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# Medical Scheme Tax Credits and Affordability

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*The 2017 version of the NHI White Paper calls for tax revenue currently paid to medical scheme beneficiaries in the form of medical scheme tax credits to be reallocated towards funding the NHI.[1] Econex assesses the impact of the tax credit on the affordability of medical schemes for existing members. In particular, we consider the proportion of medical scheme beneficiaries for whom the removal of medical scheme tax credits would make medical scheme membership unaffordable.*

*Importantly, we consider the impact of removing the tax credit ceteris paribus; i.e. we consider only the impact of removing tax credits. We do not consider how medical scheme affordability will change with adjustments to risk pools such as mandatory membership, risk equalization or single benefit options. The analysis therefore shows the theoretical impact of removing the tax credit on the affordability of medical schemes.*

*We find that the removal of medical scheme tax credits will therefore affect poorer medical scheme beneficiaries disproportionately. In total, 21.86% of medical scheme beneficiaries will move above the affordability threshold with the removal of tax credits, i.e. 1.9 million beneficiaries in 2016.*

## About ECONEX

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1. *Department of Health. 2017. National Health Insurance for South Africa: Towards universal health coverage. White paper. Par. 243, p 48.*

## 1 Introduction

The NHI White Paper published in June 2017 proposes that tax revenue currently directed towards medical scheme beneficiaries in the form of medical scheme tax credits be redirected towards funding the NHI.[2] In 2014/15, the total amount paid to the principal members of medical schemes in the form of medical scheme tax credits was approximately R 18.5 billion.[3] The primary purpose for the tax credit is to "reimburse" taxpayers making use of the private healthcare sector. The credit is therefore only available to tax payers and represents a transfer from government to medical scheme members.

This research note assesses the extent to which the tax credit affects the affordability of medical schemes for existing members. Specifically, this analysis considers the proportion of medical scheme beneficiaries for whom medical scheme membership would become unaffordable with the removal of medical scheme tax credits. Importantly, we consider the impact of removing the tax credit ceteris paribus; i.e. we consider only the impact of removing tax credits. We do not consider how medical scheme affordability will change with adjustments to risk pools such as mandatory membership, risk equalization or single benefit options. Nor do we consider the impact of redirecting government subsidisation of medical scheme membership for state employees towards the NHI – another funding proposal put forward in the White Paper released in June 2017.[4] As such, our calculations show the theoretical impact of removing the tax credit on the affordability of medical schemes.

In South Africa, principal members of medical schemes who contribute privately[5] to medical schemes receive the tax credit on an annual basis. This is a tax rebate and the value of the rebate received depends on the number of beneficiaries for whom principal members pay contributions.[6] In 2015/2016 (1 March 2015 to 29 February 2016), principal members received R 270 per month for principal membership, R 270 per month for the first beneficiary, and R 181 per month for each of the remaining beneficiaries for whom they paid contributions. Table 1 provides an example of the value of the tax rebate paid to principal members.

**Table 1: Value of medical scheme tax rebate paid to principal member (2015/2016)**

| No. of dependents | Total annual value of tax credit |
|---|---|
| **0** | R 3 240 |
| **1** | R 6 480 |
| **2** | R 8 652 |
| **3** | R 10 824 |
| **4** | R 12 966 |

*Source: SARS; Econex calculations*
*Note: In the case of "0 dependents", the principal member is the only beneficiary of the medical scheme.*

The tax credit is a set amount; the amount received is inde-

2. *Department of Health. 2017. National Health Insurance for South Africa: Towards universal health coverage. White paper. Par. 243, p 48.*
3. *National Treasury. 2017. Budget Review 2017. Available: http://www.treasury.gov.za/documents/national%20budget/2017/review/FullBR.pdf*
4. *Department of Health. 2017. National Health Insurance for South Africa: Towards universal health coverage. White paper. Par. 243, p 48.*
5. *"Private" distinguishes medical scheme members who pay contributions directly to medical schemes from those who are fully subsidised by their employers. Principal members who pay medial scheme contributions privately may therefore be partially subsidised by employers, but as long as any portion of medical scheme contributions is paid by the member, he/she receives a tax credit and is classified as making private contributions.*
6. *South African Revenue Services (SARS). 2017. Medical tax credit rates. Available: http://www.sars.gov.za/Tax-Rates/Pages/Medical-Tax-Credit-Rates.aspx*

pendent of the value of the contribution paid. The impact of the tax credit on the affordability of medical scheme membership will therefore differ across medical scheme options to the extent that prices of scheme options differ, although the nominal value remains the same. In other words, the rebate as a proportion of the membership premium paid will vary according to differences in price across membership options. In addition, the rebate is only paid to tax payers who contribute "privately" to medical scheme membership. This means that only principal members who pay any portion of medical scheme contributions themselves (as opposed to having medical scheme contributions fully subsidised by their employer) are eligible to receive a tax credit. Medical scheme members whose contributions are fully subsidised by their employer are not eligible for medical scheme tax rebates.

## 2 Dataset and methodology

### 2.1 Data: Income and Expenditure Survey 2010/2011 (IES 2010/2011)

The analysis relies on data from the most recently available Income and Expenditure Survey of 2010/2011 (IES 2010/2011), conducted by Statistics South Africa.[7] In IES 2010/2011, we observe private expenditure on medical scheme contributions, employer subsidisation of medical scheme contributions, private expenditure on medical insurance, and out-of-pocket (OOP) expenditure on healthcare. We calculate overall spending on medical scheme contributions, as well as the portion paid by individuals themselves. All expenditure data are reported at a household level, but medical scheme membership is reported at an individual level. Therefore, although all household members have the same value for medical scheme expenditure, not all household members are beneficiaries of medical scheme coverage.

Given that all medical scheme members within the same household have the same value for medical scheme contributions, we assume that every individual within the household reporting medical scheme coverage belongs to the same medical scheme option.

Using information from the South African Revenue Services (SARS),[8] we calculate the tax rebate payable at a household level, i.e. we calculate the tax rebate payable to the principal member.

The analysis is run for respondents reporting medical scheme coverage. Only respondents in households with non-missing values for medical scheme contributions are included in the analysis. All 2010/2011 values are inflated to 2016 values.

### 2.2 Removing tax credits

The affordability of medical scheme membership should be calculated on the basis of the contribution paid by individuals themselves, as opposed to the overall contribution which may comprise a portion paid by employers. The "private" contribution is the cost incurred as a proportion of household income. In addition, as we explain above, the medical scheme tax rebate is only paid to principal medical scheme members who make private contributions to medical schemes.

Removing medical scheme tax credits will therefore only affect this portion of the medical scheme beneficiary population. In order to understand the impact on medical scheme membership in South Africa, we

7. *Statistics South Africa have released aggregate income and expenditure data from the Income and Expenditure Survey of 2015/2016 (IES 2015/2016). However, detailed expenditure data is not available and it is not possible to observe household level expenditure on medical scheme contributions. Therefore, IES 2010/2011 is the most recently available record of this expenditure for South Africa.*
8. *South African Revenue Services (SARS). 2017. Medical tax credit rates. Available: http://www.sars.gov.za/Tax-Rates/Pages/Medical-Tax-Credit-Rates.aspx*

conduct the analysis for beneficiaries who contribute privately to medical scheme membership.

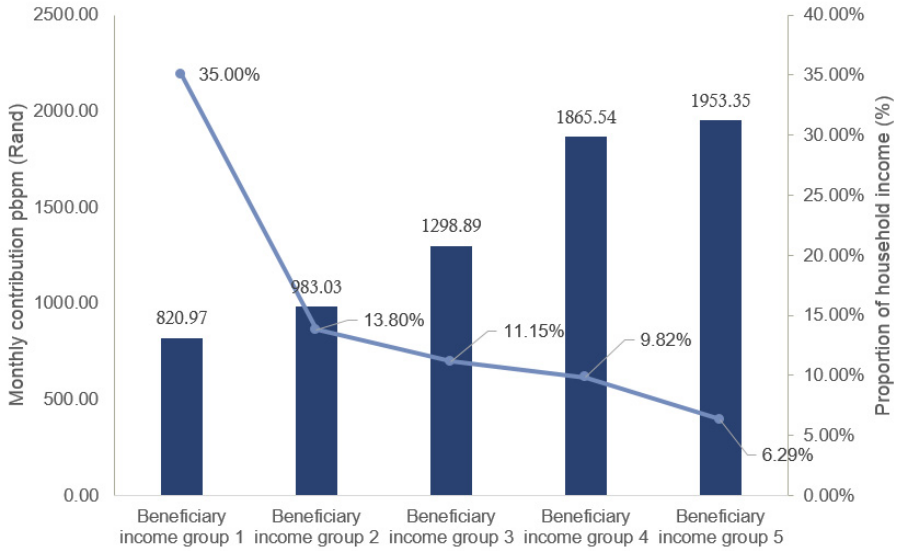
It is important to understand how individuals from different parts of the socioeconomic distribution are affected by the removal of medical scheme tax credits. We divide medical scheme members into quintiles (each comprising 20% of the entire sample of medical scheme members) on the basis of household income. We analyse the impact of removing tax credits across quintiles of medical scheme beneficiaries. We refer to these as "beneficiary income groups".

### 2.2.1 Contributions without receiving tax credits

Medical scheme contributions are calculated by adding private medical scheme contributions to employer-subsidised medical scheme contributions. IES 2010/2011 reports expenditure on an annual basis. To calculate medical scheme contributions on a per beneficiary per month (pbpm) basis, we first divide total medical scheme contributions by the number of beneficiaries per household to arrive at an annual per beneficiary contribution.

We then divide the annual per beneficiary contribution by 12, to arrive at a pbpm contribution. We show average medical scheme contributions by beneficiary income group in Figure 1.

**Figure 1: Average medical scheme contribution by beneficiary income group (private medical scheme members)**




*Source: IES 2010/2011 (Statistics SA); SARS (2017); Econex calculations.*

### 2.2.2 Contributions after receiving tax credits

Using information from SARS, we calculate the impact that medical scheme tax credits have on monthly medical scheme contributions. Conceptually, we think of medical scheme expenditure reported in IES 2010/2011 as expenditure before the impact of the tax credit has been taken into account. Medical scheme contributions described in Section 2.2.1 and shown in Figure 1 therefore show contributions before deducting the tax credit. In order to calculate medical scheme contributions after tax credits have been taken into account, we assume that the tax credit paid by SARS is allocated to contributions paid privately and therefore reduces the value of contributions. After the impact of tax credits has been taken into account, medical scheme contributions are therefore lower and show the cost reducing effect of the medical scheme tax credit.

The value of the tax credit received is calculated at a household level on the basis of the number of beneficiaries in each household, and is shown in Table 1. We subtract the calculated tax credit from private medical scheme contributions reported in IES 2010/2011 to show the impact of the tax credit on medical scheme expenditure. Medical scheme contributions after tax credits are therefore "effective" contributions in the sense that we do not observe them.

We calculate these values to assess the implications for the affordability of medical scheme membership when removing medical scheme tax credits.

### 2.2.3 Medical scheme affordability

Evaluating the impact of tax credits on the affordability of medical schemes requires assumptions about an affordability threshold. This is a maximum proportion of household income allocated to medical scheme contributions above which medical scheme contributions would likely be unaffordable.

The affordability threshold provides an indication of the level of expenditure that one might consider reasonable for medical scheme members to spend on medical scheme contributions.[10] From IES 2010/2011, we calculate average overall health expenditure for beneficiary income groups. The wealthiest and second wealthiest beneficiary income groups (i.e. beneficiary income groups 5 and 4) respectively spend 8.80% and 12.85% of household income on all healthcare.[9] We select a threshold of 12.85% against which to calculate the impact of removing medical scheme tax credits on the affordability of medical scheme membership. This is the proportion of income allocated toward overall healthcare expenditure by beneficiary income group 4 (i.e. the second wealthiest 20% of medical scheme beneficiaries.) We have done this for a number of reasons.

Firstly, the distribution of income in South Africa is highly unequal. Income at the upper end of the socioeconomic distribution is substantially higher than income in the middle and at the lower end of the income distribution. The proportion of income spent on healthcare therefore appears to be lower than in other income groups, but this is driven in part by the fact that income is substantially higher. As such, using an affordability threshold from beneficiary income group 4 is arguably a more appropriate reflection of how income is allocated at the upper end of the income distribution. Secondly, given the poor quality of healthcare received in the public sector, it is likely that some people opt out of the public sector and choose rather to pay for high quality private healthcare out-of-pocket.

As a result of the grossly unequal distribution of income as explained, 8.8% is not likely to be a realistic estimate of the extent to which people are willing to substitute other expense items to secure access to private healthcare through medical scheme contributions.

Using an affordability threshold of 12.85% of household income, we calculate the number of beneficiaries in each income group for whom medical schemes would become unaffordable according to this measure of affordability. The results are presented in the next section.

## 3 Results: Impact of medical scheme tax credits

### 3.1 Medical scheme contributions

Medical scheme contributions before and after taking account of the tax credit, as well as the proportion of household income allocated to medical scheme expenditure, are shown in Figure 2. The figure shows that for beneficiary income group 1 (i.e. the poorest 20% of medical scheme members), the tax credit reduces average monthly contributions from R 820.97 to R 583.66. As a pro-

9. *Overall healthcare expenditure includes expenditure on medical scheme contributions and between medical insurance and out-of-pocket expenditure on healthcare. Hence the reason for these percentages not being the same as shown in Figure 1.*
10. *A similar methodology and conceptualisation of affordability is used by Eighty20. Eighty20. 2009. Demand-side analysis of medical scheme coverage and access in South Africa. Prepared for the Centre for Financial Regulation and Inclusion (Cenfri) and FinMark Trust. Available: http://cenfri.org/health-insurance-and-financing/south-africa-demand-side-analysis-of-market-for-medical-schemes-2009.*

portion of household income, the tax credit reduces average medical scheme expenditure from 35% to 22.04%. For beneficiary income group 5 (i.e. the wealthiest 20% of medical scheme members), the tax credit reduces average monthly contributions from R 1 953.35 to R 1 720.39, and from 6.29% of household income to 5.50% of household income.

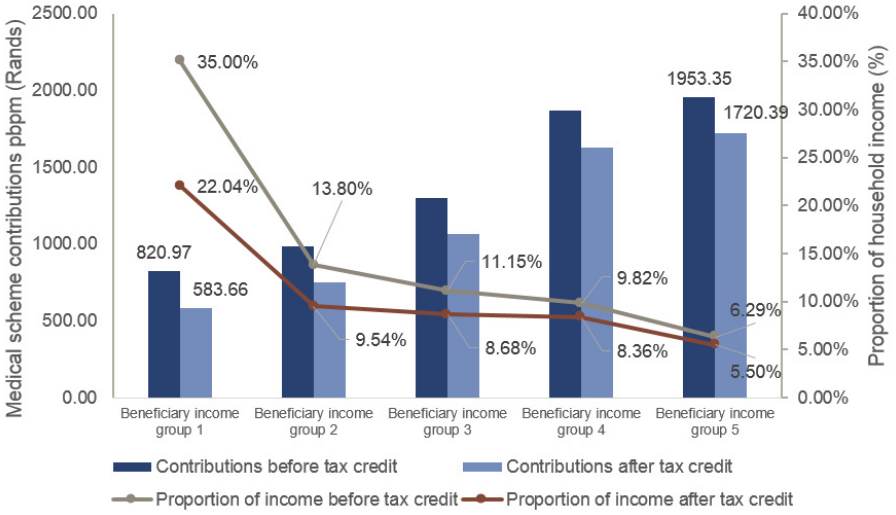
Table 2 shows the impact of tax credits on monthly contributions and on the proportion of household income allocated to medical scheme expenditure. Column 6 in Table 2 shows the impact of medical scheme tax credits on medical scheme contributions for different quintiles of medical scheme beneficiaries. We see that for beneficiaries in income group 1, the tax credit reduces the cost of medical scheme expenditure by slightly more than 40% (on average). The cost reduction in medical scheme contributions is 30.87%, 21.77%, 14.48%, and 13.54% for beneficiary income groups 2, 3, 4, and 5, respectively. The impact of the tax credit on medical scheme expenditure therefore decreases at higher levels of income, demonstrating the progressive nature of the tax credit.

## 3.2 Affordability of medical scheme membership

We assess the impact of the tax credit on the affordability of medical schemes by measuring what proportion of households will have to spend more than the threshold proportion of income allocated to medical scheme contributions should the tax credit be removed.

Using an affordability threshold of 12.85% of income (as explained in Section 2.2.3), in Figure 3, we calculate the proportion of beneficiaries in each income group whose average monthly contributions will move above that affordability threshold should the tax credit be removed. These are beneficiaries for whom medical scheme membership will likely become unaffordable. We see that almost half of medical scheme beneficiaries in income group 1 will move above the affordability threshold of 12.85% of household income. This proportion gets progressively smaller for wealthier parts of the distribution, with 21.51%, 14.29%, 9.43%, and 4.08% of beneficiaries in income groups 2, 3, 4, and 5, respectively, moving above

**Figure 2: Medical scheme contributions before and after the tax credit**




*Source: IES 2010/2011 (Statistics SA); SARS (2017); Econex calculations.*

**Table 2: Impact of medical scheme tax credits on medical scheme contributions**

| Beneficiary income group (1) | Medical scheme contribution *pbpm* before tax credit (R) (2) | Medical scheme contribution *pbpm* after tax credit (R) (3) | Proportion of household income before tax credit (%) (4) | Proportion of household income after tax credit (%) (5) | Change in medical scheme contributions after tax credit (%) (6) |
|---|---|---|---|---|---|
| **1** | 820.97 | 583.66 | 35.00 | 22.04 | 40.66 |
| **2** | 983.03 | 751.15 | 13.80 | 9.54 | 30.87 |
| **3** | 1 298.89 | 1 066.71 | 11.15 | 8.68 | 21.77 |
| **4** | 1 865.54 | 1 629.53 | 9.82 | 8.36 | 14.48 |
| **5** | 1 953.35 | 1 720.38 | 6.29 | 5.50 | 13.54 |

*Source: IES 2010/2011 (Statistics SA); SARS (2017); Econex calculations.*

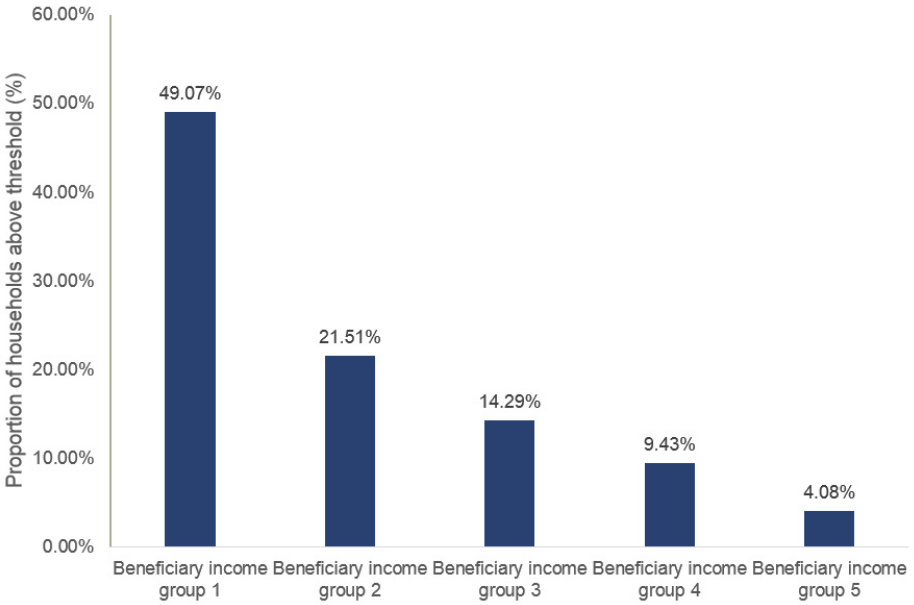
the affordability threshold. The removal of medical scheme tax credits will therefore affect poorer medical scheme beneficiaries disproportionately. In total, 21.86% of medical scheme beneficiaries will move above the affordability threshold with the removal of tax credits, i.e. 1.9 million beneficiaries in 2016.

## 4 Conclusion

Medical scheme tax credits contribute substantially to the affordability of medical scheme membership in South Africa, in particular amongst poorer beneficiary income groups.

Although this analysis shows the impact of removing the tax credit on the affordability of medical schemes ceteris paribus, it provides an estimate of the cost reducing effect of the rebate. Removing the rebate will likely have the effect of rendering medical scheme membership unaffordable to 22% of current beneficiaries, with the impact falling largely on poorer medical scheme beneficiaries. This is important to consider in assessing the likely consequences of removing medical scheme tax credits.

**Figure 3: Proportion of beneficiaries moving above affordability threshold with removal of medical scheme tax credits**




*Source: IES 2010/2011 (Statistics SA); SARS (2017); Econex calculations.*

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