6 September 2023

NHI Funding — Macro-Economic Implications



1 Introduction and key numbers

- This note provides an overview of the economic context in which National Health Insurance ("NHI") is contemplated in South Africa. We consider the difficult economic circumstances prevalent in South Africa and calculate what the funding requirements put forward by the Department of Health ("DoH") mean in terms of additional tax revenue requirements. We present estimates what size of tax increases would be required to raise such additional funding.
- 2. Firstly, we emphasise that the additional tax amount indicated by government is not the total cost of the NHI: this amount originates from a presentation by the Department of Health¹, which indicates that in addition to public funds that can be allocated to an NHI Fund, an additional R 200 billion will be raised. For context, R200 billion is equal to 12.8% of South Africa's current gross tax revenue; or 36.1% of personal income tax; or 62.4% of corporate income tax; or 51.2% of VAT.

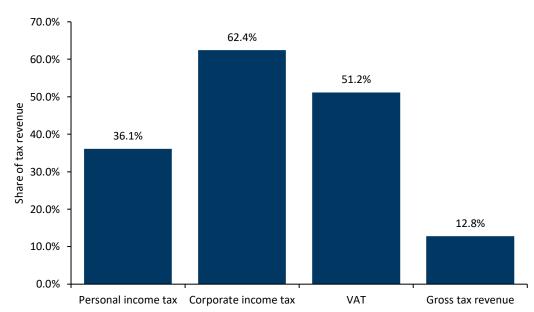


Figure 1: R200 billion as a share of current tax revenue

Source: FTI calculations using SARS data

3. Since there are no details available about the NHI benefit package, the cost of the NHI, or how these funds will be raised, we focus in this note on the R200 billion only as an illustrative value. Nevertheless, we show that to raise R200 billion in the current fiscally constrained environment and assuming that the number of taxpayers, their spending, etc. remains constant, will require that:

¹ Department of Health (12 December 2022). "National Health Insurance (NHI): Key updates." (p. 13)

- VAT increase from 15% to 21.5%;
- OR personal income tax rates increase by 31% across the board;
- OR a payroll tax on those employed in the formal, non-agricultural sector of an estimated R1,565 p/m.
- 4. These substantial tax increases will need to be implemented in an already tough economic environment: the next section provides an overview of South Africa's macroeconomic reality, highlighting slow economic growth, stubbornly high unemployment levels and diminishing take-home pay, low levels of business and consumer confidence and a declining tax base, all of which constrains the ability to raise funds via taxation.

2 South Africa's macroeconomic reality in 2023

- 5. Looking at various metrics for the South African economy's performance, two themes emerge:
 - The South African economy suffered a significant blow from the Covid-19 pandemic, eclipsing the previous all-time low observed during the 2007 to 2009 global financial crisis.
 - ii. Despite a rebound following the pandemic, relief was short-lived. Growth slowed down in 2022 relative to 2021, which means that growth of 2021 was a rebound from a catastrophically low base, rather than prolonged recovery.

2.1 GDP growth and disposable income

6. In the decade preceding the Covid-19 pandemic, South Africa's real GDP grew at an average rate of 1.75% per annum. Despite increases in real GDP, growth rate was on a downward trajectory since 2011. Covid-19 had a devastating impact on GDP growth in South Africa. In 2020, economic activity in South Africa contracted by 6.34% - a downturn of magnitude not even observed during the recession of 2007 to 2009 during the global financial crisis. While real GDP growth recovered to 4.91% in 2021, this increase is ascribed to base effects off the back of the sharp contraction in the previous period. Prospects of prolonged recovery has been slow with the South African economy only recovering to the pre-pandemic levels in 2022.

-4%

R5,000 8% Constant 2015 prices (R billion) R4,500 6% R4,000 4% R3,500 2% R3,000 R2,500 0% R2,000 -2% R1,500

Figure 2: Real GDP level and growth (2023 figures forecasted)

2010

2011 2012

Source: StatsSA and SARB

R1,000 R500 R0

The Leading Business Cycle Indicator shows that economic prospects in South Africa have remained challenging. The figure below shows that the indicator has declined since January 2022, which indicates that economic conditions have continued to deteriorate with further declines in real economic activity seeming imminent.

2014

2013

2015

% Change

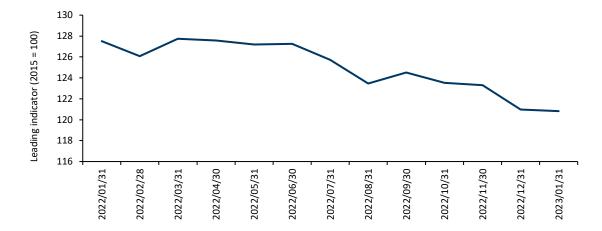
2016

2017

2018

Figure 3: Leading Business Cycle Indicator

2007



Source: Figures compiled using data sourced from StatsSA and SARB

In April 2023, the International Monetary Fund ("IMF") revised its growth projection for South Africa downwards. It is projected that real GDP growth will slow to 0.1% in 2023 and 1.8% in 2024. The growth slow-down is largely attributed to the substantial increase in the frequency of electricity outages. Weaker commodity prices coupled with spillages from the external environment (such as the effects of the Russia and Ukraine conflict) are further contributing factors.

- 9. The short to medium term growth outlook is also fraught with downside risk and uncertainty that continues to weigh on the private sector and broader economy. This is exacerbated by the lacklustre economic growth since March 2020, with the Covid-19 pandemic exposing and intensifying structural vulnerabilities in the economy.
- 10. Disposable income tracks GDP, and closely followed the decline in GDP in 2020. In line with observations for GDP, the decline in disposable income during 2020 is greater than during the 2007 to 2009 global financial crisis. Despite a rebound from the low base in 2021, disposable income growth again decelerated in 2022.

10.0% 8.0% 6.0% 4.0% 2.0% 2.0% 1.8% 0.0% -1.5% -2.0% -4.0% -2.1% -6.0% -6.3% -8.0% 2019 2018 2006

Disposable income

GDP

Figure 4: Disposable income and GDP

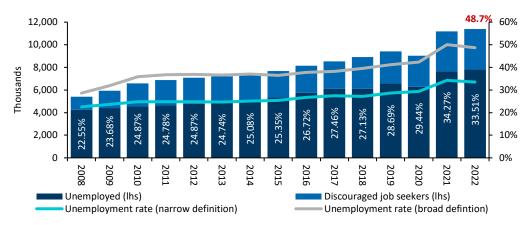
Source: StatsSA and SARB

2.2 Unemployment remains above pre-pandemic levels

11. Unemployment in South Africa increased significantly because of the Covid-19 pandemic². Despite some improvement in the unemployment rate in 2022, it has not returned to the pre-pandemic level. This improvement may also be ascribed to the fact that unemployment was at an all-time high in 2021. However, unemployment remains high at 33.5% in terms of the narrow definition and 48.7% in terms of the broad definition in 2022.

² Unemployment during 2020 is artificially low because job seeking activity and labour force participations was substantially lower during the pandemic as a result of lockdown requirements. This means that the number of people classified as unemployed (i.e. seeking a job but not working) was artificially low.

Figure 5: Unemployment in South Africa

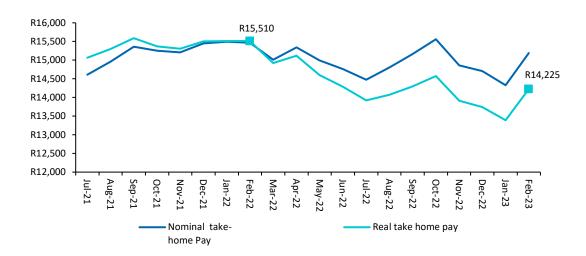


Source: StatsSA Quarterly Employment Statistics (QES) and Quarterly Labour Force Survey (QLFS)

- 12. Persistently high levels of unemployment that prevail over a long-term horizon are evidence of structural weakness in the economy. Slow economic growth also constrains improving labour market prospects. Ultimately, high and increasing unemployment results in reduced earnings and many South Africans struggle to generate sufficient income to meet their own and their dependents' basic needs. The decline in purchasing power fuels further economic challenges, as businesses face decreased demand, leading to potential closures and additional job losses.
- 13. Bank Serve Africa's³ tracking of average take-home pay in South Africa shows that in addition to reduced earnings and wages, households' purchasing power has been eroded over the last 12 months by high consumer inflation. The disparity between average nominal and real take-home pay has widened over this period: average real take-home pay was 8.3% lower in February 2023 at R14,225 compared to a year earlier (R15,510 in February 2022).

³ Bank Serve Africa Take Home Pay Index. Available online: https://www.bankservafrica.com/website/data-insights/indices/btpi

Figure 6: Average real and nominal take-home pay



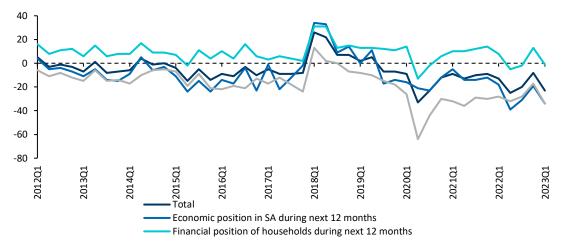
Source: Bank Serve Africa's Take-Home Pay Index (2023)

14. High and rising levels of unemployment, coupled with declining earnings erodes a tax base which is already under considerable pressure. This in unpacked greater detail later in this note.

2.3 Business and consumer confidence

15. The weakened financial position of households is also reflected in lower trending consumer confidence levels. Despite an initial recovery from the dramatically low levels of the pandemic, confidence levels remained in negative territory. The FNB/BER Consumer Confidence Index showed the third lowest reading recorded since 1993, falling to -23 points in the first quarter of 2023. These indices show evidence of significant concerns among consumers regarding the economic prospects of South Africa as well as household finances over the next 12 months.

Figure 7: Consumer confidence indices



Source: BER; StatsSA; SARB

16. Business confidence indices show similar trends to those of consumers. However, the business confidence indices seem to have experienced a more resilient rebound than consumer confidence following the sharp decline during the pandemic. Nonetheless, business confidence still showed a downward trajectory at the end of the first quarter of 2023.

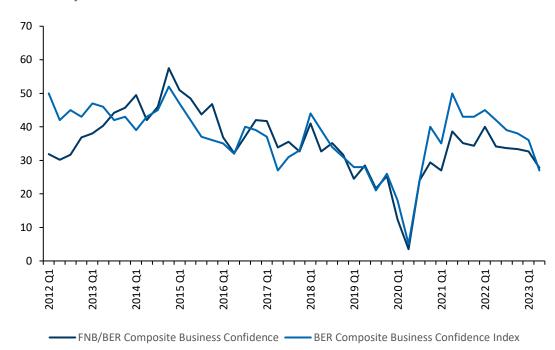


Figure 8: Business confidence indices

Source: BER; StatsSA; SARB

2.4 Declining tax base

- 17. The South African Revenue Services ("SARS") reports that the number of taxpayers has decreased between 2018 and 2021. Based on data published in the entity's *Tax Statistics 2022 Highlights* document, the total number of taxpayers assessed declined from close to 5.9 million in 2018 to 5.5 million in 2021.
- 18. Goliger (2022)⁴ reports that the 5.2 million individuals that made up the personal income tax base in 2020 represented approximately 9% of the South African population. This 9% of the population contributed 40% of South Africa's total tax revenue in 2020. South Africa's tax burden falls on a diminishing tax base, limiting the capacity to increase taxes. Coupled with South Africa's subdued economic prospects, the ability to raise taxes is constrained.

⁴ Goliger, A., 2022, The shrinking PIT tax base. What's next?, Available online: https://www.ey.com/en_za/tax/the-shrinking-pit-tax-base--what-s-next-

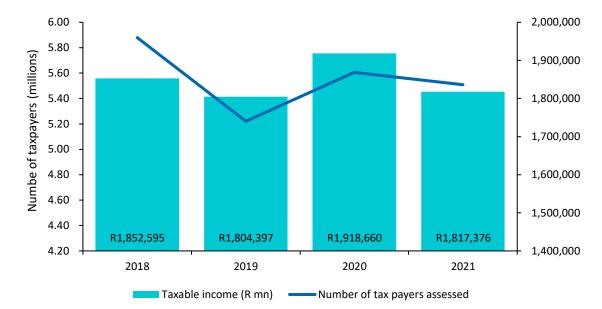


Figure 9: Number of taxpayers assessed versus Taxable income (secondary axis)

Source: Figures compiled using data sourced from SARS

19. It is against the backdrop that we must consider the capacity of the state to raise additional revenue for the NHI from the South African tax base.

3 Considerations for funding

20. The last attempt at quantifying the cost of NHI was conducted for the 2011 NHI Green Paper and costed in 2010 Rands. The estimates reached R125 billion for 2012 (R240.6 bn in 2023 Rands when adjusted for inflation) and R255 billion for 2025 (R490.9 bn in 2023 Rands). This costing has never been updated, and any such costing needs to take into account the quadruple and increasing, disease burden of the South African population. The NDoH has not presented any financial planning for discussion since the Green Paper, but has made references to tax increases in the Bill and the intention to raise R200bn of additional funding through taxes. This is unlikely to be anywhere near enough for a comprehensive package.

⁵ Department of Health (August 2011). National health Insurance in South Africa (para 122).

3.1 Knock-on effects and unintended consequences of increasing taxes

- 21. Various taxes *could* be increased to generate the required funds. However, it is important to consider that each adjustment to a specific tax rate will impact on the number of taxpayers and their spending behaviour. While keeping all else constant provides a simplifying assumption, the reality is likely to be very different and requires modelling different scenarios and considering the broad fiscal consequences of each action.
- 22. The Laffer curve shows the relationship between tax rates and tax revenue, whereby beyond the inflection point increasing the tax rate will result in less taxes being collected. Hence, while the maths allows one to increase the tax rate to arrive at R200bn (keeping the number of taxpayers the same, etc.), the nuance regarding the knock-on effects and unintended consequences of the tax increases is also important to consider.
- 23. In all, though, the point still stands that funding the R200bn is going to require massive changes to tax policy which the fiscus cannot necessarily accommodate.

3.2 Tax increases required to raise R200bn

- 24. The DoH has indicated that NHI will require R200bn to be raised in taxes to roll out the NHI. Raising taxes requires a Money Bill which is the domain of National Treasury who will take account of fiscal constraints including the pressure for other social security projects.
- 25. Collecting R200bn from VAT would require an **increase in VAT from 15% to 21.5%**. This would have massive ramifications for the poor and for the economy as a whole as was demonstrated in 2018 for a 1% change.

OR

26. Collecting R200bn from Personal Income Tax (PIT) means that **PIT tax rates would need to increase by 31% across the board** (e.g. somebody who currently pays 20% of their salary as personal income tax, will then pay 20%*(1+31%) = 26.2%). This is a very simplistic approach, and does not take into account that such a large increase in tax payments will result in reduced spending, which will reduce companies' income, and ultimately lead to job losses, which in turn will lower the PIT collected. This may take a year or two to ripple through the economy, but with such a significant change, it will happen fairly quickly, not just within a month or two like the change in behaviour following a VAT increase.

OR

Collecting R200bn as a payroll tax depends on who is included. If all working persons (formal and informal) contribute, then the tax amounts to around R1,072 p/m. If only **those employed in the formal, non-agricultural sector contribute, it is around R1,565 p/m.**⁶ Notable is the big difference between whether only formally employed – i.e., registered with SARS – are paying the payroll tax, or all workers (keeping in mind it will be much more difficult to collect the payroll tax). This is about ten times (10x) the revenue collected for the UIF through a payroll tax as reported in the UIF annual report 2022.

4 The way forward

27. It is clear that raising R200bn from a declining tax base in a very tough economic environment will be extremely difficult. To ensure sustainable health spending that stays within the fiscal constraints while still delivering the best value for money, the OECD⁷ has recommended that governments create or strengthen the appropriate governance frameworks and policy tools to enable it to identify and monitor the fiscal sustainability of their healthcare systems, as well as identify and assess risk factors to fiscal sustainability, in particular political and institutional factors. The OECD further advise that governments implement policy levers and tools that ensure greater sustainability of healthcare spending. This can include identifying the essential and cost-effective services which should be available to all without any financial barriers, provider payment reforms that create the right incentives and reward good outcomes, and broadening the revenue base (including encouraging payments from those who can afford to pay), taking care not to simply advocate for higher marginal taxes in the face of rising cost pressures. South Africa's narrow tax base and high levels of inequality create an unique systemic issue in which the private and public sectors can both fulfil a role to achieve universal healthcare access for all citizens.

⁶ Calculated based on the StatsSA QLFS employment numbers averaged for the period 2022q2 to 2023q1.

⁷ OECD (2015), Fiscal Sustainability of Health Systems: Bridging Health and Finance Perspectives, OECD Publishing, Paris.