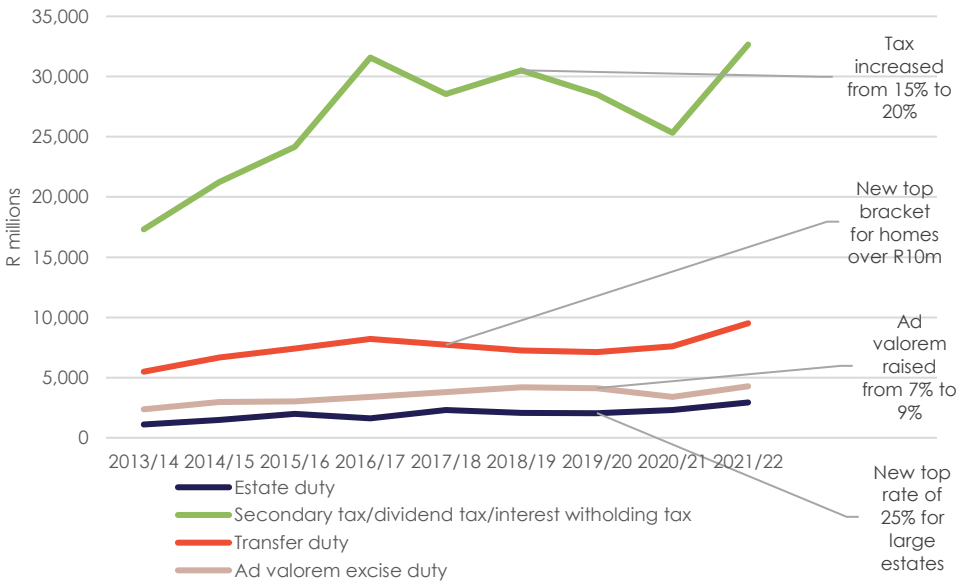
taxes that it pays. These "rents" in other words, are not excess profits (to the extent that they are a meaningful economic measure at all),[10] but are already shared between mine owners, workers and the state.

- **Wealth tax**
  Using estimates of the distribution of wealth in SA, the IEJ estimates that a tax of 1% on individuals whose net wealth is greater than R3.7m (the top 1% of taxpayers – about 350,000 people) and of 3% on the value of assets above R27.3m (the top 0.1% of taxpayers – about 35,000 people) would raise R59bn in annual taxes, a figure that they derive after assuming that the introduction of the tax would lead to a 20% decline in share prices and that wealth-owners would avoid/evade 30% of the taxes they "should" pay on their wealth. There are number of concerns with this proposal:
    - Although the assumptions made about share prices and tax evasion may be useful for modelling, they are unhelpful for policy: implemented as stated (i.e., without assuming a bear market and without assuming that all SA's wealthy will willingly evade taxes), the tax liability created would be the equivalent of R150bn a year, not R59bn. That is the equivalent of nearly R170,000 additional annual taxes for every member of the top 1% of wealth holders;
    - Even if the numbers are assumed to be accurate, the effect of so narrowly targeted a wealth tax would be the equivalent of adding 14 percentage points on the effective rate of personal income tax on a small group of highly mobile individuals;
    - There are enormous legal and administrative difficulties associated with implementing a wealth tax, not the least of which is determining which assets should qualify for taxation and which should not, how to assess their value (share prices for public companies are visible and transparent; the same is not true for privately held companies, property, art, intangible assets, etc.), and how to apportion a wealth-holders debt to his taxed and untaxed assets. Some assets also do not generate cashflow, which creates potential sources of iniquity;
    - A wealth tax of this kind would generate enormous distortions in investment decision-making as capital was shifted into asset classes that are not taxed or that are less easily taxed. Thus, if shares in public companies are taxed but art is not, for example, wealth-holders will change the composition of their portfolios. These kinds of distortions create deadweight costs that are in no one's interest. In all probability, this would also lead to very significant levels of capital flight.

[10] *As the DSD Expert Panel report notes, the assumption made in the calculation of the rents by the World Bank is that all mining companies face similar risks of similar magnitudes. If risks are higher in SA, for example, than they are elsewhere, a higher rate of profit may simply reflect that fact, and is not, strictly speaking, a rent at all.*

Apart from the new tax instruments proposed by the IEJ, there are other kinds of taxes, the rates of which might conceivably be raised to generate additional revenues to help fund a BIG. In this regard, recent experience of raising rates on individual tax instruments is not auspicious: in recent years, increases in the rates levied on each of four different tax instruments – dividends taxes, transfer duties, ad valorem excise duties and the estates tax – have failed to generate significant additional revenues, and have, in many instances, been followed by declines in associated collections. While this is partly driven by prevailing economic conditions at the time that the tax rates were raised, the experience also reflects that fact that taxpayers' choices change in response to changing tax rates.

Figure 15: Impact of raising tax rates on estate duties, dividends taxes, ad valorem duties and transfer duties



Source: National Treasury, budget documentation

Reducing tax expenditures

The final set of potential sources of funding for a BIG that has been proposed is in reducing or eliminating some or all of the many forms of tax rebate/incentive offered by government.[11]

In 2019/20, total tax expenditures amounted to close to R270bn of forgone revenue. Of this, 35% were rebates on contributions to retirement funds, 27% were accounted for by the zero-rating of VAT on some products, 13% were medical aid tax credits, and another 13% were excise duty rebates awarded to qualifying firms in the vehicle-manufacture value-chain. The employment tax incentive accounted for 2%, and the rest was made up of a variety of incentives, mostly aimed at promoting some kinds of economic activity (Table 6).

[11] *The IEJ also proposes using savings from reduced wasted and/or corrupt spending to finance a BIG, but operationalising the proposal is deeply problematic as there is no obvious mechanism to identify and secure those savings. In any event, cutting budgets in response to genuine efforts to reduce waste is "incentive incompatible" in the sense that spending agencies who face the prospect of budget cuts if they find waste are less likely to look for it.*

Table 6: Tax expenditures: 2019

	Value (R million)	% of total tax expenditures
Retirement fund contributions	94 122	35%
Zero-rated VAT	71 884	27%
Medical aid tax credits	34 523	13%
Motor vehicle industry incentives	34 107	13%
Employment tax incentive	4 754	2%
Other, incl. all industrial incentives apart from motor industry	28 904	11%
Total	**268 295**	**100%**

Source: National Treasury, budget documentation

For all practical purposes, the proposed reductions of tax expenditures are the equivalent of raising the effective rates of PIT or CIT. Thus, reducing the rebates offered for retirement saving would mean raising the effective rate of PIT on those who are currently entitled to this benefit, and the same is true for reducing the value of medical aid tax credits. The same is true of reducing industrial incentives. The implication is that the considerations that apply to the impact of raising PIT and CIT, apply equally to the impact of reducing the value of these rebates. In addition, however, three further issues are worth mentioning:

- There are good reasons to be concerned that South Africans already save too little for retirement, so reducing the incentive to do so risks worsening this. If it does so, it would also result in a lower savings rate, with commensurate macroeconomic consequences: lower investment and/or higher interest rates. It is also worth pointing out that, while contributions to retirement funds are tax-deductible, pension payments after retirement are subject to PIT, so, while tax-deduction does deliver net benefits to retirement fund contributors, some of the benefit is already recouped by the fiscus;
- The elimination of medical aid tax credits is already intended to help finance the NHI, so eliminating them to fund a BIG would necessitate raising taxes later and further to fund any expansion of NHI. It would also start to shift demand from the private to the public sector without the policy foundation to deal with such additional demand or match quality. Others, such as the retirement savings rebates might be on the table for social security reform. Eliminating these to fund a BIG makes the implementation of other commitments more difficult to finance and more reliant on raising taxes;
- Reducing any of the industrial incentives of any size will encounter strong political opposition from DTIC and parts of the ANC. In the case of motor vehicle manufacturing incentives (which account for the vast majority of industrial incentives), their elimination would likely render the industry non-viable with huge impacts on the broader manufacturing sector, employment and so into PIT and CIT.

Macroeconomic estimates by proponents of a BIG

A number of reports by proponents of a BIG make some attempt to estimate the effects of a BIG on various macroeconomic variables, especially GDP, employment and inequality. These attempts are generally unsatisfactory because they appear to rely on intuition and provide no formal model to justify their conclusions or they rely on models that are highly questionable and/or completely opaque.

In the 2021 Intellidex report on a BIG, the models used by Deloitte, as well as by the IEJ/DNA Economics were both criticised. They predicted or (in the case of the IEJ/DNA reports, implied) that a BIG's effects on macroeconomic variables would be essentially benign. This conclusion was premised, however, on a very simplistic and essentially static model of the economy in which the transfer of resources from higher-income households to poor households increased aggregate household consumption (because higher-income households save a portion of their income), and, therefore, was predicted to provide a stimulus to growth by expanding aggregate demand. The problem with this analysis is that it assumed that the imposition of even very high taxes would have no adverse impact on tax-paying households other than a proportional reduction in consumption and saving. This is highly implausible. Nor did the analysis have anything to say about the necessary corollary of higher aggregate consumption created in this manner, which is lower aggregate savings. Thus the 2021 Intellidex report argued that one of the clearest deficiencies of the models being used by proponents of a BIG was that they had no financial sector. For this reason, there was no way for changes in macroeconomic policy (more borrowing, higher taxes, etc.) to impact on inflation or on the supply and demand for savings, and, therefore, on interest rates. Nor could these models assess the impact of higher consumption, which would tend to increase imports, on the current account or on the exchange rate.

A year later, and despite the publication of the DSD Expert Panel report which purports to be backed by extensive economic modelling, these criticisms remain valid. Indeed, this criticism has been affirmed by Prof. Michael Sachs, one of the authors of the DSD Expert Panel report, who, in response to sharp criticism of the DSD Expert Panel report by members of the Presidential Economic Advisory Council about the lack of credible modelling of a BIG, acknowledged that the criticism was entirely valid. He wrote:

> "The macroeconomic modelling conducted for the DSD report was not suited to the analysis of macro-fiscal dynamics, and no attempt was made to model the consequences of basic income support for debt sustainability, interest rates, or investment behaviour. The PEAC is also right to caution that the tax modelling in the DSD report is rudimentary. No behavioural responses were modelled on the tax side, and further consideration of the tax policy implications is certainly required before government acts."[12]

[12] *Sachs, M. (2022) "Basic income support is unavoidable, but making it work requires political courage" available at http://www.econ3x3.org/node/471. Sachs's view, it should be noted, is that SA's fiscal policy is in so deep a crisis that a modest BIG will not make it meaningfully worse. We are not persuaded by this (see below). Apart from anything else, if it is true that the introduction of a modest BIG does not worsen the fiscal crisis, the likelihood is that it will encourage the introduction of a more generous BIG that will affect fiscal sustainability more significantly.*

It's worth noting, in light of this "internal" critique of the DSD Expert Panel report, that its conclusions about the effect of a BIG on the macroeconomy were far from benign in relation to economic growth: in almost all of the simulations modelled, GDP was predicted to be lower after the implementation of a BIG than in its absence, with the key exception being the most implausible scenario of all – one in which a BIG is wholly funded by foreign savings.

Admittedly, many of the comments made in the 2021 Intellidex report were made in the context of a discussion of a BIG in which we assumed that at least some portion of the costs would necessitate increased borrowing. If, however, we make the very strong assumption that a BIG is *wholly* funded through new taxes, what, then, can we say about its macroeconomic effects?

Macroeconomic/general equilibrium effects of changes in tax rates

As a general proposition, raising taxes should tend to reduce economic growth. This is because it (a) reduces households' disposable income, (b) introduces or exaggerates distortions that generally result in net reductions in aggregate output (even if they do raise output in some sectors), and (c) may transfer resources from activities that have relatively high levels of productivity to activities with relatively low levels of productivity (but which attract less tax liability). It is important, however, to recognise that, while tax increases will reduce economic output, increased government spending might offset this and may stimulate economic growth. The net effect of increased taxes and increased spending, in other words, may be much less harmful to growth than might be estimated if consideration is restricted to the increase in taxes alone.

The key considerations when thinking about the net effect on the macroeconomy of increases in taxes can be summarised as a series of questions:

1. Does the increase in taxes introduce distortions that reduce overall economic activity?
2. How are the additional revenues used?
    - Is the reduction in household consumption amongst taxpayers offset by increased household consumption among the beneficiaries of additional public spending?
    - How well are the additional funds spent by government? Are they invested in growth-enhancing infrastructure projects or improving human capital? Is this use of scarce resources more efficient than the uses to which they might have been put by taxpayers had the funds not been taxed?
3. Does the increase in taxes result in lower savings, and, if so, does that lead to a reduction in investment, a rise in interest rates, and/or increase in the current account deficit?[13]

[13] *A fundamental identity in macroeconomics is that Savings = Investment + Current Account Deficit, the logic being that if investment exceeds domestic savings, it must be funded through foreign savings, and an inflow of foreign savings (a surplus on the capital account of the balance of payments) implies a deficit on the current account. Thus, if domestic savings fall, there must be either a fall in investment or an increase in the current account deficit (or reduction in a current account surplus) to restore balance to this identity.*

4. What is the current state of the economy? Is it in a boom or a recession? Is there a positive or negative output gap? Are the public finances healthy or are they on an unsustainable trajectory? In the context of a large structural deficit, are the additional revenues to be used to consolidate fiscal policy or to expand spending? How does this affect the course of fiscal consolidation?

These are all difficult questions, which is why it is difficult to model the effects of tax increases on the macroeconomy. Before looking at what the (limited) evidence suggests about how increases in taxes affect SA's economy, it is worth dwelling on the last set of questions in the list above. In the context of this report, the question might be rendered as: what does it mean to increase taxes in order to fund new spending commitments when existing fiscal policy is unsustainable and when repeated commitments have been made to engage in fiscal consolidation by reducing spending?

Our view on this question is that a large tax increase in SA's context is especially unwise because we are supposedly in the midst of a fiscal consolidation driven by reduction in public spending. The credibility of this consolidation path has always been somewhat problematic, however, because it rests almost entirely on keeping public sector wages flat while committing not to raise taxes. If the taxes are raised in order to fund new expenditure, concerns about the credibility of the path to fiscal consolidation will increase because government's commitment to avoiding tax increases will have demonstrably weakened. This is especially the case as given the large stock of politically favoured social wage expenditure items not on the agenda. Indeed, the 2022 budget had the peculiar characteristic of lowering taxes in the immediate term in order to stimulate growth while also promising to raise taxes in the future if a BIG were implemented. This, in the context in which, as reflected in a box above, Treasury already thinks that taxes are too high and is seeking to both lower rates and simplify the tax code.

If these considerations are correct, the fact that a BIG may be funded by new taxes and may, therefore, not increase the deficit, would not mean that it has no further macroeconomic effects. Firms and households whose taxes rise to fund the BIG will update their assumptions about the future course of tax policy and will assume that future fiscal consolidation will not be driven by lower spending but by higher taxes. They will make investment and spending decisions on that basis. All of which would imply that the effect of a tax-funded BIG on economic growth might be even more strongly negative than standard models would predict because these models do not include expectations about the future course of fiscal policy in their estimates of the response of firms and households to changes in tax rates. Even without adding a "psychological" factor, however, it is very clear that even a fully funded BIG would tend to lower GDP growth.

Tax multipliers are larger than spending multipliers

There is considerable debate about the size of fiscal multipliers in SA. These numbers measure the impact of changes of taxation and spending on economic growth. A **spending multiplier** of 1, for example, implies that a given increase in spending would lead to an equal increase in economic activity, while a **tax multiplier** of 1 would imply that a given increase in taxes would reduce economic activity by a similar amount. If both multipliers

were 1, therefore, a fully funded BIG would stimulate economic activity by the exact same amount as the increase in taxes reduced economic activity. The net effect would be zero.

There are some estimates of spending multipliers that put its value as greater than 1 (which, if it were true, would mean that an increase in spending would result in a larger increase in economic activity). Other analysts, including the economists at the SARB, however, have concluded that spending multipliers are close to zero. In practice, however, much depends on what additional spending is for: new spending that bails out an SOC will likely have no measurable impact on wider economic activity (though *failing* to bail out an SOC might have a measurable economic impact), while new spending on a BIG may increase consumption, and, therefore, aggregate demand. Similarly, a spending-driven stimulus during a recession would likely have different macroeconomic effects than one effected when the economy is at full capacity. It is possible, in other words, that the multiplier on a BIG is greater than zero.[14]

The key question to ask, however, is not whether the multiplier on spending on a BIG is positive or if it is larger than 1 (which is as far as most of the models used by proponents of a BIG go), but whether the multiplier in BIG spending is larger than the tax multiplier. In this regard, the most recent evidence is unequivocal and concludes that tax multipliers in SA are larger than spending multipliers, noting that "in general the estimation results show that government spending multipliers are positive, although generally smaller than one. In contrast, tax multipliers are found to be large and distortionary."[15] If this conclusion is correct, then a BIG that was fully funded through new taxes would reduce economic activity.

The principal reasons that tax increases reduce economic activity are their effect on aggregate demand (they can reduce consumption or, by reducing savings, can lead to increases in interest rates or reductions in investment) and the distortions they introduce. The precise effects depend on which taxes are raised, of course, and, as a general proposition, economic theory would predict that raising VAT rates is less distortionary than raising PIT which, in turn, is less distortionary than raising CIT. Nevertheless, they all have some negative effect on economic output. Thus, one recent review of reductions in PIT (the results of which would be the inverse of increases in PIT), concluded that "a reduction in personal income tax is expansionary" (which implies that an increase in PIT is contractionary), and that "changes in average personal income tax rates have macroeconomic effect. Tax cuts increase output [through] both the investment and consumption channels" (so tax increases would reduce output through the investment and consumption channels).[16] The

[14] *It is important to state that even if a spending multiplier is at the most optimistic end of estimates of its value, it would not pay for itself. Consider a BIG costing R200bn with an assumed multiplier of 2 (which is larger than any estimate of the multipliers in SA's economic literature). In that case, R200bn in spending would increase GDP by R400bn.. Because the tax:GDP ratio is about 25%, however, that increase in GDP would only generate R100bn in new revenues, which is R100bn less than the assumed cost of the BIG. In fact, with a tax:GDP ratio of 25%, the spending multiplier would have to be 8 for a BIG to pay for itself.*

[15] *Kemp (2020)* Essays on Fiscal Policy p118.

[16] *Loate, T. Houssa, R. and Viegi, N. "The macroeconomic effect of fiscal policy in South Africa A narrative analysis" available at https://doi.org/10.35188/UNU-WIDER/2021/096-2*

implication of this is that a tax rise would lead to a decline in economic output.

This finding was also made by the Davis Tax Committee, which sought to calculate the effect of a 4.5% increase in tax revenues in 2014 (which would have been the equivalent of about R60bn in 2019). The DTC estimated that, if implemented in 2014, that increase in revenues would have lowered GDP three years later (i.e., in 2017) by between 0.7 and 2.7 percentage points, depending on whether the R45bn was raised through VAT, PIT or CIT, respectively. In order to achieve these increases, VAT would have had to have been raised from 14% (as it was then) to 17%, the effective rate of PIT would have had to rise by 6.1 percentage points across the board, or CIT would have had to be raised by 5.2 percentage points.[17]

These estimates have recently been updated by the SARB, who sought to estimate by how much tax rates would have to rise in order to raise R100bn in additional revenue. They estimate that a R100bn increase funded through VAT would require a VAT rate of 19%, and that this would reduce GDP by about one percentage point after four years. The equivalent numbers for PIT were an 8.1 percentage point increase in the effective rate, and that this would lead to a decline in GDP of about two percentage points after four years. For CIT, the figures were 6.8 percentage points and 3.5 percentage points, respectively.[18]

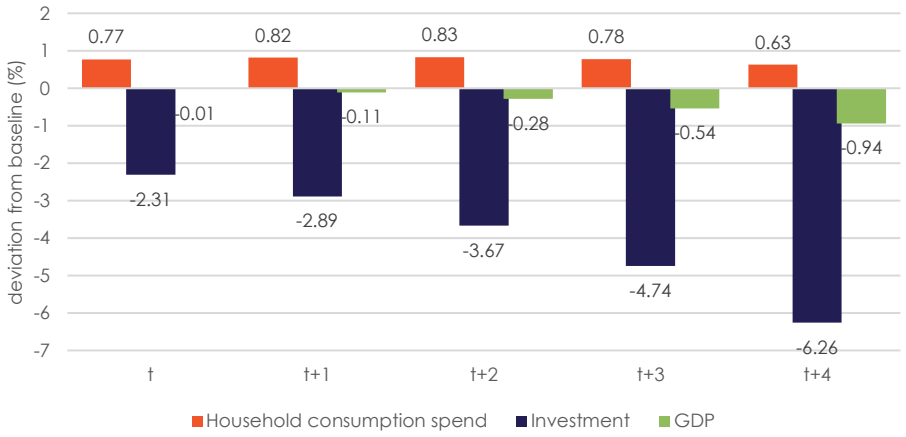
The DTC approach – updated by the SARB – looks only at the effect of the economy of raising taxes, not at what (offsetting) effects the additional spending of R100bn would generate. Thus, using a dynamic computable general equilibrium model that takes account of the increased consumption as a result of the increased spending power of recipients of a BIG, the SARB comes to less severely negative results, though they conclude the net result is still lower GDP.

In their model, higher household consumption by grant recipients is offset by (a) lower consumption by net taxpayers and (b) a large decline in investment. By year five, they calculate, GDP would be almost one percentage point lower than it would have been absent the grant while employment is two percentage points lower than it would have been.

[17] *Davis Tax Commission*

[18] *SARB 2021*

Figure 16: Impact on expenditure components (deviation from baseline)



Source: SARB (2021)

The SARB offers an important qualification to its conclusions, one that aligns with the analysis offered above: they note that their estimate may understate the contractionary effect of raising taxes on GDP because their model assumes that the effect is linear, so that increasing the VAT rate from 15% to 17% is exactly double the effect of raising it from 14% to 15%. As we have argued above, however, it is more plausible to think that the relationship is strongly non-linear - i.e., that the effect of raising tax rates depends on the initial level, so that one percentage point increase off a higher rate has more profound implications than a one percentage point increase off a lower base. This is because the effect on GDP is not driven by the percentage increase in the tax rate (which would be lower when the existing rate is high), but by the quantum of new taxes that is raised.

One of the consequences of all of this is that, if GDP slows as a result of the implementation of a fully funded BIG, the deficit will rise, not because the BIG is not funded, but because of declining non-BIG revenues. In order to avoid an increase in the deficit, in other words, the taxes raised when a BIG is implemented will actually have to exceed the cost of the BIG in order to avoid widening the deficit on non-BIG taxes and spending. Importantly, even if the deficit does not widen (because the increase in taxes pays for both the BIG and any new deficit in non-BIG spending), slowing economic growth will mean that the rate of increase in the ratio of debt to GDP will rise relative to a baseline scenario in which no BIG was implemented.

Box 5: Taxes and the "social compact"
Some proponents of a BIG – including the president – appear to see its implementation as a key element of a new social compact, and the support of organised business has been sought on the basis that the BIG would be implemented along with (in return for?) a number of growth-friendly reforms. There are clear dangers with this framing, and business needs to be careful about how it addresses it.

One such problem is that the mooted reforms have, in general, not yet been implemented, and given the slow pace and uncertain progress of these reforms, it should not be assumed that they will be. More importantly, it is far too early to say that the reforms, as implemented, will generate a meaningful growth acceleration, both because they are relatively modest and because other developments in the policy environment are much less growth-friendly. The bottom line is that it is far, far too early to "bank" a growth acceleration, so prudence demands that, unless and until more-rapid, more-sustained growth actually manifests, no further permanent additions to government's spending commitments should be contemplated. Unless and until growth actually rises, a BIG should be regarded as unaffordable.

Just as important business needs to be very cautious about the language of social compacting that is not tied to a meaningful and credible "compact" on the end-state to which the "parties" to the compact are agreeing. In

particular, business needs to recognise that a BIG is far from being the only spending pressure that government faces. Indeed, it is not even the only area of new spending that government has committed itself to. Consider, in this regard, that government also faces pressures to (or has made commitments to):

- Increase public sector wages;
- Implement the NHI;
- Expand some areas of the public service such as the police;
- Increase subsidies for free basic services;
- Subsidise and/or bail-out a range of SOCs and public entities and/or raise tariffs for their services;
- Increase funding for infrastructure;
- Increase financial support to municipalities;
- Expand public employment programmes;
- Continue to support households and businesses affected by Covid-19, the violence in KZN, and the effects of recent floods.

The key question is: If a social compact is concluded that includes only a BIG, BIG-related tax increases and the growth-friendly reforms, how will all of these other commitments be paid for? To the extent, therefore, that a BIG is part of a social compact, all of these issues should be on the table simultaneously, because if they are dealt with sequentially, they can only result in the constant ratchetting up of tax rates. In thinking about a "social compact", business should take the view that a key element of that contract would relate to the maximum value of the ratio of tax-to-GDP. It is doubtful.

Summary and concluding remarks

The analysis presented above can be summarised as follows:

1. SA has a high level of taxation in relation to GDP for a country at its level of development;
2. Overall, the system is characterised by high tax rates levied on narrow tax bases (so that nearly 60% of CIT is paid by a few hundred companies, and 60% of PIT is paid by a small fraction of taxpayers);
3. At high base rates, further increases in tax rates become increasingly inefficient, so that a given increase in a rate will generate a less-than-proportionate increase in revenues. Recent experience suggests that this is the case for SA;
4. Despite the fact that increases in tax rates can be expected to result in less-than-proportionate increases in tax revenues, we assess that it is possible to raise rates sufficiently to generate the revenues needed to pay for a BIG of R50bn or R100bn. The increases in tax rates that will be needed, however, will be substantial;
5. Even though it may be possible to raise the requisite revenues, it would not be wise to do so because of the high risk that a tax shock of this magnitude would result in significant declines in GDP growth, even if we take account of the additional consumption spending that a BIG would facilitate. By lowering the savings rate and increasing consumption, a BIG would also raise interest rates and increase imports;
6. Even if the BIG is fully funded and does not require any additional borrowing, by slowing the rate of GDP growth, a tax-funded BIG will lead to higher ratios of debt to GDP because of the decline in GDP growth;
7. Importantly, if GDP growth is negatively affected by a fully-funded BIG, the deficit will still widen because tax revenue growth will slow as economic growth declines. If that is the case, the taxes needed to fund a BIG would have to generate more revenues than the cost of the BIG itself in order to make up the gap created in non-BIG revenues as a result of slowing growth.

We conclude by offering a few summary remarks on the implications of generating additional tax revenues using existing tax instruments:

Tax type	% increase represented by R50bn	% increase represented by R100bn	Impact on economic growth	Comments
Personal income tax	9%	19%	Significant	• PIT rates are relatively high and progressive; • Tax base is very narrow; • Higher taxes will lead to behavioural responses that reduce taxable income and narrow the tax base further; • Raising PIT would reduce household savings, with macroeconomic implications.
Value-added tax	14%	29%	Modest	• The least distortionary of the major tax instruments, and, by developing country standards, levied at a relatively low rate; • Politically very difficult to raise because it is the least progressive of the major taxes; • Raising VAT would immediately translate into higher inflation, with macroeconomic implications, especially in the short-term.
Corporate income tax	24%	47%	Severe	• CIT rate is relatively high; • Tax base is very narrow, and only a minority of companies pay any tax; a few hundred by 60%; • The most distortionary tax with greatest impact on growth because of its impact on investment.
Fuel levy	62%	125%	Severe	• Fuel levies are deliberately distortionary, because they are intended (at least in part) to reduce CO_2 emissions; • Raising fuel levies to fund a BIG would be regressive, given the high proportion of household income that is spent on transport in poor households; • The effect of raising fuel levies would also be immediately inflationary, with macroeconomic implications, especially in the short-term.
Tax on international trade	89%	178%	Severe	• Very distortionary, with significant adverse effects on growth in short and long term; • Immediately inflationary, with macroeconomic consequences, especially in the short-term.
Excise duties	107%	214%	Significant	• Excise duties are highly regressive (because a larger share of household income is spent on these products in poor households); • Impact would be severely negative for affected sectors (alcohol, tobacco, retail and leisure),
Minor taxes				The tax bases of these taxes are far too small to generate the required revenue, so any increase would have to be part of a package of other increases.
Dividends tax	179%	358%	Severe	• Like CIT, dividends tax is distortionary because it reduces the return on investment, which would fall.
Taxes on use of goods	418%	837%	NA	• Taxes on the use of goods are made up by the electricity levy paid by Eskom for generating energy from non-renewable sources (70% of the total, or R8.3bn in 2019), while most of the rest is the "air departure tax" and the CO_2 emissions tax on new vehicles; • Increases in the electricity levy are passed on to consumers, while the other taxes are two small (about R1b each) to make a meaningful contribution to a BIG.
Taxes on payroll / workforce	491%	983%	NA	• Raising payroll taxes (in this case, the skills levy, would increase the cost of employment and, therefore, reduce employment growth; • In any event, these taxes are, in principle, ringfenced for skills development.
Transfer duties	702%	1 405%	NA	• Raising transfer duties makes houses less affordable; • Housing markets are too volatile to generate predictable revenues over the long-term; • Raising the duty for high-value property in 2018 raised very little new revenue.
Securities transfer tax	801%	1 603%	NA	• The securities transfer tax is too small to support the financing of a BIG; • Raising the SST would reduce liquidity of capital markets, raising the cost of capital.
Interest on overdue tax	999%	1 999%	NA	• Not a viable source of meaningful revenue.
Ad valorem excise duties	1 212%	2 425%	NA	• These are duties imposed on luxury goods imported into SACU; • Raising ad valorm duties in 2018 did not generate new revenues.

Tax type	% increase represented by R50bn	% increase represented by R100bn	Impact on economic growth	Comments
Health promotion levy	2 044%	4 088%	NA	• The HPL or "sugar tax" is too small to support a BIG, is regarded as regressive in impact, and raising it would further undermine economic activity in this sector.
Estate duty	2 442%	4 883%	NA	• Reasonably high estate duties can play a role in reducing intergenerational inequality, but high estate duties also encourage the adoption of more aggressive "estate planning" activities; • The introduction of higher estate duties for large estates in 2018 did not raise significant new revenues.
Interest with-holding tax	8 382%	16 765%	NA	• The WTI is a measure designed to ensure that foreign lenders to SA businesses pay taxes on interest paid by local borrowers and is intended to reduce transfer prising risk; • The tax is payable by the foreign taxpayer, but the collection rates are low and administratively complex
Donations tax	8 737%	17 474%	NA	• Raising the tax levied on gifts/donations between taxpayers would generate little additional revenue and would be next to impossible to enforce compliance.
Average increase for all taxes	**4%**	**7%**	**Severe**	• SA is already a high tax economy, with rates levied on the narrow base of taxpayers being very high by global standards. Raising these rates further would increase the distortionary effects of taxation, and slow economic growth meaningfully.

Source: Intellidex

Section three – Debt financing of social spending and its impact on fiscal sustainability

Fiscal sustainability can be understood across several dimensions, including social, economic, and environmental. All of these are important considerations when designing or evaluating long-term fiscal trends. Fiscal sustainability's financial dimension is however absolute and objective – if a government is unable to afford its expenditure programme, it is ultimately unsustainable, independent of its desirability or the positive benefits that it might be able to generate.

Social policies aimed at boosting household welfare (such as the BIS or NHI reforms) are unambiguously justifiable in terms of the social and economic deficits that we experience. But for policies to generate positive benefits they must not only be evaluated in terms of their effectiveness and their opportunity cost but must also be shown to be sustainable.

Policy commitments that have significant implications for government borrowing must therefore be carefully and cautiously evaluated in terms of their impact on fiscal sustainability. Short-term benefits from policies often create a bias to underestimate their long-term costs. Mistakes in this regard, however, have significant and lasting negative impacts on longer term welfare and development prospects. Both theory and historical experience show that the economic, social and political costs of attempting to maintain an unsustainable fiscal position are severe and regressive and can result in the diminution of sovereignty.

Defining fiscal sustainability and what it means

From a policy perspective, the public finances are considered sustainable if a government is credibly able to maintain its expenditure policies without defaulting on its debt (explicitly through failure to repay or through higher inflation that reduces the real value of outstanding debt). Functionally, persistently increasing debt to GDP without a credible expectation that it will stabilise or fall, can be considered an unsustainable fiscal position.

If a country is in a fiscally unsustainable situation, the social and economic programs of government are unaffordable, and the benefits of the budget enjoyed today will not all be available in the future. The cost of unsustainability is a budget adjustment to stabilise debt either by raising taxes or cutting expenditure. If left unresolved, unsustainability will inevitably be accompanied by severe economic effects that significantly reduce incomes, employment and investment, alongside rising interest rates and inflation, and a depreciating currency. Global experience shows that the cost of this adjustment falls disproportionately on the poor. Thus, a country whose debt can be repaid only if it imposes policies that are politically implausible (e.g., if a return to sustainability requires tax increases or expenditure reductions that cannot plausibly be implemented) faces an existential contradiction between its intentions and the means to sustainably deliver on those intentions. This contradiction is objective and cannot be ignored forever or wished away.

Technically, sustainability is defined by the intertemporal solvency condition – debt is sustainable if the expected present value of future primary balances covers the existing stock of debt. Mathematically, this is captured

by the often-referenced "r-g" equation. For completeness, the equation for the path of debt is presented below (1) followed by the equation for a sustainable path of debt, whereby the debt stock this year is equal to the stock of debt in the previous year (2).

$$d_t = \frac{(1+r)}{(1+g)} \cdot d_{t-1} - s \quad (1)$$

$$d_t = d_{t-1} \rightarrow s + \frac{(r-g)}{(1+g)} \cdot d \quad (2)$$

Where d and d_{t-1} are the debt to GDP ratios in the time periods now and last year respectively; r and g are the interest and growth rates; and s is the primary balance (revenue minus non-interest expenditure) as a percent of GDP.

While the mathematics of equation (1) are a little turgid, its results are powerful for analysis and policy making. What it essentially says is that the debt path is a function of the amount of outstanding debt, the interest rate that government pays on that debt (i), the size of the primary deficit/surplus (s) and rate of economic growth (g). Equation (2) basically says that if a primary deficit consistently results in increasing debt, the fiscal position is unsustainable (in other words, so long as debt is serviceable and non-increasing, it is sustainable).

Rapid economic growth is good for debt sustainability and slows the momentum of debt accumulation – it increases the tax revenue potential of the economy, and a larger economy can generally afford a larger value of debt because its repayment would absorb a smaller proportion of the national economy (i.e., its debt ratio would be lower). Countries that grow fast also tend to have lower real interest rates because they attract capital and default risk is low. This is important because, high interest rates are bad for sustainability and accelerate the accumulation of debt – they increase the cost of servicing debt, leading to higher spending and diverting resources from productive areas resulting in lower economic growth. Growth and interest rates, in other words, work in opposite directions – hence the common referencing of a country's "r-g".

When the interest rate for government debt is greater than the rate of growth (r>g or r-g>0) a country must run a primary surplus[19] to stabilise debt, with the size of that surplus determined by (a) the size of the outstanding stock of debt and (b) the size of the gap between r and g. When the interest rate government pays on its debt is less than the rate of growth (r<g or r-g<0), governments can sustainably run primary deficits (up to a point) because economic growth is eroding the debt burden faster than the deficit and interest costs are adding to it.

It's a bit like riding a bicycle: when r>g, the effect is to accelerate the accumulation of debt as a share of GDP and the rider must apply the brakes (run a primary surplus) to slow that effect and avoid continuous accumulation of debt; when g>r, the rider can push the bike harder (run a small primary deficit) without debt accumulation gathering speed. By way

[19] *The primary balance is defined as revenue minus non-interest expenditure. A primary surplus indicates some capacity to service debt. A balanced primary budget shows that government is borrowing just to pay for interest costs. A primary deficit indicates that government is borrowing to finance its debt servicing and some share of its other spending.*

of illustration, Table 7 below, sets out the debt-stabilising primary balance that is required for various combinations of interest and growth rates when the debt ratio is 75% of GDP.

As a fiscal policy tool, the "r-g" equation works in the following way. Interest rates and growth are not controlled directly by government. While they can be influenced by government, government impacts on them very indirectly and with long lead times. What government can control directly and in the short term is the size of the deficit. So, with r and g given or exogenous in the short to medium term, fiscal planners and analysts are able to calculate how any given level of the deficit will impact on the level of debt. A sustainable fiscal path is one where the planned fiscal deficit is consistent with a stable or declining debt path.

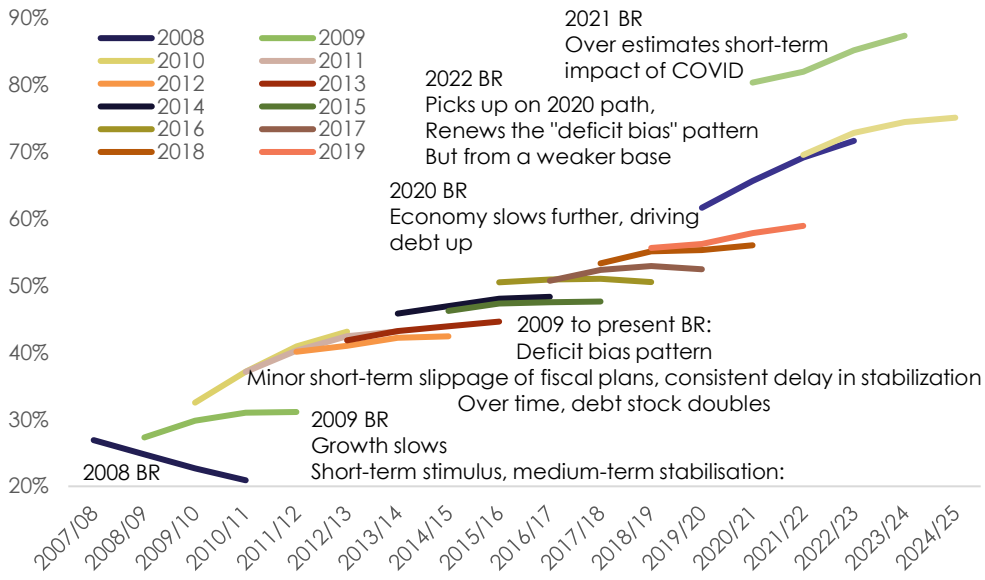
The dynamics described above are very simple, mechanical relationships. While useful, fiscal planners and economic policy makers cannot get away from the fact that the deficit, growth, interest rates and investor sentiment are highly endogenous (interconnected and dynamic, each influencing the other). One of the channels in which this plays out is investor confidence. Low confidence in fiscal sustainability will generally also reduce growth, thereby deepening the sustainability problem and further worsening sentiment. The opposite is generally true for positive investor confidence.

These are arguments that business has been increasingly making into Nedlac. The fiscal discussion amongst social partners cannot simply be dislodged from the maths.

A brief history of fiscal sustainability in South Africa

South Africa has seen its ratio of debt to GDP more than double since the onset of the financial crisis in 2008 (when it was 26% of GDP), reaching 57% of GDP by the end of 2019 (Figure 2, above) before jumping to 71% during 2020's Covid-induced recession. The growth in non-interest expenditure since 2009 has far outpaced revenue – largely due to economic forecasts that have failed to materialise, but also due to above inflation wage increases and deteriorating SOE balance sheets (Figure 3, above). As a result, a deep, structural deficit has emerged as a characteristic of fiscal policy. At around 70% of GDP, outstanding debt combined with high interest rates, means that debt service costs have increased significantly (claiming 19% of budget revenue this year, compared with 9% in 2008/09) and will continue to increase even if government follows the fiscal consolidation that Treasury has outlined. If we accept that a fiscal position cannot be sustained if it generates a continuous increase in debt to GDP, this is a clearly unsustainable fiscal stance.

Figure 17: Official debt forecasts by Budget Review vintage[20]



Source: National Treasury, budget documentation

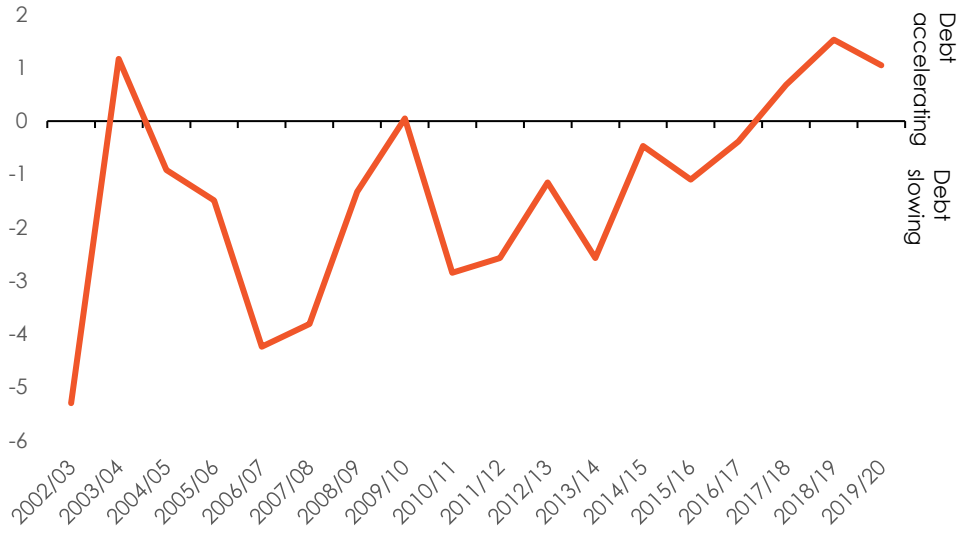
All of this has been taking place in the context of a secular decline in growth (and, potential growth), largely as a result of poor governance of the economy and the public finances. Regulated prices raise the costs of living and doing business, while many economic policies remain inefficient (and, sometimes, perverse). Critically, the balance sheets of state-owned enterprises have deteriorated sharply, and many are increasingly unable to adequately deliver the services that are their *raison d'être* (the generation of electricity, the provision of port services, transport of goods and people, etc.), making faster economic growth impossible to attain. The capacity of the state to implement large, complex and catalytic infrastructure or development orientated programmes appears to be continuing to decline, and too often the programmes that are implemented appear beset by corruption and maladministration. Structural reforms to enable private sector investment and growth remain absent, while government has struggled to keep a lid on wage bill growth. None of these challenges are easily resolved, and all exert upward pressure on spending.

Interest rates and growth

Figure 18 provides a basic picture of the gap between interest rates and economic growth over the past two decades. It uses the nominal effective interest rate on government debt and nominal GDP to give some insight into the underlying debt dynamics.

[20] *Note that the figures from the 2022 Budget Review are not entirely comparable with the others because they were published after StatsSA released its new (higher) estimates of GDP. For full comparability, they would run along a line that is about 7 percentage points higher than reflected in* ***Figure 17****, which would be slightly lower than the BR2021 figures (which were themselves prepared before the commodity boom lifted tax revenues).*

Figure 18: Interest rates minus growth rates (r-g): 2002 to 2019

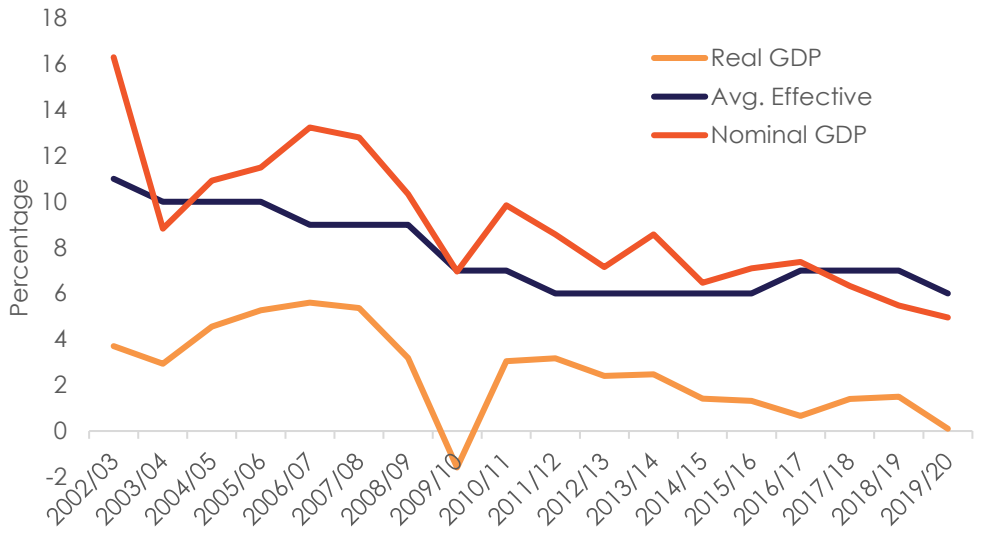


Source: Intellidex using budget documentation

It is noteworthy that it is only since 2017/18 that interest rates have exceeded growth rates, a situation that worsens debt dynamics and requires primary surpluses to stabilise or reduce the debt ratio. Before that, growth tended to exceed interest rates, which while good for stable debt dynamics has been generally outweighed by large primary deficits since 2008/07.

Figure 19 disaggregates trends in real and nominal GDP and interest rates. It shows that the effective interest rate on government debt fell between 2002 and 2012, a dynamic that largely reflects declining inflation expectations and, more importantly, global interest rate dynamics. The decline ends in 2011/12, however, when growth was slowing, the challenges of fiscal consolidation were becoming more evident, and sovereign risk was rising. A second obvious feature is the secular and persistent decline in nominal GDP. This decline is broadly replicated in real GDP, indicating that the decline in nominal GDP was not generally related to falling inflation, but rather a slowing in real income growth over the period. We should note that we now have a very different global monetary policy backdrop emerging.

Figure 19: Real GDP, Nominal GDP and interest rates



Source: Intellidex using budget documentation

The future of fiscal sustainability in South Africa

The dynamics described above are established, long-term features of the South African economy. They can be considered structural in nature – an outcome of features of the socio-economic environment that are not easy to change.

In 2019, on top of these trends, the economy experienced a significant shock in the Covid epidemic. The effect of this was a worsening in the levels of debt and GDP. As the effects of the Covid epidemic begin to pass, the level of debt is higher, and the level of national income is lower than we would otherwise have experienced. From this new, weaker baseline, the economy returns to its same structural dynamics – slow growth, increased pressure on any commitment to fiscal stability, creeping debt accumulation.

In response to the rising debt path, the government has put forward a plan to stabilise debt at around 78% of GDP in 2026/27. The consolidation is to be achieved mainly through expenditure restraint, primarily, by ensuring that public sector wage growth is essentially flat, and that other spending is contained. As the Treasury itself acknowledges, a number of significant risks exist to the fiscal strategy, including faster-than-planned growth in the wage bill, slower-than-expected economic growth, the possibility of rising global interest rates, the financial positions of large SOCs, and a variety of other risks (which, when the budget was drafted, did not include a major war in Europe or floods in KZN). Because the fiscal strategy appears to be premised on none of these significant risks materialising and does not provision for their eventuality, its credibility is strained - a fact that has been temporarily obscured by the unexpected rise in commodity prices in 2021. Further, deteriorating quality in public services highlights the extent to which important existing spending commitments are insufficiently resourced.

All of this means that apart from episodes of temporary over-performance in tax revenues, the budget will most likely follow the historical pattern of structural deficit and occasional shocks to the level of debt in response to political pressure or unanticipated crisis. This is consistent with the strong and structural deficit bias established between 2008 and 2019. Under this

pattern, short-term slippage in expenditure restraint was balanced out by medium-term commitments to debt stabilisation that, in practice, have been serially postponed.

Interest rates and growth

Following a small increase in effective interest rates, in 2016/17 (6.5%) , government expects them to revert to around 6% going forward. This assumes a very benign domestic and international financing environment.

Having been significantly shocked by the effects of the Covid epidemic and government regulations, nominal GDP growth is forecast to return to around 6% a year. With relatively low forecast inflation, this equates to real GDP growth of between 1.5 and 2% a year – a level consistent with the past decade and the deficit bias that the budget has exhibited for over ten years now.

In terms of the underlying r-g debt dynamics, these forecasts imply that the interest rate will exceed the growth rate for most of the foreseeable future, a situation where the underlying debt dynamics accelerate the rise in the ratio of debt to GDP, necessitating a primary surplus if debt levels are to stabilise. Precisely how large the primary surplus has to be depends on both the stock of debt (about 75% of GDP) and the size of the gap between interest rates and growth, as reflected in Table 7. As is evident, the faster the growth rate, and the lower the interest rate, the smaller the primary surplus needed to stabilise debt. Indeed, if growth were high enough and interest rates low enough, a small primary deficit would be consistent with debt stabilisation. Conversely, the higher interest rates and the lower growth rates, the larger the primary surplus must be to stabilise debt.

Table 7: Size of a primary surplus needed under different combinations of real growth and real interest rates when debt:GDP is 75% (highlighted area is zone of highest probability)

Real growth rate	Real interest rate								
	0%	0,50%	1,00%	1,50%	2,00%	2,50%	3,00%	3,50%	4,00%
-0,75%	0,8%	1,3%	1,8%	2,3%	2,8%	3,3%	3,8%	4,3%	4,8%
-0,50%	0,5%	1,0%	1,5%	2,0%	2,5%	3,0%	3,5%	4,0%	4,5%
-0,25%	0,3%	0,8%	1,3%	1,8%	2,3%	2,8%	3,3%	3,8%	4,3%
0,00%	0,0%	0,5%	1,0%	1,5%	2,0%	2,5%	3,0%	3,5%	4,0%
0,25%	-0,2%	0,2%	0,7%	1,2%	1,7%	2,2%	2,7%	3,2%	3,7%
0,50%	-0,5%	0,0%	0,5%	1,0%	1,5%	2,0%	2,5%	3,0%	3,5%
0,75%	-0,7%	-0,2%	0,2%	0,7%	1,2%	1,7%	2,2%	2,7%	3,2%
1,00%	-1,0%	-0,5%	0,0%	0,5%	1,0%	1,5%	2,0%	2,5%	3,0%
1,25%	-1,2%	-0,7%	-0,2%	0,2%	0,7%	1,2%	1,7%	2,2%	2,7%
1,50%	-1,5%	-1,0%	-0,5%	0,0%	0,5%	1,0%	1,5%	2,0%	2,5%
1,75%	-1,7%	-1,2%	-0,7%	-0,2%	0,2%	0,7%	1,2%	1,7%	2,2%
2,00%	-2,0%	-1,5%	-1,0%	-0,5%	0,0%	0,5%	1,0%	1,5%	2,0%
2,25%	-2,2%	-1,7%	-1,2%	-0,7%	-0,2%	0,2%	0,7%	1,2%	1,7%
2,50%	-2,4%	-2,0%	-1,5%	-1,0%	-0,5%	0,0%	0,5%	1,0%	1,5%
2,75%	-2,7%	-2,2%	-1,7%	-1,2%	-0,7%	-0,2%	0,2%	0,7%	1,2%
3,00%	-2,9%	-2,4%	-1,9%	-1,5%	-1,0%	-0,5%	0,0%	0,5%	1,0%

Source: Intellidex after SARB

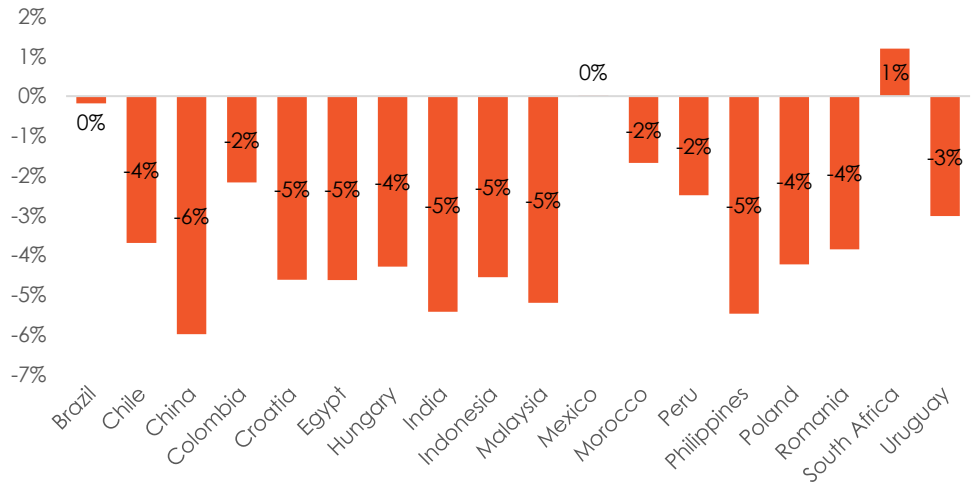
South Africa's debt dynamics in a global context

It is important to note that SA's challenges differ from those of other developing countries, where growth rates are generally higher and, critically, where their level exceeds the interest rate.

The publication of the IMF's Fiscal Monitor database provides a useful cross-country resource. While not the same as the official forecasts, the IMF forecasts are made after extensive engagement with countries and with their consent. They represent, therefore, a reasonable and robust "learning house" of global dynamics and trends. For South Africa, the key difference between the official and Fiscal Monitor forecasts is that the IMF's average effective interest rate increases over the medium-term horizon, while the official forecast is stable.

Based on the October 2021 fiscal monitor data, South Africa's public finances are a global outlier. As Figure 20 shows, between 2021 to 2026 and across a range of countries, SA is alone in having its forecast growth rate lower than its forecast interest rate. Indeed, on average, developing countries are expected to have a growth rate that exceeds the interest rate by over three percentage points. In SA, the growth rate is expected to be one percentage point *lower* than the interest rate. This indicates significantly more positive underlying debt dynamics for these other countries and reinforces the need for SA to run a primary surplus of significance for an extended period – a politically challenging undertaking given South Africa's social challenges.

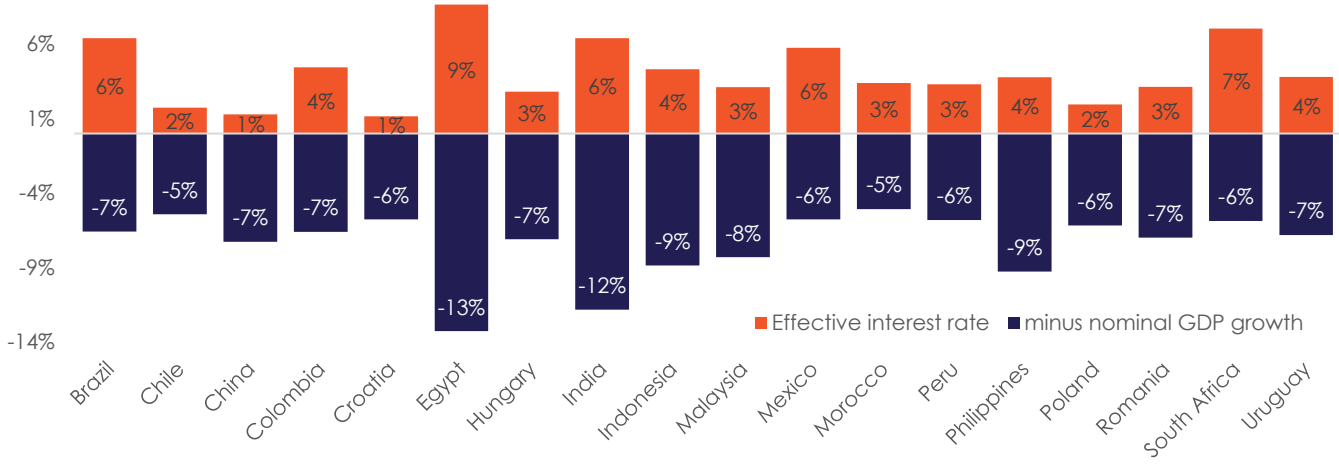
Figure 20: Average effective interest rate minus growth – the "r-g" (nominal, average 2022-26)



Source: IMF Fiscal Monitor

Figure 21 shows that compared to peer countries, SA's debt dynamics are a result of a "worst of both worlds" situation – a high interest rate on government debt and low growth in nominal GDP.

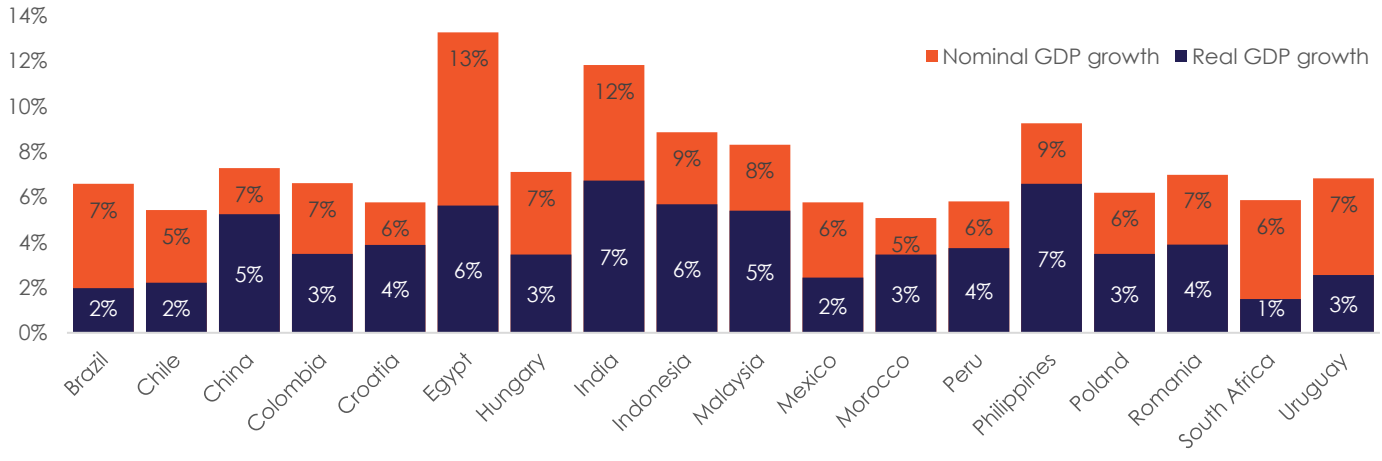
Figure 21: Average effective interest rate vs growth (nominal, average 2022-26)



Source: IMF Fiscal Monitor

Where South Africa is performing particularly poorly is on growth. According to the IMF forecasts, South Africa's average real growth in GDP is the slowest in the group (Figure 22), while the GDP deflator (inflation) is relatively high (indicated by the difference between real and nominal growth).

Figure 22: Nominal and real economic growth (average, 2022-26)



Source: IMF Fiscal Monitor

The urgency of SA's need for growth extends beyond its impact on debt dynamics (important as this is), and a great deal of energy has been expended trying to understand the reasons for the dramatic and very damaging collapse in growth after 2008. Less attention has been paid to trying to explain why interest rates are so high in SA.

South Africa has a sophisticated, mature approach to monetary policy, and very deep, very liquid capital markets that have attracted significant foreign capital inflows over the years. In this context, high interest rates are under-analysed, though there may be some technical reasons that help explain it. One example of this is that the term structure of South African debt is the second longest in the world (after the UK). The predictability and protection from "roll-over" risk that this provides is valuable, but the nature of the yield curve means that a significant premium has to be paid for this.

In a developing world context, and one in which capital flows are somewhat volatile, the premium paid on long-dated debt is driving up average interest rates.

Also, unlike many comparator countries, almost all our borrowing is in domestic currency. Foreign borrowing usually happens at an interest rate closer to that of the lender, often a developed country with low inflation and risk. In practice, this apparent discount is compensated for by exchange rate risk which is not captured in the effective interest rate. As a result, it may be the case that the true cost of borrowing for many in the comparator list is higher than the estimates provided show.

Ultimately though, in an open economy such as South Africa, the interest rate works as an effective measure of perceived risk, and we would do well to seriously engage with why risk perceptions are high. High interest rates imply that risk associated with our borrowing is higher than those countries. Essentially, lenders are saying that to invest in a country with rising debt stock, slow growth and pressing social challenges, they need to be paid a high return to compensate for the probability that they will not be fully repaid. We can debate "how much higher is fair?", but more usefully we should address why risk is higher.

This debate can take place across a number of dimensions and perspectives. What is unambiguous though is that high and rising debt stock, accompanied by low growth increases the probability of default. If we were to add in declining fiscal policy credibility (something that is not the case right now but could be if unaffordable policies start ratcheting in), policy uncertainty on monetary policy (could the SARB end up targeting 6% inflation?)[21], and government policy failure in the regulation of the economy and provision of public services, and it is clear that macroeconomic dynamics are a definitive contribution to the high cost of capital in South Africa.

Risk is a self-reinforcing outcome of poor policy and economic management. As risk perceptions increase, they raise interest rates and lower growth, leading to escalating risk further. At the same time, declining income growth and rising unemployment increase the demand for short-term stimulus that do little to improve potential growth and therefore also add to perceived risk. Ultimately though, the solution to a high cost of capital also rests on achieving higher rates of growth. Most importantly, microeconomic policies that enable sustainable growth and improved living standards, accompanied by conservative and credible fiscal and monetary policy will go a long way toward de-risking the South African economy and thereby lowering the interest rate.

The inevitable significant tightening of monetary conditions in the USA and Europe will sharpen this challenge for all developing countries, especially those like South Africa that rely on large foreign capital inflows. As global interest rates in developed countries increase, the relative attractiveness of

[21] *The SARB currently targets the midpoint of a range between 3 and 6% inflation. While 4.5% is, therefore, the official target, persistently overshooting that up to 6% is still consistent with the official mandate. This is a meaningful difference for investors. If investors invest based on expected inflation of 4.5%, and it turns out that inflation is persistently closer to 6%, it significantly affects the real return on that investment. This is partly why the SARB is now trying to stimulate a debate on tightening the inflation target range to possibly a lower point target.*

investing in South African bonds will fall. To keep foreign capital coming into the country, the return that financing receives will have to improve. This can be achieved by paying higher interest on bonds or returns on equity improving because of accelerated economic growth. With growth prospects remaining severely muted as a result of supply side constraints, the prospect of higher global interest rates leading to a higher cost of borrowing is a daunting and troubling prospect for South Africa's growth prospects and fiscal sustainability – and a scenario of high likelihood if not addressed soon.

The effects of unsustainable fiscal policy

An unsustainable level of spending generates a financing requirement that must be met by ever increasing levels of debt, and with it, rising interest costs. This impacts both the public finances and the macro economy.

A fiscal policy that is an excessive burden on the economy suffocates economic activity – principally through the private investment channels – leading to slow income and employment growth, high inflation and a high cost of capital. If left unresolved, a debt spiral develops, which is eventually resolved through an economic crisis – generally characterised by some combination of a balance of payments collapse, significant exchange rate depreciation, surging inflation, and escalating interest costs. The effect of the crisis is to significantly reduce the real value of national wealth and incomes, thereby imposing a more affordable balance between revenue and expenditure on all actors in the economy, including government. Across the various established theories of macroeconomics, this is not controversial.

Without addressing the underlying dynamics of fiscal sustainability, our large domestic capital markets and access to global liquidity likely combine with deficit bias and probable upward creep in debt stock to generate a prolonged period of economic suffocation, along with steadily growing debt stock and interest expenditure. The high financing requirement (deficit) will draw savings away from private sector investment and generate upward pressure on the interest rate as government needs to pay a higher premium on debt and attract additional foreign savings. This will further reduce investment in economic activity, retarding economic and employment growth, especially in the formal sector where the best opportunity for creating sustainable, decent work lies.

There will be broader economic effects that will further weaken the economic performance. For example, increased reliance on foreign funds to finance the deficit and debt redemptions will result in a stronger than otherwise exchange rate, which alongside additional consumption expenditure, will strengthen the economy's momentum towards imports. In essence the unsustainable economic model and resulting social arrangements that we have struggled to transform for the past twenty years will become deeper entrenched and associated perversities more prevalent.

At the same time, this period of "economic suffocation" will be accompanied by efforts to sustain the status quo through expenditure cuts and a generally increasing tax burden. Like what we have seen in the last ten years, budget cuts to finance new spending will generally undermine other areas of service delivery. Some of the time, budget cuts will be

efficiency enhancing, but often and increasingly, they will leave important areas of service delivery under-resourced and failing. Ultimately, fiscal austerity will be forced on the budget – either by the government as expenditure cuts and/or tax increases, or by the economy as inflation. The effect of this austerity will be to rebalance the macroeconomy by reducing the real value of government spending with predictably damaging impacts on service delivery and the social wage. In the case of higher inflation, the costs of this adjustment will not just be borne by the government budget, but will be shared across all economic actors, including poorer households.

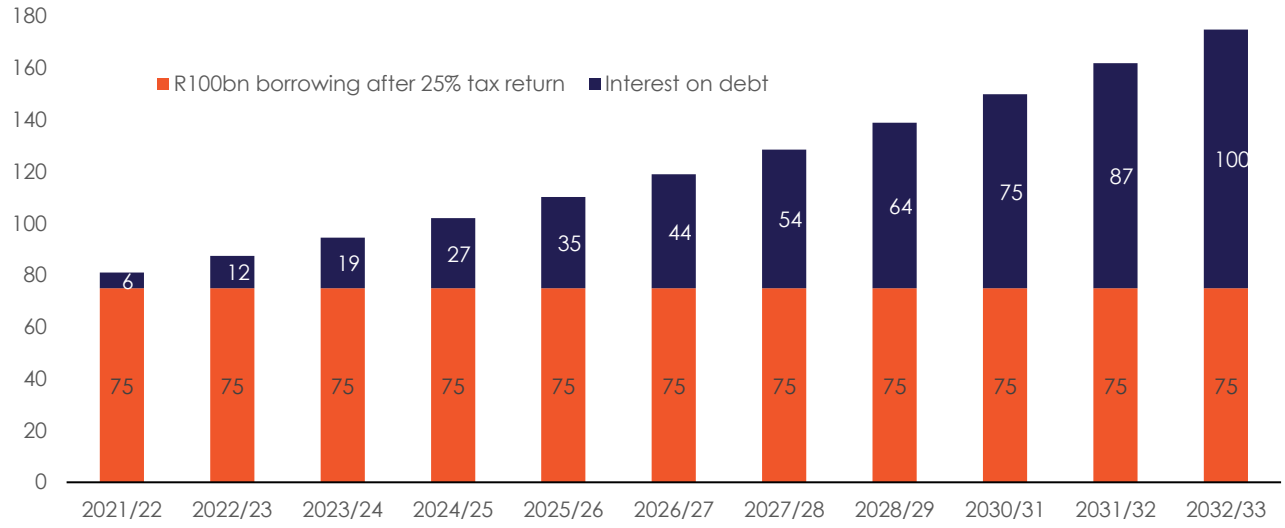
Effects of a widening deficit from increased social spending

A decision to introduce recurrent expenditure that is debt financed often seems to have limited or manageable effects in the short term. The problem though is that it must be financed not just in the short term, but in perpetuity. Introducing a BIG that is debt financed by R100bn would only increase the debt stock by around 1.3% of GDP. This may seem affordable relative to the positive impact it can have on households. The problem is, you have to keep borrowing 1.3% of GDP each year in perpetuity as well as the interest that is associated with that increasing stock of debt. At the same time, while you are continuously adding to debt and interest costs, household welfare remains unchanged from the first year that you introduced the transfer.

Figure 23 below shows a simple illustration of how the effects of debt financing appear manageable in the short term but commit one to an unsustainable path. We start by assuming debt financing of a transfer to households of R100bn into a baseline economy, growing at 6% in nominal terms. We assume that all of this is spent, and nothing is lost through imports, higher inflation, or higher interest rates (an unrealistic simplification). The R100bn increase in consumer spending results in a R100bn increase in GDP. Some of that comes back to the government as higher taxes. We need to pay interest on that debt – at 8%, that's around R6bn. With a tax to GDP ratio of 25%, we assume that revenues go up by R25bn. Net borrowing would therefore be R75bn. All of these are very optimistic assumptions.

The problem starts the following year. To keep household incomes and GDP at last year's level, we need to borrow another R75bn (R100bn to be spent, net R25bn in tax). But we would also need to borrow the interest from our new debt. We also still have the debt from last year, so total spending on interest is now R12bn. This repeats every year. The size of the grant spending relative to the interest we pay on it falls every year. By 2032 we are paying the same on interest as we are on the grant and debt to GDP would be over 22% higher, while household welfare remains unchanged from the first year. With each passing year, these effects will continue to compound and there is no end to this exponential algebra until the gap is sustainably financed or real spending is cut through austerity or inflation.

Figure 23: Impact of borrowing R100bn, illustrative example



Source: Intellidex

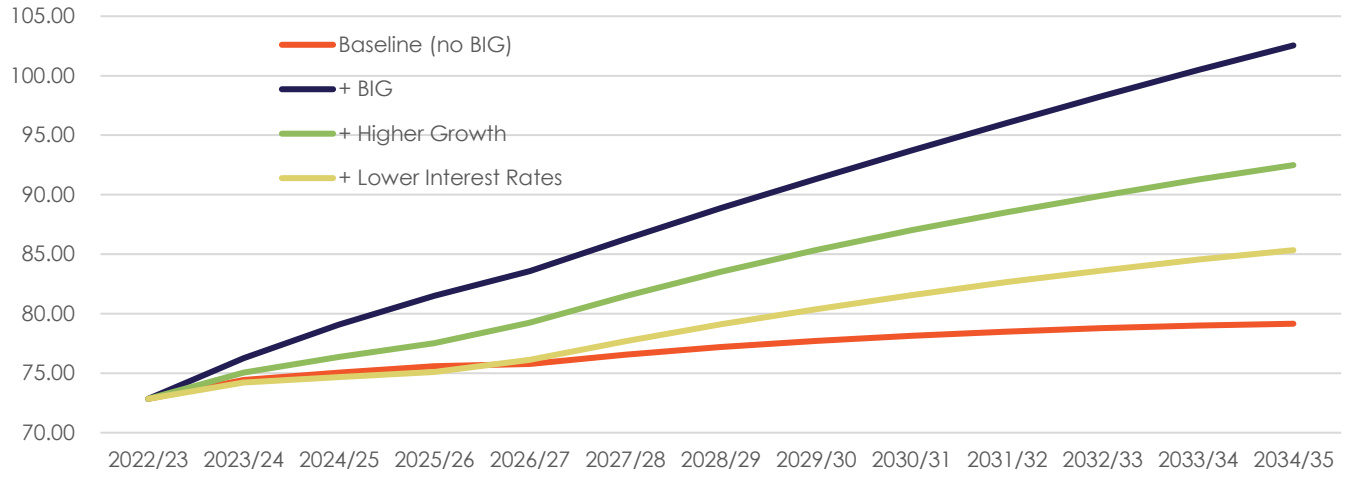
This is of course an extreme simplification for illustrative purposes. Growth could be higher or lower, as could inflation. Multipliers could be different from what we have assumed. And there is a myriad of economic effects that need to be included. Some of these could reduce these effects, however many of them might make things worse. However, what this example shows is that for debt financing of this nature to be sustainable, it would rely on an extremely strong growth performance. Any policy based on such a growth performance needs to be treated very cautiously and interrogated closely for realism.

Debt modelling scenarios

To more accurately illustrate the impact of borrowing for this purpose, two scenarios are presented below. In both scenarios, budget forecasts are used as the starting point. Beyond the budget forecast period (2024/25), real growth is assumed to be around 3% (optimistic compared to historical performance and estimates of potential GDP) and inflation is in line with the SARB mandated target. This baseline exhibits a very gradual increase in debt to GDP. The scenarios estimate the impact of increased deficit financing of R50bn in 2023/24, rising to R100bn by 2025/26. Thereafter, the additional deficit financing increases in line with a conservative inflation estimate.

Figure 24 below shows the first scenario. This is a positive or optimistic assessment of borrowing for recurrent spending. Adding the debt financing yields a sharp increase in debt from 73% of GDP this year, to 103% by 2034/35. The scenario increases the growth forecast (higher demand boosting investment and production) and lower interest rates (lower political risk reducing the risk premia and improved growth sentiment). Adding in a positive growth boost flattens the curve, as does adding lower interest rates to the higher growth. However, even with the accumulation of these optimistic assumptions, the shape of the curve is still unambiguously and persistently upwards, indicating a structurally unsustainable position.

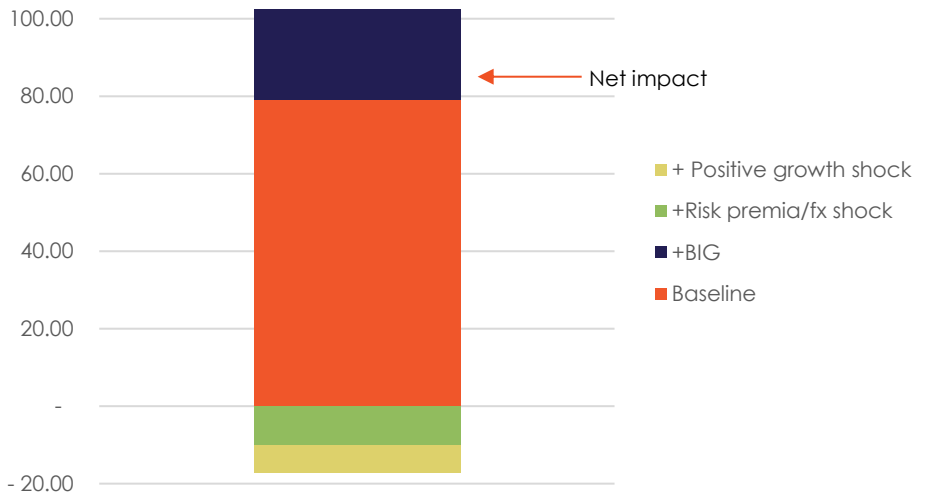
Figure 24: Optimistic debt forecast – accumulated BIG+higher growth+lower interest rates (% GDP)



Source: Intellidex

Figure 25 shows the contribution of these different forces to overall debt by 2034/35. It shows that while the baseline forecast accounts for most of the debt, the increase due to the BIG is significant at around 23% of GDP. This is partially offset by higher growth and lower interest rate assumptions (17.5%). This illustrates the difficulty and degree of optimism in trying to argue that a BIG will improve fiscal sustainability.

Figure 25: Composition of optimistic scenario debt in 2034/35 (% GDP)

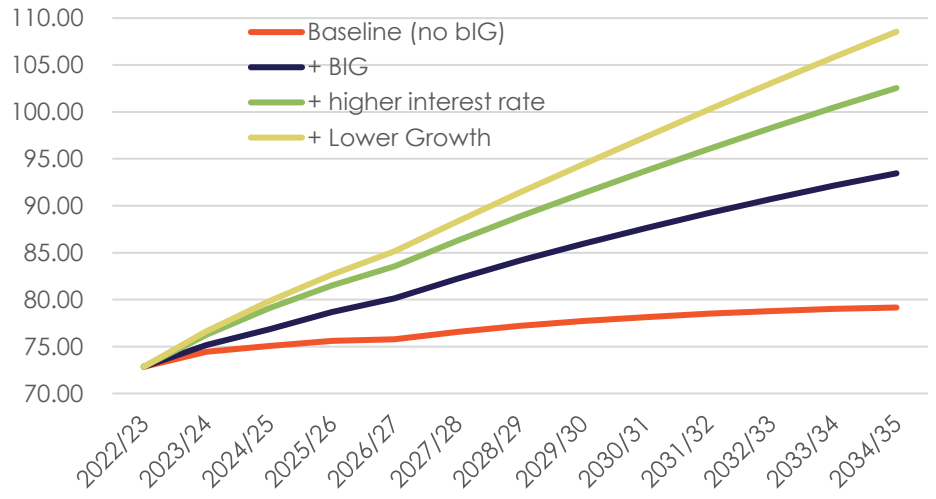


Source: Intellidex

The negative scenario in figure 24 below illustrates the impact of lower growth and higher interest rates resulting from the introduction of the BIG. For this scenario, the impact of introducing a BIG, with no other effects increases debt to GDP to 94% in 2034/35. Higher interest rates (increase in risk premium due to sustainability concerns and higher rates to attract finance into the bond market) increase debt to GDP to over 100%. Lower growth (lower investment due to financing constraints) pushes debt up further to nearly 110%. The steepness of this curve represents a severe failure

of sustainability that will result in significant pressure on the public finances and economy, and if left unresolved, the sustainability of the state.

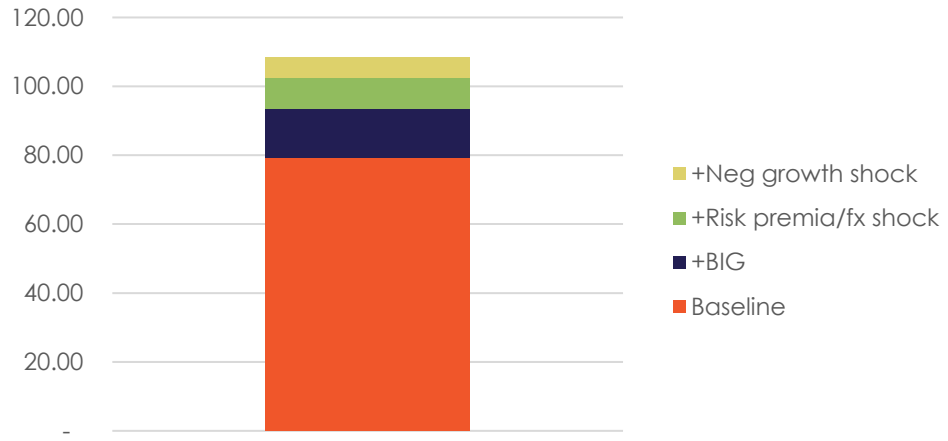
Figure 26: Pessimistic debt forecast – accumulated BIG+lower growth+higher interest rates (% GDP)



Source: Intellidex

Figure 25 shows how these negative assumptions contribute to higher debt to GDP by 2034/35.

Figure 27: Composition of pessimistic scenario debt in 2034/35 (% GDP)



Source: Intellidex

Conclusion

In its essence, this is a debate about whether it's best to jump out of a burning building from the 10th or the 20th floor. While you might make a bit less mess from the 10th floor, the outcome is materially the same. Another approach is required.

Nobody should try to argue away from the fact that South Africa is an extremely unequal society, and that this inequality undermines our development and results in enormous hardship. At the same time, we already have an excellent basis of credible monetary and fiscal policy (although the credibility of fiscal policy is arguably eroding with each budget). The budget itself is structured in an extremely progressive way, with an extensive social wage and income transfer programmes.

Any attempts to expand the budget within the status quo environment will damage the debt dynamics further – increasing the unsustainability of the budget and shortening the runway to fiscal or economic crisis. There is no way around this.

The reason for this is that the problems the South African economy faces are not due to a short-fall in demand; they are a result of increasingly urgent supply side failures – the structural factors and policy failures that are by now well documented and comprehensively diagnosed and result in the absence of jobs which is key to households sustainably escaping poverty. There are many ways in which the state can invest in its people and the economy to provide short-term upliftment while also contributing to greater growth potential and addressing the debt dynamics of the government. These supply side measures will have their own demand effects, which can be complemented further with measured stimulus. This should be the focus of discussions and the measure against which we hold the government accountable. The period from 2003 to 2009 was associated with higher economic growth, meaningful job creation, and a meaningful expansion in the social wage. This shows that if there is success in this regard, the opportunity to expand demand side and important welfare interventions without putting the future of the country at risk will once again open up.