

NHI Funding Options: Making Informed Choices

Prepared for the Hospital Association of South Africa (HASA)

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EXECUTIVE SUMMARY

- 1 This report responds to the Davis Tax Committee's call for submissions on National Health Insurance (NHI) funding proposals. We consider this is a very important issue that will be key to the successful, sustainable operation of the NHI.
- 2 The analysis commences by contextualising the estimated total cost and shortfall in funding the NHI within the current national budget and provides updated GDP growth estimates. It is found that the existing medium term budget estimates do not allow for the same increases in the public health budget as included in the NHI White Paper. Lower and more realistic GDP growth estimates further reveal a greater annual shortfall in funding than calculated in the White Paper. In addition, we point out that existing demand- and supply-side constraints are not adequately accounted for in the NHI White Paper's total cost estimates.
- 3 The three main sources of funds proposed in the NHI White Paper are noted: a payroll tax, an increase in VAT and a surcharge on taxable income. The potential income from these and a few other sources mentioned in the White Paper are calculated, revealing that even if these additional revenues were to be ring-fenced for NHI purposes, it would still be insufficient to fund the estimated annual shortfall.
- 4 Given that the funding sources suggested in the NHI White Paper are unlikely to yield revenue sufficient to support a system like the proposed NHI, we proceed to describe the appropriate economic framework for designing a sustainable funding solution. It is argued that the current and projected performance of the South African economy and the associated fiscal state of the country need to be taken into account. The tempered economic outlook, as well as the existing high tax-to-GDP ratio and inefficient public service delivery, constitute a difficult environment for increasing tax rates or introducing new taxes.
- 5 As such, we suggest a phasing-in approach that does not require an immediate increase in the tax burden. Rather, improved quality and efficiency of public health services will mean that more and better public health services can be provided using the same funds. Should the need arise to increase the tax burden in the future, the improved quality of services will make it more acceptable to the public. Given the likely high cost of the NHI, government transfers to this programme should be conditional on real savings effected and transferred from other government votes and programmes. In the first few years funding could also come from reprioritisation within the existing macroeconomic constraints of the national budget.

- 6 As the economy improves and fiscal consolidation achieves the desired results, the high priority enjoyed by health may succeed in securing a larger portion of the growing government budget, without the need for new or higher taxes. But until such time, from the perspective of the National Treasury, NHI has no superior claim above any other government expenditure to any particular revenue source or to the common revenue pool. It should compete on equal footing for the allocation of government funds in the budgetary prioritisation process.
- 7 It is imperative to improve healthcare services (access and quality) for all South Africans, in particular those dependent on public health services. Committed efforts to improve health services and uphold the constitutional obligation to provide access to healthcare services, are crucially important. In our view, a gradual move towards a “new system” will be more sustainable than complete overhaul of the existing health system in a short timeframe with disruptive economic consequences arising from increased taxes, amongst other factors.
- 8 The report concludes that the current proposals in the NHI White Paper are not, in our view, the most efficient or feasible way to fund the NHI. Many factors must be taken into account when designing appropriate funding mechanisms that are both feasible and sustainable in the long term. Gradually increasing funding for health services as improved outcomes become apparent, before introducing additional or new taxes, seems a more sensible way forward.

1 Introduction

- 9 Econex was commissioned by the Hospital Association of South Africa (HASA) to respond to the call for submissions on National Health Insurance (NHI) funding proposals¹ by the Davis Tax Committee (DTC). Both HASA and Econex are of the opinion that this is a very important issue that will be key to the successful, sustainable operation of the NHI.
- 10 The first detailed description of the NHI (a leaked 200 page document in 2009) was followed by a document from the African National Congress (ANC) National General Council meeting in 2010, reaffirming the commitment to the NHI.² The first official government policy (not from the ANC alone) was the NHI Green Paper, released in August 2011.³ Referring to funding mechanisms, par 114 of the Green Paper stated that, “The precise combination of these sources is the subject of continuing technical work and will be further clarified in the next 6 months in parallel to the public consultation.” Four years later the public had not seen any such “technical work” or clarification. In December 2015 the NHI White Paper was published.⁴ The awaited details regarding funding mechanisms were again absent from this policy document, with figures from the Green Paper repeated in the same 2010-values. As such, there is still uncertainty as to the total cost (and hence the exact need for, and prospective type of, funding). In fact, the lack of progress in this regard is evident from the White Paper warning in par 256 that the current estimates “are illustrative projections and do not represent the actual expenditure commitments that will occur.”
- 11 It is thus with some unease that the call for submissions on NHI funding proposals was received from the DTC on 1 September 2016. It is not clear how this DTC process aligns with the NHI policy process within the National Department of Health (NDOH) or the National Treasury’s own work streams on NHI funding options. Little detail is known regarding the exact service delivery model and other important aspects of the NHI proposal that will influence directly, and significantly, the need for funding and the combination of funding sources to be considered. As a result, one is left to interpret the DTC call for submissions as part of the broader clarification process mentioned in the Green Paper; in so doing, attempting to understand the feasibility and economic implications of the many different options for funding that are included in the NHI Green and White Papers.

¹ Dated 1 September 2016. Available at:

<http://www.taxcom.org.za/docs/20160901%20Call%20for%20submissions%20on%20NHI%20funding.pdf>

² ANC. (2010). Report of the 3rd National General Council. 20 – 24. Available at: <http://www.anc.org.za/docs/reps/2010/3rdngcx.pdf>

³ Department of Health of the Republic of South Africa. (2010). National Health Insurance in South Africa: Policy Paper. Available at: <http://www.gov.za/sites/www.gov.za/files/nationalhealthinsurance.pdf>

⁴ Department of Health of the Republic of South Africa. (2015). National Health Insurance for South Africa: Towards Universal Health Coverage. *Version 40*. Available at:

http://www.gov.za/sites/www.gov.za/files/National_Health_Insurance_White_Paper_10Dec2015.pdf

- 12 The existing “illustrative” cost projections in the White Paper imply that the NHI as a whole will be the biggest single government expenditure item upon full implementation. Funding such a programme in a sustainable manner and without causing large scale economic disruptions, requires careful thinking and detailed planning. Various funding mechanisms need to be evaluated, taking into account existing fiscal commitments and competing expenditure items. It is important to approach tax design (and more specifically here, the funding of the NHI) in a sensible manner. Hence the reason for this submission, in spite of the uncertainties highlighted above. We will reiterate that the existing cost projections are not sufficient, but then proceed to assess funding options in light of the estimates in the NHI Green and White Papers, as those are the only official government documents at our disposal, and with due cognisance of the widely accepted properties of a good tax system.
- 13 Section 2 of this report updates and summarises the comments on the NHI White Paper that was submitted to the NDOH earlier this year on behalf of HASA. This provides context to the DTC regarding the significant fiscal impact of the proposed NHI, and also describes some of the demand- and supply-side constraints that are not adequately accounted for in the current costing of the NHI. Section 3 provides preliminary calculations based on the suggested tax increases in the NHI White Paper. It is shown that these sources will not provide sufficient additional income, even if those funds were to be allocated to the health budget alone. In section 44 we present a discussion of the relevant economic framework and principles to consider when attempting to increase the funding (specifically via the introduction of new or additional taxes) for a single government programme. That section explains how it will be best first to seek alternative means of funding before turning to new tax and/ or increased tax rates. Section 5 emphasises the need for funding healthcare services to ensure universal health coverage in South Africa, and argues that alternative options should be considered in order to improve access to much needed healthcare services. Section 6 concludes.

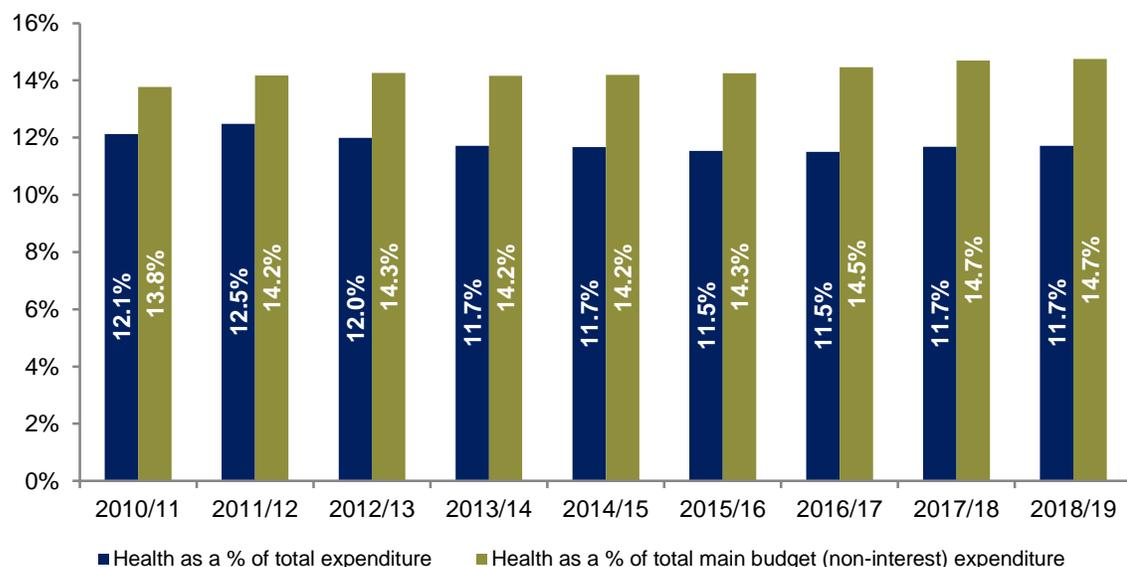
2 NHI Total Cost: Fiscal Implications

- 14 Funding the proposed NHI should be considered in context of the entire fiscal equation. In this section we emphasise the magnitude of financial implications, as well as the significant growth required to increase funding as suggested. This section summarises and updates some of Econex's earlier comments on the White Paper.⁵

2.1 Current health budget and estimated expenditure

- 15 Figure 1 shows public health expenditure as a proportion of total consolidated expenditure and main budget non-interest expenditure. These proportions are expected to remain relatively constant over time based on Treasury's medium-term expenditure forecasts.

Figure 1: Health expenditure as a proportion of total consolidated national government expenditure and main budget non-interest expenditure, 2010/11 - 2018/19

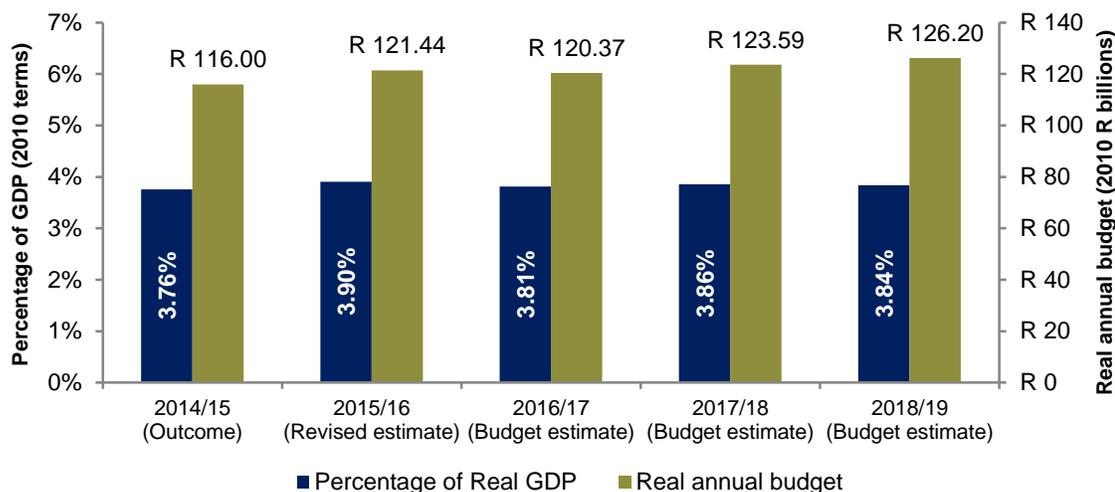


Source: National Treasury; Econex calculations

- 16 Figure 2 shows that as a proportion of real gross domestic product (GDP), the share of the national health budget (i.e. public health expenditure) is also expected to remain almost unchanged over time.

⁵ See the Econex Occasional Note: Comments on select aspects of the NHI White Paper (June 2016) for a summary of the earlier report. Available at: http://econex.co.za/wp-content/uploads/2016/06/ECONEX_Occasional-Note_June-2016.pdf

Figure 2: Actual and projected increases in the national health budget (public health expenditure) in real terms and as a percentage of real GDP, 2014/15 - 2018/19



Source: National Treasury; Econex calculations

- 17 In the forecast period (to 2018/19), it seems then, little provision has been made for the NHI, despite the fact that the NHI White Paper makes projections in this regard.⁶ Indeed, the White Paper estimates the cost of implementing the NHI to be (in 2010 prices) R134.3 billion for the 2015/16 fiscal year, R185.4 billion for the 2020/21 fiscal year, and R255.8 billion for the 2025/26 fiscal year. Assuming GDP growth of 3.5% per annum, this means average annual expenditure increases to the public health budget of 4.1% until 2015/16 and 6.7% thereafter. However, an annual GDP growth rate of 3.5% per year seems unrealistic given estimates obtained from the World Bank, the International Monetary Fund (IMF) and Treasury itself. The broader importance of the GDP growth rate in determining funding mechanisms is discussed in section 44, but first we consider the role of this growth rate in the context of the projected NHI funding shortfall.

2.2 The shortfall: Macroeconomic implications

- 18 The NHI White Paper models the funding shortfall as a function of GDP growth. Using their own projected increases to the public health budget, and assuming an annual GDP growth rate of 3.5% up to 2025/26, the White Paper estimates imply a funding shortfall of R71.9 billion. This growth rate seems unrealistic and out of date. Estimates of GDP growth from the World Bank, the IMF and from Treasury are well below 3.5% to 2020. Indeed, the current growth outlook for South Africa is significantly weaker than what is assumed in the NHI White Paper. Updated GDP growth rate forecasts are presented next.

⁶ This is to be expected as the medium-term budget statement normally does not provide for programmes that are not formally registered as a budgetary vote. This, of course, also shows that not even preliminary allocations to the NHI – existing or envisaged – seem to have made themselves into the formal fiscal planning and prioritisation process.

Table 1: GDP growth rates, 2013/14 - 2025/26

Year	GDP growth rate
2013/14	1.5%
2014/15	1.3%
2015/16	0.1% ⁷
2016/17	1.0% ⁸
2017/18	1.6%
2018/19	2.6%
2019/20	2.6%
2020/21	2.3%
2021/22	2.3%
2022/23	2.3%
2023/24	2.3%
2024/25	2.3%
2025/26	2.3%

Source: IMF (2016); Econex calculations

- 19 Table 1 shows that GDP growth in South Africa is projected to be lower than the 3.5% assumed in the NHI White Paper. As mentioned before, the funding shortfall for the NHI (according to the White Paper, and given the estimated increases in the public health budget) depends on the assumed rate of GDP growth. The shortfall calculated under different growth rates is presented in Table 2 below.

Table 2: NHI shortfall projections in 2010 prices by 2025/26

Annual GDP growth rate	Funding shortfall predicted by NHI White Paper (R billion)
2.0%	R108.1
3.5%	R71.9
5.0%	R27.6

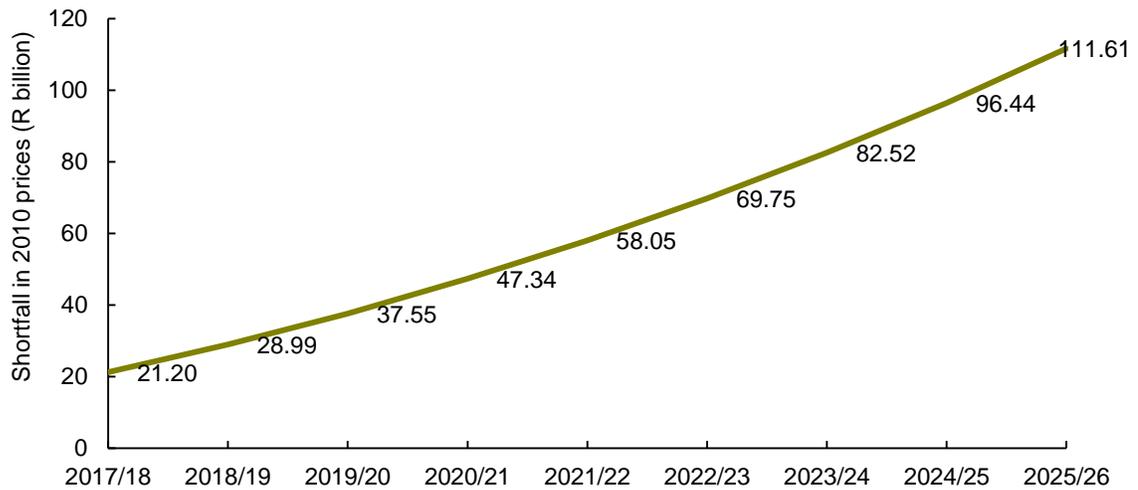
Source: NHI White Paper

- 20 Using the same estimated NHI costs as in the White Paper, but the more recent GDP growth forecasts from Table 1, the annual NHI shortfall is calculated to reach approximately R111 billion (in 2010 prices) by 2025/26. Figure 3 illustrates the projected shortfall for the period 2017/18 to 2025/26.

⁷ International Monetary Fund (IMF). (2016). *World Economic Outlook Update*. Washington, DC: IMF. 19 July 2016.

⁸ *ibid.*

Figure 3: Projected annual funding shortfall in 2010 prices for the NHI under Econex GDP projections, 2017/18 - 2025/26



Source: Econex calculations

- 21 Further important in the context of lower GDP growth and the estimated shortfall, is that it is not only the concern regarding the mobilisation of enough funds to begin with the implementation of the NHI which are problematic. It is also the potential “waste” incurred when it turns out that the economy is not growing enough in order to sustain the programme, which one should be cognisant of.

2.3 Additional demand- and supply-side constraints

- 22 The shortfall calculated above is based on the cost estimates from the NHI Green and White Papers which take into account the planned increases in service delivery and administration, as well as expected utilisation increases based on the experience of Thailand after introducing universal health coverage in that country.⁹ Based on the evidence presented below, we argue that relying on those increases is insufficient as South Africa’s unique circumstances are likely to imply a much greater financing requirement. (More detail on each of these demand- and supply-side constraints are provided in the HASA submission to the NDOH on the NHI, as well as the Econex Occasional Note from June 2016.¹⁰)

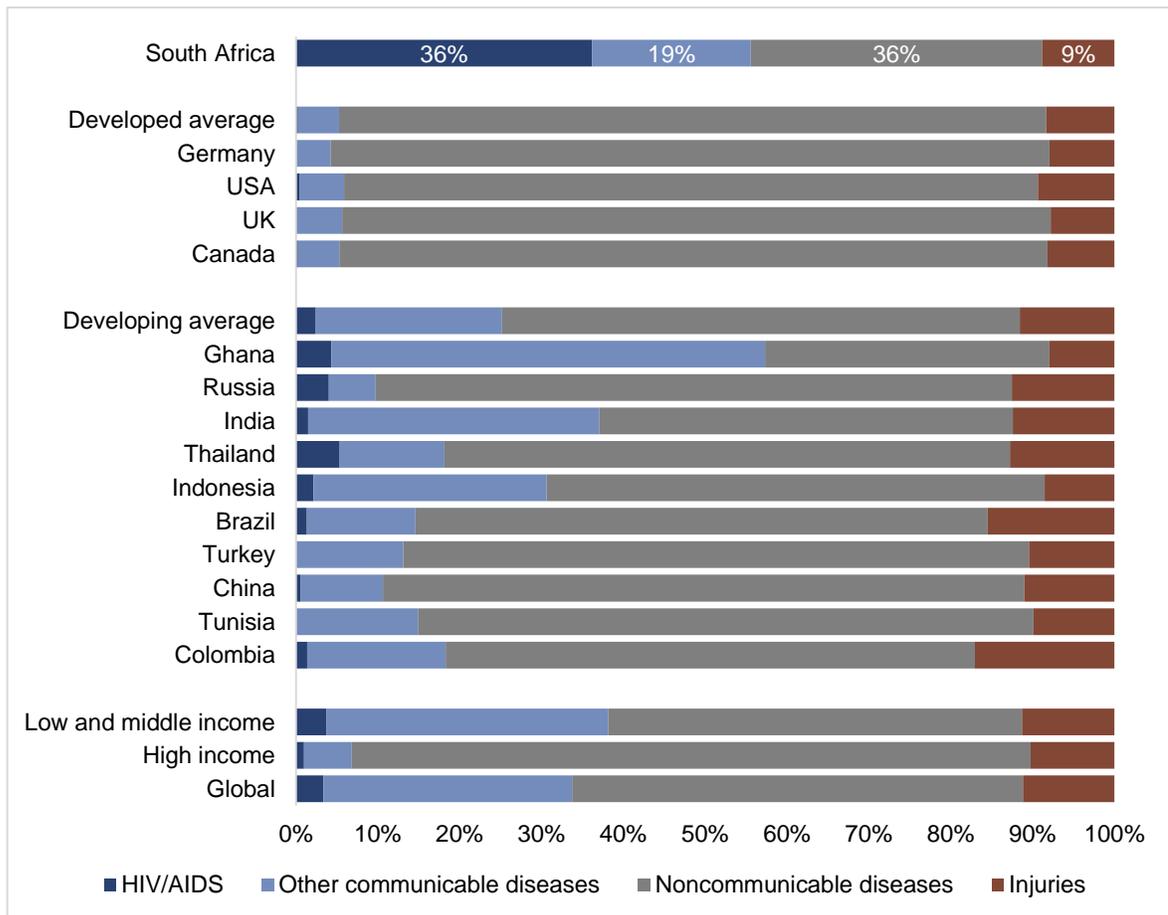
⁹ Department of Health of the Republic of South Africa. (2010). National Health Insurance in South Africa: Policy Paper. (par 121)

¹⁰ See footnote 5.

2.3.1 Demand-side constraints: Burden of disease

23 Data from the World Health Organization (WHO) show that South Africa's burden of disease (BOD) was more severe and more complex than most of its peer countries.¹¹ In 2012, South Africa's total disability-adjusted life years (DALYs) were 62,419, with the developing country average in the sample at 35,158 DALYs. Thailand's total BOD was about half of South Africa's at 31,945 DALYs; and, as Figure 4 show, it did not have the same quadruple BOD.

Figure 4: DALY breakdown comparison between South Africa, developing countries and income groups, 2012



Source: World Health Organization (2016)

24 Updated population projections for South Africa have recently been published and include detailed projections regarding HIV/AIDS and related deaths.¹² Those estimates are quite different from

¹¹ World Health Organization. (2016). Metrics: Disability-Adjusted Life Year (DALY). Available at: http://www.who.int/healthinfo/global_burden_disease/metrics_daly/en/

¹² Available at: <http://www.thembisa.org/>

previous models¹³ and show greater than expected increases for the total population, AIDS deaths and the proportion of the population who are HIV-positive.

- 25 From these new estimates, as well as Figure 4, it is clear that the introduction of a NHI in South Africa will have different resource requirements to treat its more complex BOD – not only in terms of financial resources, but also for the type of facilities or support structures and healthcare personnel. The White Paper, however, does not account for the supply-side constraints South Africa faces in this regard.

2.3.2 Supply-side constraints: Hospital beds and human resources

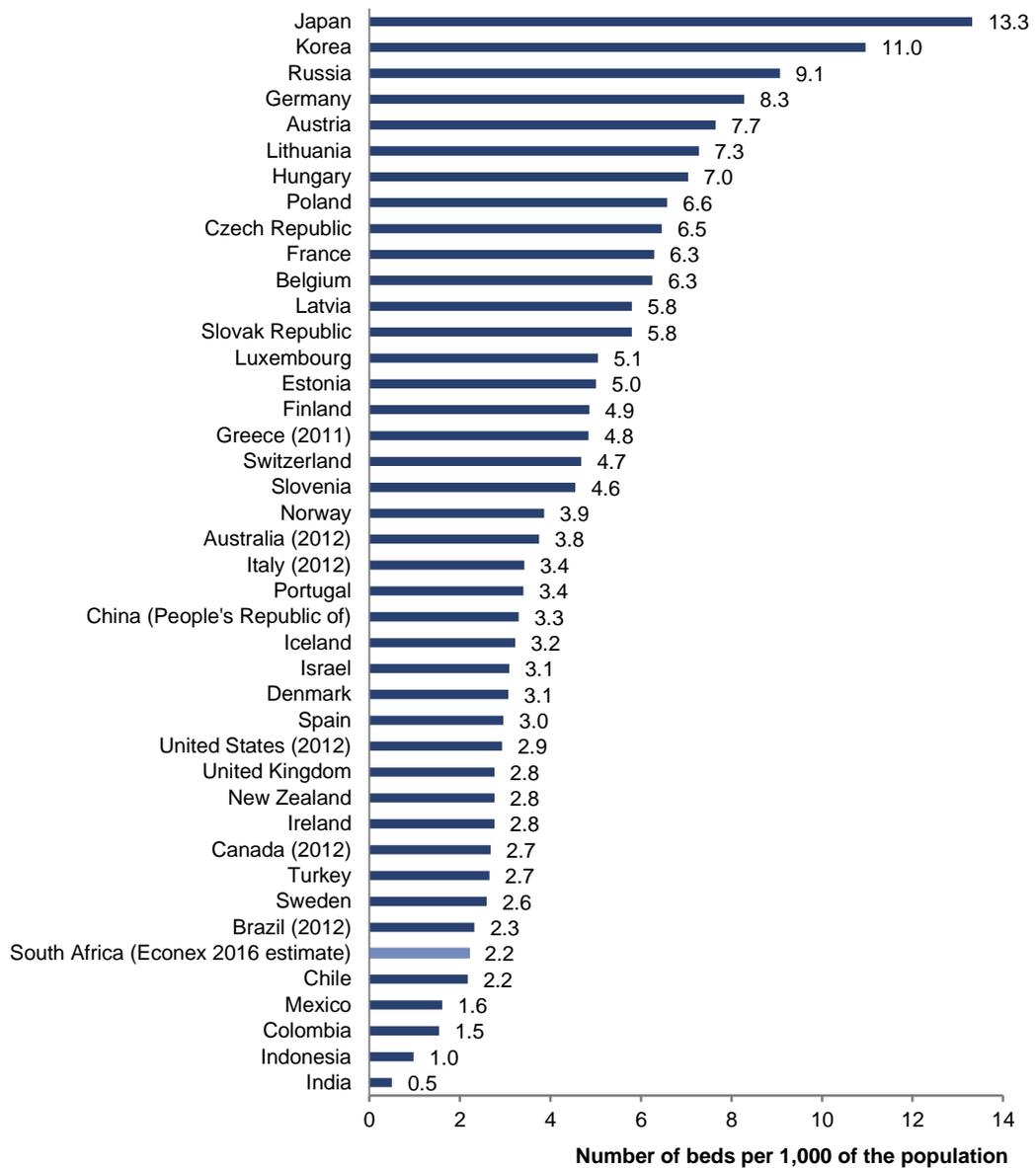
2.3.2.1 Hospital beds

- 26 By international standards, South Africa has relatively few hospital beds per capita, placing considerable strain on service delivery. In 2012 the total number of hospital beds in South Africa (121,741) was almost the same as it was in 1976 (119,000), while the population more than doubled from 22 million people to 51 million people over the same period.¹⁴ Given population growth and the increasing burden of disease, the unchanged national supply of hospital beds result in very high occupancy rates (which are understood to create significant problems in terms of effective service delivery). Figure 5 below illustrates South Africa's comparatively low bed availability.

¹³ See for instance the Actuarial Society of South Africa's (ASSA) AIDS and demographic model. Available at: <http://www.actuarialsociety.org.za/Societyactivities/CommitteeActivities/DemographyEpidemiologyCommittee/Models.aspx>

¹⁴ Sources include: Van den Heever (2010); Health Systems Trust; Annual statements of private hospitals; Econex Market Concentration trends in the Private Healthcare Industry, Occasional Note, March 2014; Statistics South Africa

Figure 5: Hospital beds per 1,000 of the population, 2013 (or most recent year available)



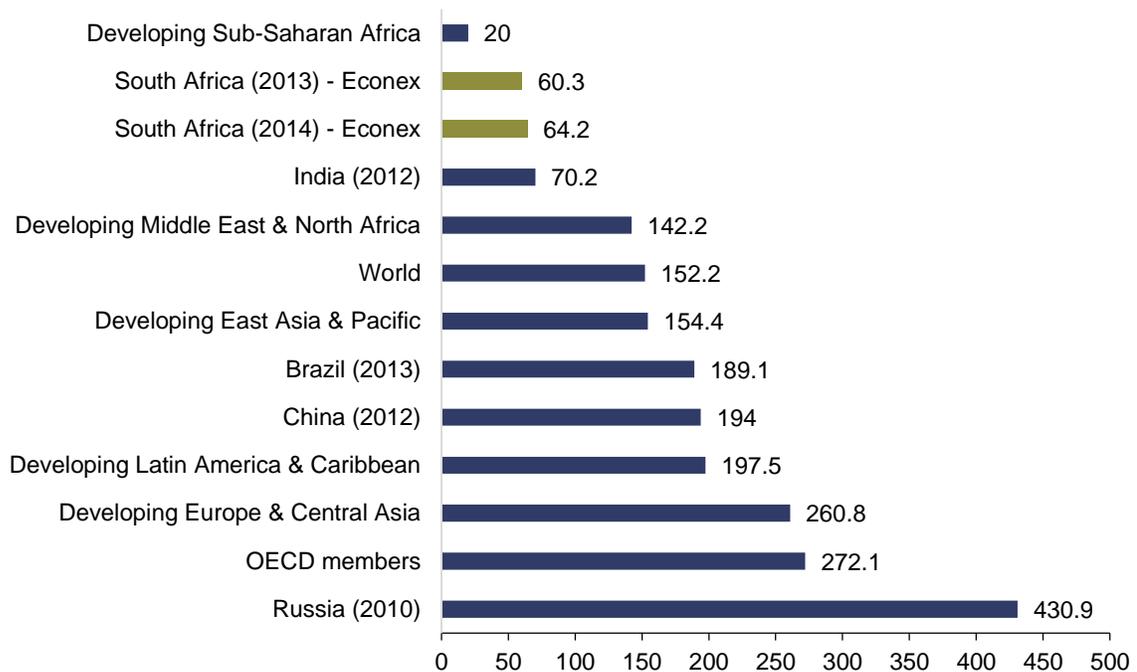
Source: OECD (2016); Econex calculations

2.3.2.2 Human resources

27 In addition to the low number of beds, South Africa faces severe constraints in the number of qualified medical professionals in the country. Figure 6 shows how South Africa compares internationally in terms of the number of physicians per 100,000 of the population. South Africa ranks lower than all of the other BRICS¹⁵ countries presented in the figure, and with the exception of developing Sub-Saharan Africa, it has a lower ratio of physicians to population than all of the regions presented.

¹⁵ Brazil, Russia, India, China and South Africa.

Figure 6: Physicians per 100,000 of the population, 2014



Source: World Health Organization

2.4 Summary

- 28 It is evident that the NHI will come at a great cost to the fiscus, as well as the South African economy as a whole. Current cost projections are already large, but still insufficiently accounts for demand- and supply-side constraints that are likely to have bigger than anticipated resource requirements. Indeed, South Africa's high and increasing burden of disease means that resource requirements are higher than what can be predicted with health systems in countries with similar levels of economic development. South Africa's DALYs are significantly higher than the developing country average. In addition, the comparatively low numbers of hospital beds and physicians place considerable strain on service delivery.
- 29 Notwithstanding the above, we proceed to analyse the suggested funding mechanisms as included in the NHI White Paper. We point out however, that there are many obstacles to overcome in collecting sufficiently large sums of money; and that funding options should be evaluated in the context of the entire fiscal equation.

3 NHI White Paper Funding Proposals

30 Section 7 of NHI White Paper is devoted to the financing of the NHI. It starts by discussing the projected cost of the NHI and consequent funding shortfall, using these figures as the basis for modelling potential revenue sources. However, as set out in Section 2 of this report, the projected cost and shortfall in the White Paper are much lower than what is realistic. The White Paper goes on to consider the principles of tax design from a theoretical perspective, after which the potential revenue sources are set out. The three main sources of funds proposed are a payroll tax, an increase in VAT and a surcharge on taxable income. These, as well as the alternative sources from which NHI funds can potentially come, are described below, after which estimates of the revenues from a payroll tax and increased VAT are calculated. The aim is to assess the current funding proposals as included in the White Paper. For none of the above scenarios assumed in the calculations, the additional funding from the payroll tax and increased VAT will be able to cover the estimated shortfall in 2025/26.

3.1 Main sources of revenue

31 The White Paper proposes that a **payroll tax** be instituted. This will work in the same manner as the current skills development levy, that is, a certain percentage of the total amount paid in salaries to employees will be taxable.¹⁶ The White Paper states that it can be a substantial and stable source of revenue, but cautions that since it adds to the cost of employment, it may negatively affect formal employment and job creation.

32 The **surcharge on taxable income** suggested in the White Paper¹⁷ would be identical to an increase in the marginal personal income tax rates. The White Paper assumes that the increase would be applied uniformly across all income tax brackets. In 2015/16, personal income tax was the largest source of tax revenue at R353 billion.¹⁸ Increasing these rates therefore has the potential to be a significant and stable source of revenue, *ceteris paribus*. It would also be administratively easy to implement since the personal income tax structure is already in place. However, the higher tax burden would lower households' disposable income, making it important to carefully consider the impact on household consumption and savings, as well as economic activity in the country. (The fact that South Africa already has a high tax burden, and the implications thereof for increasing taxes to fund the NHI, is discussed in more detail in section 44.)

¹⁶ Department of Health of the Republic of South Africa. (2015). National Health Insurance for South Africa: Towards Universal Health Coverage. *Version 40*. (par 296).

¹⁷ *Ibid.* (par 283 – 286).

¹⁸ National Treasury of the Republic of South Africa. (2016). Budget Review. (Annex B, Table 2). Available at: <http://www.treasury.gov.za/documents/national%20budget/2016/review/FullReview.pdf>

33 Another possibility considered in the White Paper is an **increase in value-added tax (VAT)**,¹⁹ although it is not explicitly stated whether *only the additional* VAT income will be allocated to the funding of NHI. VAT is also a stable and substantial source of revenue. Part of the reason for this is that the tax base is broad, reaching both the formal and informal economies; however, this also means that an increase in the VAT rate is regressive and will negatively impact the lower socio-economic groups more than the rich, thereby increasing inequality even further. This impact is softened by the existing zero-rating of basic consumption items, an already very costly compensation of the regressiveness.²⁰ The DTC²¹ points out that while an increase in the VAT rate would be inflationary in the short-run, negatively impacting real GDP and employment, it would be much less distortionary than an increase in the personal income tax or corporate income tax rate.

3.2 Other options for tax revenues

34 As stated in the NHI White Paper, there is an intuitive argument to be made for using the tax revenues from the sale of alcohol and tobacco products (**sin taxes**) to fund NHI.²² However, in 2013/14, levies on alcohol and tobacco amounted to only R17.2 billion and R13.1 billion, respectively. Allocating *all* the revenue from sin taxes, even with increased rates, would therefore not be enough to meet the long-term funding requirements of the NHI by itself, although it could contribute to the pool of NHI funding. Additionally, an increase in the sin tax rates may have a number of negative consequences, such as a loss of consumer surplus and adjustment costs for both producers and workers. These (sometimes unintended) negative consequences are elaborated upon in section 8 (Appendix B).

35 **Securities transfer tax** and **estate duties** are also mentioned in the White Paper²³ as potential revenue sources. However, in 2014/15 revenues collected were only R4.1 billion and R1.5 billion, respectively.²⁴ Other problems with relying on these tax revenues, as mentioned in the White Paper, include lack of a clear reason as to why the revenues should be allocated specifically towards funding the NHI, the unreliability and volatility of these revenues, and the high costs associated with collecting the tax.

¹⁹ Department of Health of the Republic of South Africa. (2015). National Health Insurance for South Africa: Towards Universal Health Coverage. *Version 40*. (par 291, 292).

²⁰ This is discussed further in section 44.

²¹ The Davis Tax Committee. (2014). First Interim Report on VAT to the Minister of Finance. (p 38, 39). Available: <http://www.taxcom.org.za/docs/20150707%20DTC%20VAT%20First%20Interim%20Report%20for%20public%20comment.pdf>

²² Department of Health of the Republic of South Africa. (2015). National Health Insurance for South Africa: Towards Universal Health Coverage. *Version 40*. (par 303, 304).

²³ *ibid.* (par 304).

²⁴ National Treasury of the Republic of South Africa. (2016). 2016 Budget Review.

36 Two proposed taxes, namely the **carbon tax** and **tax on sugar-sweetened beverages** (SSBs), can again be intuitively linked with health expenditure.²⁵ The carbon tax is set to be implemented on 1 January 2017,²⁶ while the so-called “sugar-tax” is to be in effect from 1 April 2017.²⁷ While no specific revenue projections for the carbon tax are provided by the Treasury in its 2013 Carbon Tax Policy Paper,²⁸ a DTC report states that the tax will be revenue-neutral during the first five years; it must also be remembered that the tax is aimed at changing behaviour and not raising revenue.²⁹ Similarly, for the sugar tax to address health issues, it should be geared towards changing consumer behaviour and not raising revenue. Additionally, should these taxes be successful in changing behaviour, the revenues will subsequently decrease and therefore are unlikely to provide a large and/or stable revenue source.

3.3 Further possible sources of revenue

37 Instead of raising additional tax income through new or higher taxes, certain government expenses can be reallocated to the funding of the NHI. The first of these proposed in the White Paper is the reallocation of the **State’s employer contributions to medical schemes**, e.g. the Government Employees Medical Scheme (GEMS).³⁰ Another option is to **phase out tax credits for medical scheme contributions**, and instead allocate these funds to the NHI.³¹ In 2013/14, R15.4 billion of tax revenue was spent on medical tax credits.³² The White Paper cautions that the credits can only be phased out once the NHI is operational; these funds would therefore not be available to cover the shortfall until the NHI has started operations.

38 The South African Revenue Services (SARS) explains that medical scheme tax credits are put in place to allow for greater equality in the treatment of medical expenses across different parts of the income distribution.³³ The rebate therefore reduces the amount of tax paid and effectively increases disposable income. Phasing out the medical tax credit therefore diminishes the affordability of private medical scheme coverage and may disincentivise people to join medical schemes. This decreases the size of the private risk pool and place a higher burden on the state in

²⁵ Department of Health of the Republic of South Africa. (2015). National Health Insurance for South Africa: Towards Universal Health Coverage. *Version 40*. (par 306, 307).

²⁶ The Davis Tax Committee. (2015). First Interim Report on Carbon Tax to the Minister of Finance. (p 23). Available at: <http://www.taxcom.org.za/docs/20151116%20DTC%20Carbon%20Tax%20First%20Interim%20Report.pdf>

²⁷ National Treasury of the Republic of South Africa. (2016). Taxation of Sugar Sweetened Beverages: Policy Paper. (p 2).

²⁸ National Treasury. 2013. Carbon Tax Policy Paper. Available:

<http://www.treasury.gov.za/public%20comments/Carbon%20Tax%20Policy%20Paper%202013.pdf>

²⁹ The Davis Tax Committee. 2015. First Interim Report on Carbon Tax for the Minister of Finance. (p. 27, 28).

³⁰ Department of Health of the Republic of South Africa. (2015). National Health Insurance for South Africa: Towards Universal Health Coverage. *Version 40*. (par 308).

³¹ *Ibid.* (par 309).

³² National Treasury of the Republic of South Africa. (2016). 2016 Budget Review. (Annexure C).

³³ South African Revenue Services. (2016). Medical scheme fees tax credit. Available: <http://www.sars.gov.za/TaxTypes/PIT/Pages/Medical-Credits.aspx>

terms of provision of medical services. Within this context the needs and financial implications for disabled and older taxpayers must also be carefully considered.

3.4 Amount of revenue that can be collected

- 39 The exact amount of revenue that can be collected from each source is uncertain and would depend on various (dynamic) factors that interact with one another, e.g. individuals adjusting their behaviour in response to a change in tax rates, real GDP growth and the actual tax rates implemented over different periods. The eventual incidence of the tax burden is therefore unclear. Nonetheless, the rough estimates presented below illustrate that the potential revenue is not enough to cover the estimated costs of the NHI, especially once a lower and more realistic GDP growth rate is assumed.
- 40 To calculate³⁴ the amount of revenue that can *potentially* be collected, the 2014/15 nominal tax revenue for the skills development levy and VAT are expressed as proportions of the nominal GDP in 2014/15. These proportions are assumed to remain constant until 2025/26. All values are adjusted to reflect 2010 prices in order to make comparisons to the shortfall in the White Paper. The potential revenues from the new payroll tax and increased VAT are calculated according to (a) the incremental rate increases detailed in Scenario D^{35,36} of the White Paper, as well as for (b) a “maximum” scenario. In the latter, the maximum rates stated in the scenarios, namely 2% for the payroll tax and an increase of 1.5% for VAT, are applied to the *entire* period. This is a very optimistic estimation of the revenue that can be derived from these sources since it will not be possible to increase the tax burden before the NHI is operational (as mentioned above and also in section 4.1.3) and it will be preferable to increase taxes incrementally (as will be explained in section 4.2). These estimates also do not take into account any possible negative effects of the higher tax burden on the economic growth rate.
- 41 For both scenarios (i.e. (a) and (b) above), in the case of the new payroll tax, it is assumed that the percentage of the salaries of employees that are taxable is the same as for the current skills development levy. The revenue that can be raised in 2025/26 is calculated using the Econex projections of GDP growth, (a) according to the incrementally increasing tax rate in the White Paper’s Scenario D, and (b) at a rate of 2% over the whole period. To calculate the *additional* revenue that can be raised with higher VAT, it is assumed that the number of zero-rated items

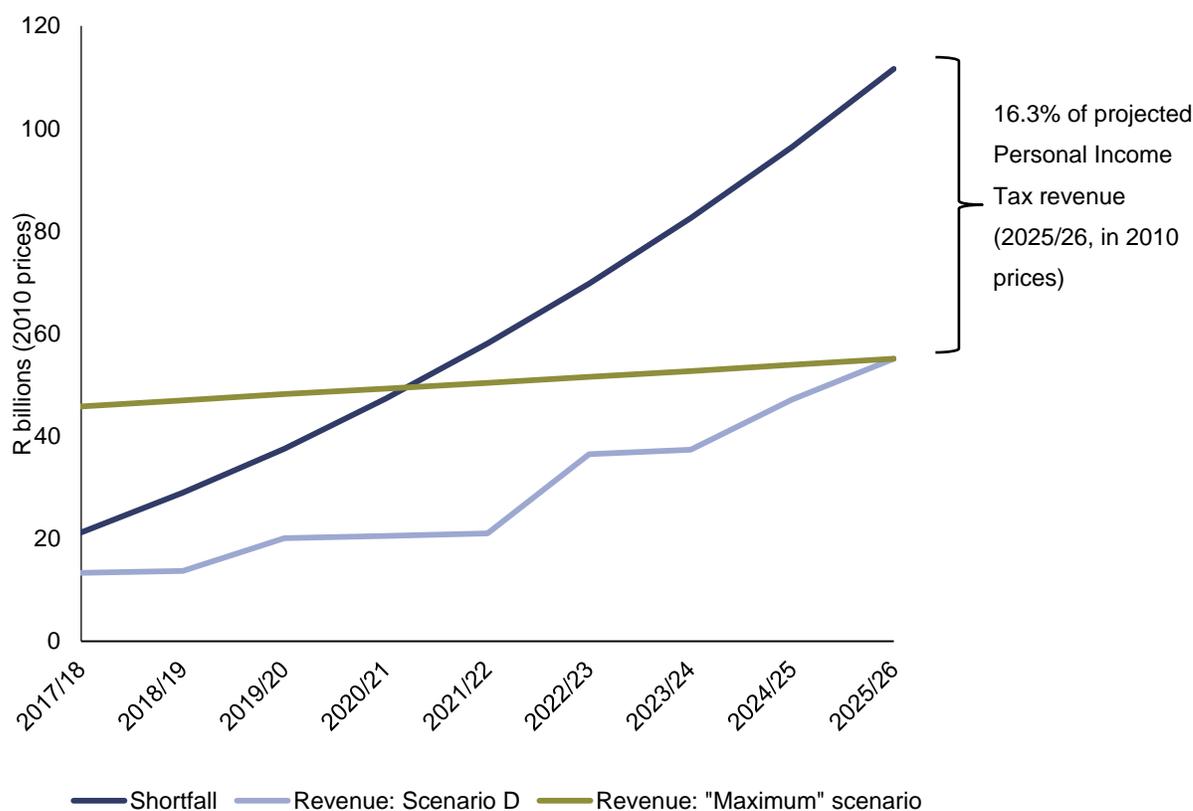
³⁴ The calculations in the following scenarios are in line with and follow a similar methodology as that of DNA Economics. (2016). Options for financing the National Health Insurance: An overview of the fiscal capacity and financing instruments. Presented at the BHF Southern African Conference. 18 July 2016.

³⁵ Scenario D was chosen for this estimation since it is the only scenario in the White Paper that relies only on a payroll tax and an increase in VAT.

³⁶ Department of Health of the Republic of South Africa. (2015). National Health Insurance for South Africa: Towards Universal Health Coverage. *Version 40*. (p 55).

remain constant (similar to the White Paper). The revenue is again calculated using the GDP growth projections by Econex, for (a) the incremental increasing rate in Scenario D, and (b) an increase of 1.5% over the whole period. Figure 7 shows that the additional revenue from the payroll tax and VAT increases according to (a) Scenario D is not enough to cover the shortfall throughout the whole period. The revenue from (b) the “maximum” scenario is also not enough starting 2021/22, even though it is higher than for Scenario D until 2025/26 (with 2025/26 being the only fiscal year the same tax rates are applied).

Figure 7: Econex shortfall v. revenue (for (a) Scenario D and (b) the “Maximum” scenario), 2010 prices



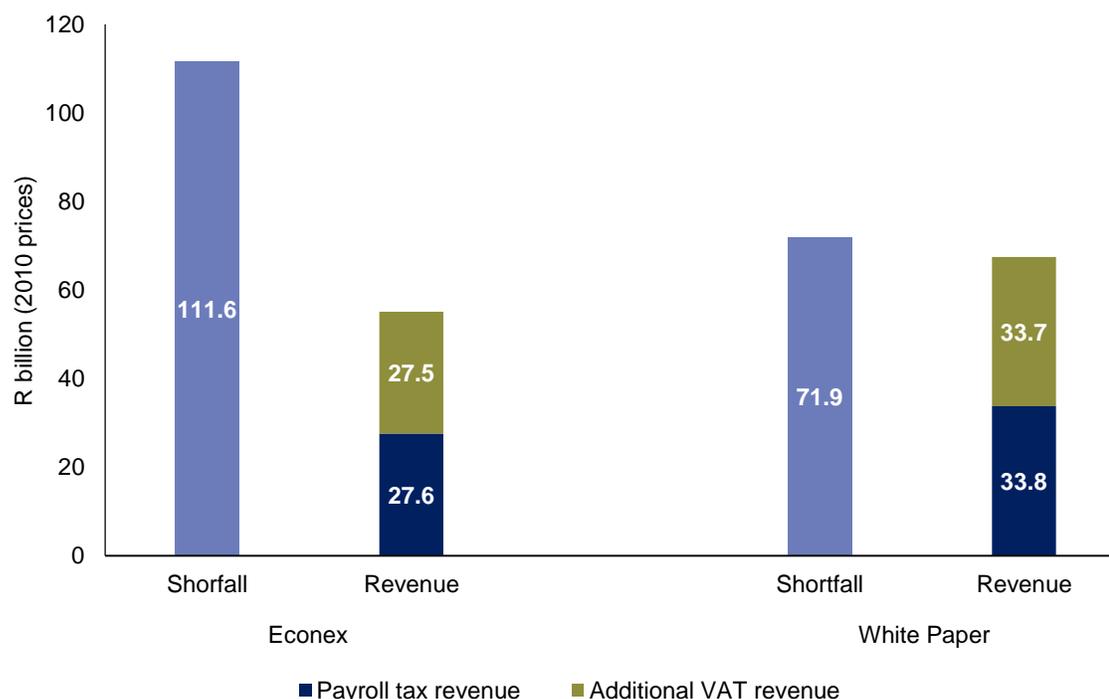
Source: International Monetary Fund (IMF); World Economic Update; Budget Review 2016; Econex calculations

- 42 The third of the main sources of revenue is the surcharge on taxable income. The projected future income from personal income tax is calculated in the same manner as the projected skills development levy and VAT revenue, after which the remainder of the shortfall not covered by the payroll tax and additional VAT revenue is expressed as a proportion of the projected personal income tax revenue. By 2025/26, R56.6 billion of the R111.6 shortfall is not covered by payroll tax and additional VAT revenue – equivalent to 16.3% of the projected personal income tax revenues (all in 2010 prices). To increase personal income taxes in order to collect this R56.6 billion will result in a tax burden that is too high for some consumers to bear (since the tax burden is already

high – see section 4.1.2), and especially once the payroll tax and increased VAT are also taken into account. Other sources of NHI funding may help to alleviate the burden.

- 43 Figure 8 indicates that even when the higher, but less realistic, 3.5% GDP growth rate, as well as the highest payroll tax and increased VAT rates are assumed over the whole period (as in the “Maximum” scenario), the R71.9 billion shortfall projected in the White Paper will not be covered by the payroll tax and additional VAT revenue. The remainder of the shortfall (R6.9 billion) will need to be covered by the surcharge, equivalent to 1.7% of the projected personal income tax in 2025/26 (also calculated on the basis of a 3.5% GDP growth rate and in 2010 prices). While the White Paper scenario appears much more feasible, the difference in the sizes of the Econex and White Paper shortfalls must be noted (together with the updated GDP estimates provided earlier).

Figure 8: Econex v. White Paper shortfall and revenue (2025/26 in 2010 prices)



Source: International Monetary Fund (IMF); World Economic Update; Budget Review 2016; NHI White Paper; Econex calculations

- 44 Based on the information provided in the White Paper, it is clear that the three proposed main sources of funds will not be enough to cover the projected shortfall. This is especially true if more realistic GDP growth rates are used in calculations of the shortfall and potential revenue. Even an optimistic estimation of the potential revenues was shown not to cover the projected shortfall. As a result, one has to reconsider how best to fund the NHI – the next section describes the appropriate economic framework.

4 Funding the NHI: Economic Framework

45 Given that the funding sources suggested in the NHI White Paper are unlikely to yield enough revenue to support a system like the NHI, one has to go back to the drawing board. When approaching tax design and funding of a new government programme (or attempting to increase substantially funds being allocated to a specific government function), the current and projected performance of the South African economy and the associated fiscal state of the country need to be taken into account. These are crucially important when considering the prospective sources of finance and the timeline for the implementation of the NHI. In this section we discuss what factors to consider before the implementation of new and higher taxes that will increase the tax burden, as well as possible tax options should it still be necessary to introduce new/ higher taxes.

4.1 Context

4.1.1 Economic environment

46 As discussed in section 2, South Africa's economic growth is expected to be lower than anticipated in the NHI White Paper. While the latter assumed an annual GDP growth rate of 3.5%, the IMF expects a growth rate of only 1% for 2016/17. This will result in a second year of falling per capita real incomes. A muted recovery is expected from 2017, with growth rates projected to approach 2% to 2.5%, as was shown in Table 1 previously.³⁷

47 Prior to the international financial crisis of 2008/9, South Africa's levels of government debt as a percentage of GDP were good when compared to the median of other emerging market economies. After the crisis, South Africa declined into a weak position. This is ascribed to poor growth, although expenditure increases also contributed. The 2016 national budget reduced the expenditure ceiling by R25 billion over the next three years compared with the 2015 medium-term budget policy statement (MTBPS). Together with higher revenue due to tax adjustments, this was projected to stabilise national debt at 46.2% of GDP in 2017/18.³⁸ However, the country's economic prospects have since deteriorated. The IMF³⁹ warns that rising government debt (largely due to low growth and financially weak state-owned enterprises) has increased fiscal vulnerabilities, along with sovereign downgrades that could trigger capital outflows. Accordingly, it would be difficult to

³⁷ International Monetary Fund (IMF). 2016. *World Economic Outlook Update*. Washington, DC: IMF. 19 July 2016.

³⁸ International Monetary Fund. 2016. South Africa Latest Outlook Shows Urgent Need for Policy Reforms. Available: <https://www.imf.org/external/pubs/ft/survey/so/2016/car070716a.htm>

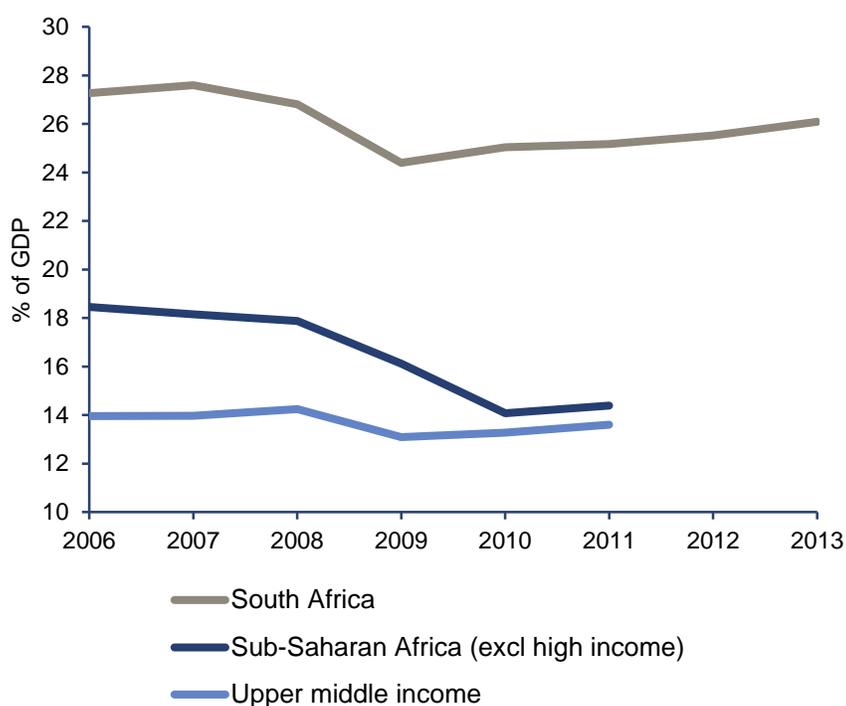
³⁹ International Monetary Fund. 2016. South Africa Latest Outlook Shows Urgent Need for Policy Reforms. Available: <https://www.imf.org/external/pubs/ft/survey/so/2016/car070716a.htm>

motivate a new, large government expense such as the planned NHI to be financed via an increase in public debt.

4.1.2 Current tax burden

48 Evidence presented below suggests that, in comparison to other countries, there is limited scope for an increase in South Africa's total tax burden. Between 2006 and 2011, South Africa's tax-to-GDP ratio was more than 10 percentage points above the average for upper-middle income countries, as well as for sub-Saharan countries (excluding high income countries). In 2013, South Africa's tax-to-GDP ratio reached a high of 26.1%. These trends are illustrated in Figure 9.

Figure 9: Tax-to-GDP ratios, 2006 - 2013



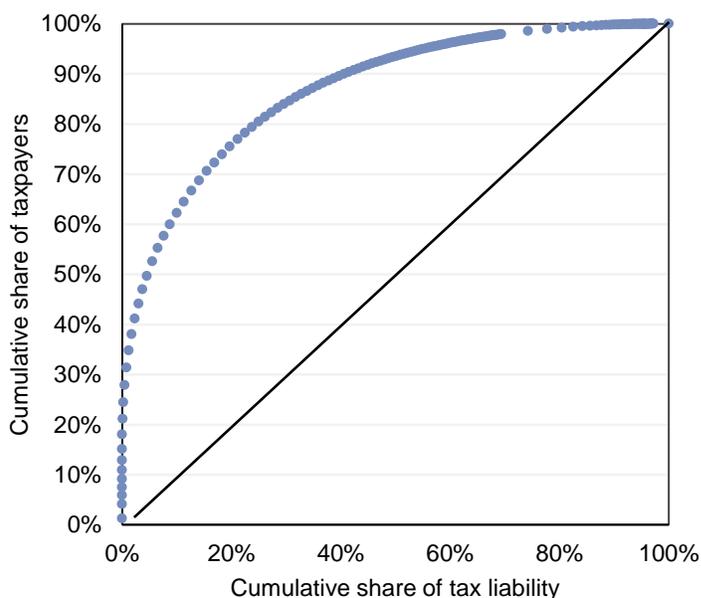
Source: World Bank (2016)

49 In particular, the scope for increasing the progressivity of personal income tax (the largest source of tax revenue) for purposes of equity and revenue increases appears to be limited. Due to the skewness of the income distribution, the top 6% of assessed income tax payers were liable for 50% of 2014's personal income tax revenue.⁴⁰ The concentration curve in Figure 10 illustrates this by plotting the cumulative share of the personal income tax liability against the cumulative share of taxpayers, ordered from poorest to richest. The diagonal line indicates where the personal income

⁴⁰ Calculated from data published by SARS (2016).

tax burden is shared equally among all taxpayers. A concentration curve above the diagonal line (as is the case here) indicates that the tax is progressive, i.e. the rich pay more taxes than when it is shared equally, whereas the poor pay less. The concentration curve for South African personal income tax is highly convex, indicating the extent of the skewness in the income distribution.

Figure 10: Concentration curve of personal income tax payers, 2014



Source: South African Revenue Service (2016)

4.1.3 Service delivery

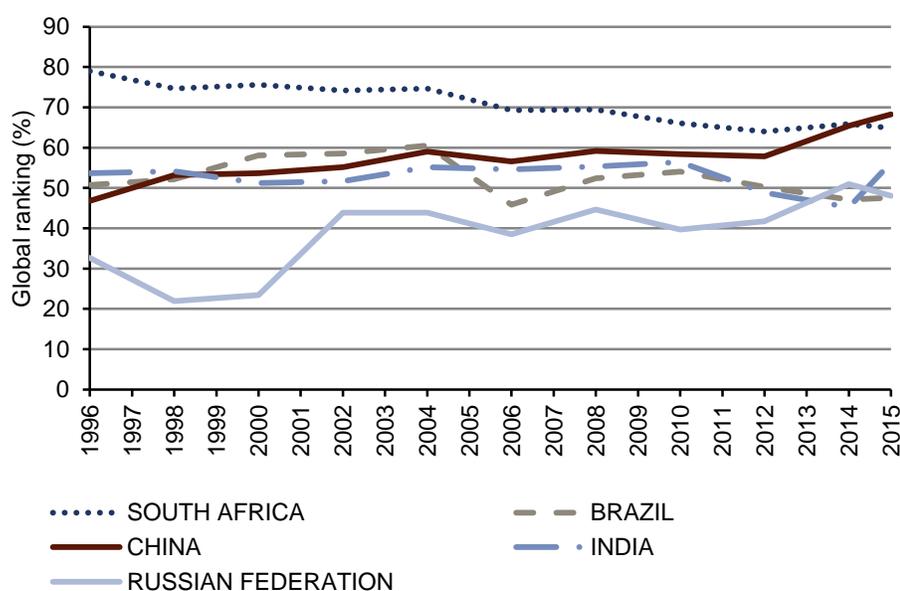
50 With an already relatively high tax burden, the introduction of new and/or higher taxes will likely be met with some resistance. An improvement in the quality of public health services will greatly strengthen the acceptability of NHI-induced tax increases, especially since the quality of public service delivery (including healthcare) is now much lower than in the past. Figure 11 illustrates this deterioration and the public's increasing dissatisfaction with the situation by comparing the global ranking of South Africa's government effectiveness percentage⁴¹ to those of the other BRICS countries.⁴² South Africa's performance clearly worsened between 1996 and 2015. The trend shows a decrease of 15 percentage points from 79% to 64% over that 20-year period. Although not quite as big as the decline for South Africa, it is only Brazil that also showed a decline in the

⁴¹ "Government effectiveness" refers to the perceptions of the quality of public and civil services, the degree of independence from political pressures, the quality of policy formulation and implementation and the credibility of the government's commitment to such policies.

⁴² World Bank. 2016. Worldwide Governance Indicators. Available: <http://data.worldbank.org/data-catalog/worldwide-governance-indicators>

country's government effectiveness. However, Brazil's ranking improved over the first decade, after which it decreased again – it did not experience the same continuous decline in government effectiveness as South Africa over the period as a whole. The governments of Russia, India and China all succeeded in delivering more effective services in 2015 than in 1996. The increased dissatisfaction with service delivery in South Africa, as demonstrated by public protests, suggests that proof of better service delivery has become a prerequisite for any tax increase. This creates a timing issue since it would be difficult to increase taxes before the NHI is operational and public health services are regarded as effective.

Figure 11: Government effectiveness: BRICS countries



Source: World Bank (2016)

4.2 Alternative measures before increasing taxes

51 Section 3 of this report described the sources of tax revenues currently proposed to fund NHI. However, as discussed above, the scope for new or higher taxes is very limited. It would therefore be more appropriate to seek funds from sources other than tax, before introducing new and higher taxes. The following three alternative measures can be implemented before increasing the tax-to-GDP ratio:

- (i) Drastically improve the quality and efficiency of public health services;
- (ii) Save on existing expenditures; and
- (iii) Reprioritise the current allocation of funds in order to free up resources for health services.

- 52 Improved quality and efficiency of public health services will mean that more and better public health services can be provided using the same amount of funds. Should the need arise to increase the tax burden in the future, the improved quality of services will make it more acceptable to the public, as discussed in section 4.1.3. Given the likely high cost of the NHI, government transfers to this programme should be conditional on real savings effected and transferred from other government votes and programmes. In the first few years funding could also come from reprioritisation within the existing macroeconomic constraints of the national budget. As the economy improves and fiscal consolidation achieves the desired results, the high priority enjoyed by health may succeed in securing a larger portion of the growing government budget, without the need for new or higher taxes.
- 53 The characteristics of the envisaged NHI in relation to the different possible funding resources suggest a phasing-in process, such as the process described in the previous paragraph. The case for a phased approach is strengthened by the uncertainty about the cost of the NHI and the fragile fiscal position. Such an approach allows sufficient scope for learning-by-doing and on-going cost discovery. Moreover, it allows for informational feedback and real-time corrections in efficiency, financial arrangements and the utilisation of varied sources of finance. The different phases described in the White Paper testify to the acceptability of such an approach. It is important to allow for sufficient flexibility to deal pragmatically with unforeseen factors and correct for unintended consequences. This approach would be greatly strengthened by the development of a much finer and detailed multi-year financing programme within each phase.
- 54 Only once these alternative measures have exhausted all possibilities to free up resources to finance NHI would it be appropriate to consider new or increased tax rates.

4.3 Considerations when increasing taxes

- 55 If it is indeed decided to introduce new taxes or increase tax rates, some theoretical and practical aspects must be considered. South Africa is characterised by great income inequalities and it is therefore important to determine what the impact of taxes on inequality will be. The design of the tax system is vital to its success and its impact on the economy.

4.3.1 Impact on equality

- 56 The redistribution policy of the South African government constitutes a mix of revenue and expenditure measures. It has been proven though that by far the biggest impact on the Gini coefficient as indicator of inequality, is achieved via the expenditure side of the national budget. In

this regard Van der Berg⁴³ showed that the Gini coefficient of income per person in 2006 decreased by 17 points (from 0.69 to 0.52) when the distribution of income before grants, subsidies and personal taxes was compared to the distribution after the value of grants and subsidies were added. When taxes were subtracted as well, the Gini coefficient decreased by only 5 additional points (from 0.52 to 0.47). It was concluded therefore that public expenditures have decreased inequality much more than tax measures.

- 57 Recent research commissioned by the South African National Treasury,⁴⁴ following on from Lustig,⁴⁵ confirms South Africa's extensive fiscal redistribution. The efficacy of South Africa's fiscal redistribution compared to other middle-income countries was analysed by Lustig, et al.⁴⁶ The authors calculated the Gini coefficients for market, disposable, post-fiscal and final income,⁴⁷ which enabled a comparison of income distribution before and after the impact of fiscal policies. Their findings reveal that Peru, Indonesia and Columbia have limited fiscal redistribution, whereas the fiscal redistribution of South Africa, Brazil and Chile is more extensive. The alarming finding, however, is that the Gini coefficient after fiscal redistribution in South Africa was still worse than the primary (market) Gini coefficient in countries such as Brazil. Whilst an increase in taxation of higher income tax payers may have important symbolic value, the revenue benefit for the fiscus is unlikely to be big and should be weighed up against the risk of reduced compliance, such as increased avoidance, evasion or reduced work effort.
- 58 In addition, and in line with the risks mentioned here, it is important to consider the impact of increasing tax rates on the incentive to invest. A large literature⁴⁸ finds an adverse relationship between tax rates (specifically, corporate income tax rates) and investment. Although measurements of the size of the effect differ, the overarching finding is that the relationship is negative. That is, higher tax rates generally lead to lower investments and/ or capital flight.

⁴³ Van der Berg, S, 2009. Fiscal incidence of social spending in South Africa, 2006. Stellenbosch Working Paper Series No. WP10/2009

⁴⁴ Inchauste, G, Lustig, N, Maboshe, M, Purfield, C & Woolard, I, 2015. The distributional impact of fiscal policy in South Africa. Policy Research Working Paper Series 7194, The World Bank.

⁴⁵ Lustig, N, 2014. "Fiscal Policy, Inequality and the Poor in the Developing World". Round 1. CEQ Working Paper No. 23, Center for Inter-American Policy and Research and Department of Economics, Tulane University and Inter-American Dialogue, forthcoming.

⁴⁶ Lustig, N, 2015. "Inequality and Fiscal Redistribution in Middle Income Countries: Brazil, Chile, Colombia, Indonesia, Mexico, Peru and South Africa". Working paper 1505, Tulane Economics Working Paper Series. Tulane University, Tulane.

⁴⁷ See diagram 1 and the accompanying explanation in Lustig, et al. (2015) for a discussion on these concepts.

⁴⁸ This literature is discussed in Djankov, S., Ganser, T., McLiesh, C., Maralho, R. and Shleifer, A. (2010). "The effect of corporate taxes on investment and entrepreneurship". American Economic Journal: Macroeconomics. p 31 – 64. Available: <https://www.enterprisesurveys.org/-/media/GIAWB/EnterpriseSurveys/Documents/ResearchPapers/Effect-of-Corporate-Taxes-on-Investment.pdf>

4.3.2 Earmarked revenue⁴⁹

59 Earmarking the revenue from new or higher tax rates for the exclusive use by the NHI, implicitly institutionalises health as a superior priority above the other public services that need to be funded from the common revenue pool. Healthcare’s escape from the budgetary prioritisation process then results in a mismatch between parts of the revenue stream and parts of the expenditure flows, with clear risks to efficient cash-flow management. Earmarking may also result in the protection of the NHI-programme against the expenditure adjustments that may from time to time be necessary in the event of adverse fiscal shocks. This is in contrast to the phased approach suggested in the White Paper and discussed in section 4.2. From the point of view of effective management of public funds, earmarking therefore does not seem to be the best way forward.

4.3.3 Design as a benefit tax

60 To be able to view and design the funding as a benefit tax, there should be a very close correspondence between cost and benefit. At the aggregate level such a condition might be met: because of the compulsory “membership”, the same group of people will be paying and benefitting, which is a minimum requirement for allocative efficiency. The correspondence problem arises at the individual level. As a result of the insurance character of the NHI, many members are bound to experience big differences between payment and benefit. It would be possible to effect administrative efficiency if the governance rules are clearly set out from the start, isolating the process from opportunistic political interference. However, if cross-subsidisation is considered, the feasibility and administrative complexity of setting and implementing a differentiated benefit tax on the basis of ability to pay, rather than because of prospective benefits from the NHI, may disqualify a benefit tax as a source of financing for NHI.

4.3.4 Design as an insurance scheme

61 Another consideration when attempting to collect additional revenue for NHI funding, is the option to design the financing in the form of an insurance scheme. This could work if premiums are set relative to types of services (as is the case for private medical schemes), inclusive of factors such as no-claim bonuses. Funding would then have at least two components: membership premiums (in line with benefits to be paid for) and a transfer from the national budget (as a common-pool contribution) to assist means-tested members who cannot afford premiums pertaining to a basic level of health service. In an admittedly unsophisticated manner, the allocation from the national budget – or part thereof – can also be interpreted as internalising the positive externality associated

⁴⁹ Also see section 7 (Appendix A) for a discussion of earmarked taxes in the context of NHI.

with the improved health status for the entire community. Moreover, such a “nationalised insurance scheme” reduces the problem of adverse selection associated with private healthcare.

4.4 Potential tax options

62 While it is important to remember that the scope for increasing the tax burden is limited, if the decision is made to increase existing tax rates, there are a few options that can be considered

4.4.1 Corporate income tax

63 Steenekamp⁵⁰ judged corporate income tax rates in South Africa to be low, implying a potential to generate more revenue from this source. Recent international trends, however, have been to reduce corporate rates, thus making one cautious to suggest this as a source of NHI funds.⁵¹

4.4.2 Change in the composition of taxes

64 If an increase in specific tax rates is not feasible, one may consider whether a change in the composition of taxes from direct to indirect sources holds promise of generating significant additional revenue, in particular via higher economic growth. A systematic OECD investigation of 15 European Union countries concluded that a shift towards indirect taxation seemed unlikely to constitute a panacea.⁵² In some countries, however, it may represent a useful element in an overall strategy to improve growth performance by means of a reduction of the fiscal burden on labour – in other words, possibly incentivising a substitution of labour for leisure. This would presumably also generate extra growth-related tax revenue. Should such a compositional shift be considered for South Africa, the revenue is unlikely to contribute substantially to the funding of NHI.

65 If anything, a compositional shift consisting of increases in indirect taxes without reducing direct personal or corporate income tax rates may be considered – a non-revenue-neutral change. Since the short-term impact on economic growth may be negative, the timing of such rate increases is crucial. South Africa’s relatively low reliance on VAT, compared to most developing countries, does

⁵⁰ Steenekamp, T.J. 2007. Tax performance in South Africa: a comparative Study. Southern African Business Review, Vol. 11, No. 3. (p.1).

⁵¹ Devereux, M.P. and Sorensen, P.B. 2006. The Corporate Income Tax: International Trends and Options for Fundamental Reform. European Commission Economic Papers. Available: http://ec.europa.eu/economy_finance/publications/publication530_en.pdf;

OECD Tax Database. 2016. Available: <http://www.oecd.org/tax/tax-policy/tax-database.htm>

⁵² OECD. 2006. Macroeconomic effects of a shift from direct to indirect taxation: a simulation for 15 EU member states. Available: <http://www.oecd.org/tax/tax-policy/39494151.pdf>

suggest scope for a higher rate.⁵³ However, a restraining factor may be the increased cost of zero-rating in terms of revenue foregone to higher-income tax payers who also benefit from zero-rating.⁵⁴

4.4.3 Untapped revenues

66 One approach that may well generate some extra income, but unlikely in a way that could accurately anticipate unintended effects, is to carefully survey the untapped revenue raising opportunities offered by all existing taxes in terms of rate increases and compliance improvements, and consider various smaller additional taxes as well. However, the harnessing of “rats and mice” taxes will not only signal a sense of desperation, but will also detract from a simple and administratively efficient tax system. Also, the feasibility of such additions remains subject to the doubtful scope for an increase in the overall tax burden.

4.5 Summary

67 The low expected economic growth and already high tax burden leave little room for funding the NHI via higher public debt and increased taxes. Instead, other measures must first be pursued: increased quality and efficiency of healthcare services using the same amount of funds, saving on existing expenditure in the rest of the national government budget and the reprioritisation of the current allocation of funds. Only once all the potential revenue from these sources has been extracted, should new and increased taxes be considered.

68 Any tax financing of the NHI must be considered in the context of possible externalities, as well as the principles of common pool financing. In other words, the prospect for tax increases has to be determined by standard considerations applying to any choice of an additional tax, namely aggregate fiscal affordability and the standard properties of a good tax. In this regard, from the perspective of the National Treasury, NHI has no superior claim above any other government expenditure to any particular revenue source or to the common revenue pool, and should compete on equal footing for the allocation of government funds in the budgetary prioritisation process.

⁵³ This view is strengthened by Steenekamp’s (2007) finding that South Africa’s VAT effort and effective tax rate are low. He came to this conclusion having followed the representative tax system approach which measures average effective rates for a sample of 29 developing countries.

⁵⁴ Jansen and Calitz (2016, forthcoming) calculate that if the lowest four deciles of households (in terms of household expenditure) are assumed to constitute the intended beneficiaries of zero-rated consumer goods, the cost in terms of foregone revenue (on account of the upper six deciles also benefitting from the zero-rating), amounted to R5.265 billion (2012 prices).

5 Funding Healthcare for All

- 69 It was mentioned in the introduction to this report that there is uncertainty regarding the policy formation process and context of this call for submissions on NHI funding by the DTC. In part this is due to the quoted statements in the NHI White Paper, but also because the service delivery model has not been finalised. The NHI White Paper acknowledges that there are many different aspects that make up the complete NHI structure, including information technology systems, the training of human resources, building of facilities, management, administration and payment systems, procurement of medical devices, pharmaceuticals and other products, as well as service delivery in its entirety. The funding of the NHI is therefore one of many factors that need detailed consideration and must be developed in conjunction with these other systems that will comprise the NHI. In designing any one of these systems or integral aspects of healthcare provision, it is important to evaluate the impact of that particular design on the operation and requirements of all other aspects contributing to the successful introduction of the NHI.
- 70 In order to clarify the above, consider for instance human resource development and the building of healthcare facilities. If these two aspects are planned independent of each other, one might for example end up with thousands of community health workers in a few years' time, but no new or improved primary clinics to support these professionals (if it was for example also decided to only upgrade and build provincial hospitals). Although extreme, this example serves to explain how isolated decisions may hamper or frustrate improved healthcare delivery for all. Additionally, any such misaligned policy choices not only result in inaccurate cost estimates, but will lead to the inefficient use of public and private funds.
- 71 Another example relates to section 5.4 in the NHI White Paper that lists certain instances where co-payments will be charged. Depending on the exact benefit package that is finally decided on, co-payments may or may not contribute substantially as a funding source. Defining a benefit package will also impact directly on resource requirements in terms of healthcare professionals, pharmaceuticals, medical devices, types of facilities to be built/ upgraded first, etc. It is clear that each of these requirements will again have unique cost implications and therefore underpin the total funding need.
- 72 However, given our analysis and discussions in this report – arguing that an immediate increase in public expenditure on health services is not a likely scenario, as illustrated in section 2.1 – it is more valuable to focus on what steps can be taken incrementally towards the introduction of the NHI. In other words, it is more useful to consider where the 'easy gains' are in terms of changes that can be made in the current environment that will improve service delivery and still constitute progress towards NHI implementation.

- 73 This brings us to an important point in the report that must be highlighted: the fact that although additional financial resources allocated to public health expenditure will not be substantial in the short to medium term, this should not prevent improved provision of healthcare services to the majority of the population. It is imperative to improve healthcare services (access and quality) for all South Africans, especially those who have to rely on public health services. Committed efforts to improve health services and uphold the constitutional obligation to provide access to healthcare services, are crucially important. In our view, a gradual move towards a “new system” will be more sustainable than complete overhaul of the existing health system in a short timeframe with disruptive economic consequences due to increased taxes and many other factors. (The summary in section 4.5 conveys precisely this idea.)
- 74 Using existing budget allocations more efficiently will achieve many of the desired outcomes. For instance, large allocations towards the upgrading of health facilities and improvement in quality are often under-spent, although such changes will go a long way towards better service delivery for patients. Increased training of doctors are also possible without burdening the fiscus or the health budget further, if private medical schools and hospitals were to be allowed to assist with that training.⁵⁵ There are also numerous private sector initiatives within the medical schemes and health insurance products environment that can potentially increase coverage in that sector. Regulatory constraints make the introduction of such products difficult, but if allowed, those would further alleviate the burden on the public sector by ensuring access to private providers for more people. A lesser burden on the state implies in turn some resources becoming available to improve access and service delivery via public hospitals and clinics. In this way, more citizens will be able to access much needed healthcare services in both sectors.
- 75 It should be noted, however, that the NHI White Paper foresees only a limited “complementary” role for medical schemes, stating that “[t]he share of public expenditure on health will also be affected by restructuring of medical schemes arrangements in response to the services covered by the NHI Fund.”⁵⁶ Conversely, in its own macroeconomic analysis of the tax system the DTC states that quality healthcare will be provided to South Africans that will either be free at the point of service, or will be paid for by publicly or *privately funded insurance*.⁵⁷ It is important to acknowledge that the amendments to the medical scheme industry as envisioned in the NHI White Paper, will limit the private insurance system’s ability to increase access to health services.

⁵⁵ See the full Econex report titled *Identifying the determinants of and solution to the shortage of doctors in South Africa: Is there a role for the private sector in medical education?* August 2015. Available at: www.econex.co.za

⁵⁶ Department of Health of the Republic of South Africa. (2015). National Health Insurance for South Africa: Towards Universal Health Coverage. *Version 40*. (par 399, 262)

⁵⁷ Davis Tax Committee. (2016). Macroeconomic analysis of the tax system and inclusive growth in South Africa. (p 11). Available: <http://www.taxcom.org.za/docs/20160421%20Second%20and%20Final%20Report%20on%20Macro%20Analysis%20Framework%20-%20Full%20Report.pdf>

76 It is not the aim to put forth an entirely new plan for achieving universal health coverage in South Africa, but it should be noted that the opinions expressed in this report must *not* be interpreted as stating that it is impossible to provide healthcare services for all. However, the current proposals in the NHI White Paper are not, in our view, the most efficient or feasible way to do so. As set out in section 44, many factors have to be taken into account when designing appropriate funding mechanisms that are feasible and sustainable in the long term. Gradually increasing funding for health services as improved outcomes become apparent, before introducing additional or new taxes, seems a more sensible way forward.

6 Concluding Remarks

- 78 The DTC issued a call for proposals for NHI funding on 1 September 2016. The uncertainty surrounding the funding mechanisms and cost of NHI evokes a sense of trepidation. It is therefore important to consider the economic environment in which the NHI and the funding suggestions contained therein will be implemented, as well as the principles that must be considered when deciding on the most appropriate funding sources, especially in the form of new or higher taxes.
- 79 Previous analyses by Econex have shown that the White Paper's calculation of the shortfall of R79.1 billion in 2025/26 (in 2010 prices) is incorrect, mainly due to the unrealistic assumption of a GDP growth rate of 3.5% over the period. We recalculated the shortfall based on more realistic projected growth rates, to find a shortfall of R111 billion in 2025/26 (in 2010 prices). This has important implications not only for the size of funding required, but also the funds that can be collected, especially in the form of taxes. The three main sources of funding discussed in the White Paper are taxes, namely a new payroll tax, increased VAT and a surcharge on taxable income. We calculated the potential revenue that can be collected from the first two of these, showing that it is not sufficient to cover the shortfall, even when the maximum rates in the White Paper's illustrative scenarios are applied over the whole period. The remaining shortfall will impose a large additional burden on income tax payers in the form of a new surcharge on taxable income. Other suggested sources of funding, e.g. a shift to NHI of current government subsidies to medical schemes (on behalf of its employees), will help ease the burden.
- 80 South Africa already has a comparatively high tax-to-GDP ratio, meaning there is limited scope to increase the tax burden. The economic and fiscal environment therefore indicates that it will be more appropriate to first seek funding by means other than a higher tax burden. Generally speaking, this entails the more efficient utilisation of revenue generated by existing taxes: providing higher quality healthcare; saving on other expenditures; and more effective service delivery and reprioritisation of the current allocation of funds in other sectors of government so as to free up resources for reallocation to public healthcare.
- 81 It was further emphasised that without efficient service delivery, it is difficult to introduce a new tax to fund the NHI. As such, from a practical point of view, the quality and efficiency of public sector healthcare need to be improved in order to make the increased tax burden acceptable to the public. A phased approach will provide the opportunity for learn-by-doing, ongoing cost discovery and real-time information feedback, which will enable corrections in efficiency, financial arrangements and the utilisation of financing sources. This should also ensure that decisions take into account the needs and timing of the other components of NHI, as well as the impact that a decision in one

component will have on others. For example, the decision on the benefit package that will be provided, will significantly impact on the funding requirements.

- 82 Most importantly, it was argued that the funding proposals in the White Paper are not the most appropriate way of ensuring a sustainable financing source for the NHI. Instead, we suggested that gradually increasing the funding for healthcare as the improved health outcomes become apparent, before new or additional taxes are introduced, seems to be a more sensible way to successfully implement and fund the NHI.

7 Appendix A: Earmarked Taxes⁵⁸

- 83 An earmarked tax is a tax from which the revenue collected is reserved for specific expenditure. Internationally, healthcare is often funded with earmarked taxes from alcohol and tobacco. One of the first examples of using earmarked taxes for tobacco is the Australian state of Victoria in 1987, in which revenue from taxes on tobacco was used to fund an independent health promotion foundation, VicHealth.⁵⁹ Similarly, in the United Kingdom and Belgium, tax revenue collected from cigarette sales is earmarked for spending on healthcare.⁶⁰
- 84 In South Africa, the proposition put forward is that NHI expenditure is funded to a large extent by ear-marked income taxes in the form of a payroll-related contribution. Other countries in which this happens are France and Italy. In an African context, Ghana's National Health Insurance Levy is earmarked for health expenditure. Overall, though earmarked taxes are a relatively small component of healthcare expenditure.⁶¹

7.1 Classification of earmarked taxes

- 85 Earmarked taxes are classified as either weak or strong, and as narrow or broad.⁶² Strong earmarked taxes are tax revenues which must equal government expenditure. That means that government expenditure is restricted by the amount of revenue collected from a particular tax. Earmarked taxes are weak when earmarking is used predominantly as an accountability enhancing tool. Earmarking is intended in this case to make the system more transparent and to inform the taxpayer of the cost associated with government expenditure. However, it is not intended to stipulate that government expenditure must equal tax revenues. Wide earmarking refers to allocating tax revenues to an entire spending programme, and narrow earmarking allocates tax revenue to specific projects within broader spending programmes.
- 86 Proponents of earmarking generally refer to strong earmarking since the requirement that government expenditure remain equal to tax revenue is necessary to achieve the accountability enhancing quality of earmarked taxes.⁶³ Weak earmarking (i.e. no requirement that expenditure equal revenue) fails to constraint government expenditure since government is able to augment

⁵⁸ Based on Econex Health Reform Note 14, August 2011. Available at: www.econex.co.za

⁵⁹ Doetinchem, O. (2010). Earmarking of Tax Revenue for Health. World Health Report: Background Paper No. 51.

⁶⁰ Mossialos, E., Dixon, A., Figueras, J. and Kutzin, J. (2002). "Funding Health Care: Options for Europe." European Observatory on Health Care Systems Series, World Health Organisation.

⁶¹ Savedoff, W. (2004). Tax-Based Financing for Health Systems: Options and Experiences. World Health Organization: Discussion Paper.

⁶² Wilkinson, M. (1994). Paying for Public Spending: Is there a role for earmarked taxes? Fiscal Studies, Vol. 15, No. 4. (p 119-35).

⁶³ *Ibid.*

spending with revenue from general taxes. Effectively, weak earmarking constrains the minimum level of government expenditure while leaving the overall level of expenditure to government's discretion.⁶⁴

87 The type of earmarking that would be required in the case of the NHI is weak, wide earmarking.

7.2 Theoretical elements

88 The use of earmarked taxes is a contentious issue. Proponents of public choice models view government as self-interested and view earmarking as a mechanism through which accountability can be enhanced. In this view, earmarking revenues constrain public spending as government is limited in how revenue can be spent. Traditional public finance theory on the other hand views government as benevolent and sees earmarking as excessively restrictive. In this view, government spending should be determined by policy decisions rather than by how much revenue is raised. Earmarking revenue reduces flexibility in government spending. So while public choice theorists propose that earmarking tax revenues reduces wasteful government expenditure, public finance theorists suggest that government is limited in its ability to allocate resources as it sees fit. They explain that given that tax revenue largely follows the business cycle, restricting expenditure to the revenue generated from earmarked taxes will mean that spending is largely dependent on fluctuations in the business cycle rather than on the needs of the population.

89 Indeed, during recession, tax revenues tend to decrease while the demand for healthcare tends to increase. Under weak earmarking, recessionary periods might require that health expenditure be supplemented by other tax revenues, while in expansionary period expenditure on other programmes may well be "raided" from revenues earmarked for health expenditure. This undermines the argument in favour of earmarking tax revenues, since the accountability-enhancing characteristic of earmarking taxes falls away.⁶⁵ For this reason, the effectiveness of earmarked taxes falls away. Their lack of fiscal flexibility and the fact that they often do not raise the required revenue limit the effectiveness of earmarking tax revenue.⁶⁶

7.3 Political support and the benefit principle

90 There is likely to be differences in opinion on the attractiveness of earmarked taxes across different government departments. Health departments are likely to be proponents of earmarked taxes since

⁶⁴ Savedoff, W. (2004). "Tax-Based Financing for Health Systems: Options and Experiences. World Health Organization: Discussion Paper.

⁶⁵ British Medical Association. (2004). Could a Hypothecated Tax Close the Gap? Available: <http://www.bma.org.uk/Archive/healthcarefund-ingreview.jsp?page=18&media=print>

⁶⁶ Doetinchem, O. (2010). Earmarking of Tax Revenue for Health. World Health Report: Background Paper No. 51.

their revenues will be protected. However finance departments are more likely to oppose the implementation of earmarked taxes since this will interfere with their discretion and flexibility in budgetary allocations.

- 91 In terms of the benefit principle, one of the key motivating factors for the introduction of earmarked taxes is the argument that they provide a strong and explicit link between tax contributions made and health benefits received. This is called the benefit principle. They are said to increase taxpayers' willingness to pay, since payers will have a clear idea of what their tax contributions are being used for. In the case of the NHI which is envisaged to be funded by progressive income taxes, the benefit principle is unlikely to apply as it is unlikely that taxpayers (insofar as they represent wealthier members of society) will switch to public health services on a large scale. Progressive income taxes are therefore likely to be substantial vertical cross-subsidies and taxpayers are therefore likely to be less willing to pay.⁶⁷

⁶⁷ Van der Heever, A. (2011). Introduction to Health economics and Systems: Financing Health Care. Graduate School of Public and Development Management.

8 Appendix B: Negative Externalities of Increased Sin Taxes⁶⁸

92 This appendix discusses some of the negative consequences of increasing excise taxes. This is in the context of using excise taxes to fund the NHI.⁶⁹ This is not a full analysis of excise taxes. Rather, it serves to highlight the potential distortions and unintended consequences of increasing excise taxes.

8.1 Unintended effects

93 Excise taxes are levied on goods such as alcohol and tobacco in order to compensate for the fact that consumption of these goods results in a negative externality for society that is not compensated for by the price paid by individual consumers of those goods. One of the options put forward as a possible source of funding for the NHI is an increase in excise tax rates. Important to consider in increasing any tax rate is the extent to which different tax rates will be distortive, and if they are, what the unintended consequences will be. This appendix discusses the possible impact of increase excise tax rates.

94 As mentioned before, excise taxes are levied when a negative externality to the consumption of particular goods exists. It is however necessary in this context to consider whether the standard fiscal criteria of economic efficiency and equity are met. In other words, will an increase in excise tax rates reduce the negative externality by a larger margin than other regulatory and fiscal interventions, and will this happen at a lower cost to the community?

95 Excise taxes, like most indirect taxes, are limited in their ability to remedy negative externalities by a greater margin than the additional welfare cost experienced by consumers. Some of the unintended consequences of increasing excise taxes are discussed below, namely:

1. Loss of consumer surplus;
2. Excess tax and tax inefficiency;
3. Adjustment costs and allocative efficiency; and
4. Unfair distribution of tax incidence.

⁶⁸ Summary of the Econex report "The external cost of alcohol consumption in South Africa: The effectiveness of excise taxes and other appropriate interventions" (August 2010).

⁶⁹ Department of Health of the Republic of South Africa. (2015). National Health Insurance for South Africa: Towards Universal Health Coverage. *Version 40*. (par 303, 304). Available at: http://www.gov.za/sites/www.gov.za/files/National_Health_Insurance_White_Paper_10Dec2015.pdf

8.1.1 Loss of consumer surplus

96 The introduction or increasing of an excise tax results in decrease in consumer surplus.⁷⁰ Although some of this consumer surplus is transferred to government in the form of increased revenue receipts from the tax, the net effect is negative. As mentioned above, the objective of imposing an excise tax is to counteract the negative externality associated with consuming certain products. However, given that excise tax is not ear-marked, excise tax revenue goes towards the general fiscal budget. This revenue is therefore not necessarily used to remedy the externality problem, so the largely dissipated benefit to the consumer (and therefore taxpayer) of a marginally larger fiscal budget is unlikely to exceed the tax paid by the consumers. The size of the loss to consumer surplus will depend on the difference between the price paid before increasing the excise tax and price paid after the increase.

8.1.2 Excess burden and tax inefficiency

97 The excess tax burden is the deadweight loss associated with an increase in taxes. It is the portion of consumer surplus that is diminished but not transferred to government in the form of tax revenue. This results from the fact that increased prices associated with a higher tax rate means that consumers will pay more for the units of the products that they consume, but they will also consume a smaller quantity and in some cases, may stop consuming the product. The lower quantity consumed as a result of a tax increase therefore causes a deadweight loss: no revenue is generated so unlike transfer from consumers to government, surplus is destroyed.

98 The size of the deadweight loss depends on the price elasticity of demand (since this will determine the size of decrease in quantity demand as a result of increased tax rates and therefore increased prices), and on the tax rate. For example, if the price elasticity of demand is equal to one, then an increase in tax of 50% will result in an increase in the deadweight loss of 125%. Increasing excise taxes therefore results in disproportionately high increases in the deadweight loss associated with the tax.

8.1.3 Adjustment costs and allocative efficiency

99 Excise taxes are designed to decrease both the demand supply of certain products. A consequence of this, however, is that producers of the product need to make adjustments to their operations, many of which are costly. For example, workers may need to be retrenched to

⁷⁰ Consumer surplus can be thought of as the difference between the price an individual consumer is willing to pay for product and the price that they actually end of up paying. That is, if the difference between the price that the consumer is willing to pay and what they actually paid is large (with the price they are willing to pay being higher), their consumer surplus will be large. If the imposition of a tax increases the price they actually pay, so that the gap between the price they are willing to pay and what they actually pay decreases, their consumer surplus will decrease.

accommodate smaller scale of operations – a significantly expensive process for producers. Retrenched workers in turn face the costs associated with unemployment. For consumers too some adjustment costs exist. Consumers who cannot afford higher prices resulting from higher tax rates face the cost of finding suitable substitutes. In some cases, suitable substitutes are potentially dangerous products, as discussed later when we talk to unmeasured markets. Tax increases therefore have unintended inefficient consequences in the form of adjustment costs to both producers and consumers of taxed products.

8.1.4 Tax incidence and fairness

100 Consumers with lower price elasticity for the demand of a product will be the most affected by increased taxes. In the case of alcohol for example, excise tax cannot distinguish between moderate drinkers (by far the largest portion of the market) and heavy “at-risk” drinkers of alcohol. and so if there is a higher proportion of moderate drinkers with inelastic demand relative to the number of heavy at-risk drinkers, moderate drinkers will effectively be paying a higher proportion of overall tax revenue and will be “paying for most of the sins” of heavy drinks. This is an unfair outcome.

8.2 Unrecorded market

101 An important element to consider when either levying or increasing excise taxes is what the impact of increasing prices will be on the size of unrecorded and illicit markets for products. In both the tobacco and the alcohol industry, evidence suggests that increases in excise tax rate shifts consumers into the illicit market, thereby limiting health objectives in addition to disincentivising investment and depriving government of revenues.

102 In South Africa, unrecorded consumption is thought to comprise just over 26% of the total alcohol market and between 24% and 30% of the tobacco market. Price differentials between legal and illicit markets are often large, and increasing excise taxes will exacerbate this gap. Poorer consumers (and others) would likely substitute away from legally produced and taxed product to illicit markets in order to avoid higher prices with the consequence that net economic and health benefits will be eroded and may ultimately be negative.

103 Implementing or increasing excise taxes may therefore have various unintended consequences. These need to be considered if excise taxes are to be increased in order to fund the NHI.