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Southern Africa – Towards Inclusive Economic Development

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Tax financing options for new social protection instruments

The equity implications of taxing more to expand the South African social security system

Maya Goldman[1] and Ntuthuko Hlela[2]

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The equity implications of taxing more to expand the South African social security system

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Abstract: In this paper, we use a static fiscal incidence analysis model to evaluate the poverty and inequality impacts of using fiscal policy to finance expanded social spending in South Africa. We assess three methods to enhance the social protection system's equity objectives: increasing the size and/or coverage of the existing Social Relief of Distress grant and introducing a universal or working-age basic income grant. The implications of financing these reforms are examined using four tax instruments: increasing the value-added tax rate, increasing personal income tax rates, reducing the personal income tax primary annual rebate, and introducing a surcharge on incomes. While we discuss behavioural effects, they are not included in the model. Our analysis indicates that an expansion of the social security system financed through increased taxation could substantially reduce poverty and inequality to varying degrees depending on the taxes and transfers used.

Key words: fiscal policy, fiscal incidence, social spending, inequality, poverty, taxes, transfers

JEL classification: H22, I38, D31

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1 Introduction

The concept of implementing a basic income grant (BIG) has gained increasing popularity in both academic circles and public discourse over the years (IEJ 2021; Le Roux 2024). This paper provides evidence designed to feed into the policy decision of whether to continue or expand the current Social Relief of Distress (SRD) grant or to implement a working-age or universal BIG, and simultaneously examines the feasibility of relying solely on taxes to finance an expansion of the South African social protection system.

South Africa is the most unequal country in the world, with a Gini coefficient of 0.63 and more than half of the population living below the upper-bound poverty line (UBPL). In the context of this socio-economic plight exacerbated by the COVID-19 crisis, the South African government expanded the social protection system to account for unemployed working-age adults. This was originally to be a temporary measure but, on the back of public pressure, the grant has remained in place for now and the value and duration of the SRD grant were extended to R370 and R2,025 respectively in 2024 (National Treasury 2024a). While the SRD has proven extremely valuable, it has also been plagued with a number of issues—most notably that the means test resulted in a substantial number of false exclusions (Bassier et al. 2022). In addition the low threshold and the small size of the monthly payout has limited the grant's potential impact on poverty and inequality (Orkin et al. 2023).

There has been research and media attention looking at how we might expand the existing SRD grant or replace it with something that will not have such significant implementation issues (Haffajee 2024; Orkin et al. 2023). Some policy work has also been done on how this might be financed (Goldman et al. 2023). This paper builds on and disseminates this work, some of which is not publicly available, by systematically analysing a set of direct transfer scenarios together with potential financing options and evaluating their combined impact on poverty and inequality. While we do not expect the scenarios chosen here to be the final ones that policy makers would use, we hope that the analysis builds conceptual understanding, thereby helping policy makers to arrive at a preferred set of policy changes.

We begin by assessing the impact of three direct transfer scenarios on poverty and inequality. We compare them to a baseline which includes an SRD at R370 per month (SRD370), the Child Support Grant (CSG), and the Old Age Grant (OAG) (see Section 3 for the details). These three grants together cost R220 billion annually, of which R186 billion is the CSG and OAG, and the SRD370 accounts for the remaining R34 billion. Direct transfer scenario 1 comprises an SRD at a value of R510 per month (SRD510), combined with the existing CSG and OAG, and costs R263 billion (expenditure on the SRD increases from R34 to R76 billion). Scenario 2 replaces all three existing grants (the SRD, CSG, and OAG) with a universal BIG (U-BIG) with a clawback mechanism, and costs R303 billion. Scenario 3 replaces the SRD370 with a 'working-age' BIG (W-BIG) with a clawback mechanism, and costs R332 billion (the cost of the W-BIG alone is R146 billion, even with a clawback mechanism).

In the current scenario the personal income tax (PIT) and value-added tax (VAT) raise roughly R440 billion more than is spent on direct transfers. We evaluate the impact on poverty and inequality of three corresponding financing scenarios which are selected in order to arrive at a roughly similar net revenue amount to the baseline when combined with each transfer scenario

into a 'package'.[1,2] The baseline financing scenario includes current PIT and VAT rates (see Section 4 for details). Financing scenario 1 comprises a 1 per cent increase in both PIT and VAT rates. Financing scenario 2 features a 1 per cent increase in PIT rates, a 1 per cent and 3 per cent surcharge on incomes above R500,000 and R1.5 million respectively, and a 1 per cent VAT rate increase. Financing scenario 3 includes a 1 per cent increase in the PIT rate, the implementation of a surcharge using rates as proposed by the IEJ (2021), and a 1 per cent increase in the VAT rate.

The poverty and inequality reduction due to the W-BIG transfer far outweighs any increases in poverty and inequality due to increases in the PIT and VAT rates and the additional surcharge that we apply. The question we are faced with, however, is how much will behavioural effects erode the revenue collection capacity of our changes to the tax instrument, and how feasible are these changes politically.

The U-BIG package also makes very substantial inroads into poverty and inequality and is perhaps slightly more palatable than the W-BIG. The South African elite might perceive it as being more just in that both the rich and the poor make some 'sacrifices'. The rich make sacrifices in the form of larger tax burdens, as do the poor in that the CSG and OAG are removed in favour of a universal grant which covers the whole population but which has a lower rand value per month than the OAG. Given that the OAG is often used to support other members of the household, some recipients may end up gaining from this policy change as other household members will receive their own grant funding, while other recipients who did not share their grant amount with other household members may end up losing out. Nonetheless the number of unfair exclusions should be reduced dramatically to a negligeable number compared to the current SRD grant.

While the SRD510 has the lowest impact of the three packages examined here, it is easy to implement, and still lifts an additional 88 million people out of extreme poverty and 29 million out of poverty altogether.

The remainder of the paper is structured as follows. Section 2 discusses the data, methodology, and prior work relevant to this study. Section 3 examines the case for expanding the existing SRD grant and for implementing either a W-BIG or U-BIG. Section 4 describes the tax instruments analysed. Section 5 presents the net impact of the tax and transfer packages, estimating their effects on poverty and inequality. Section 6 concludes.

2 Data and methodology

The analysis is built on a fiscal incidence analysis[3] conducted by Goldman et al. (2020) using the Commitment to Equity Institute's methodology (hereafter referred to as a 'CEQ Assessment'). It also follows on from a piece of work which modelled the cost, efficiency, and poverty reduction impact of five options for replacing the current Special COVID-19 SRD grant introduced during the COVID-19 pandemic and due to expire in March 2023 (Goldman et al. 2021). While all five

[1] We use the term 'package' to refer to a particular combination of taxes and transfers, while scenarios are used for direct transfers or direct taxes alone.

[2] When we combine each direct transfer and financing scenario into a package, package 1 accounts for 94 per cent of the net revenue raised in the baseline, scenario 2 accounts for 92 per cent, and scenario 3 accounts for 99 per cent.

[3] A fiscal incidence analysis measures who bears the burden of taxes and who receives the benefits of government spending.

options modelled had their strengths and weaknesses, two options have since dominated the South African discourse, and so we focus on these: an increase in the size and/or coverage of the existing SRD grant or the introduction of a BIG. However, we extend that previous work by examining two types of BIGs, namely a W-BIG (in place of the SRD) and a U-BIG (in place of the SRD, CSG, and OAG). Finally, the work has evolved through a working paper that proposed a set of recommendations for the extension, redesign, and repurposing of the SRD (Orkin et al. 2023).

The model used for the analysis is based on the Household Living Conditions Survey of 2014/15 (LCS 2015) (Statistics South Africa 2017). The dataset is updated to more closely resemble the mid-pandemic environment of 2021 by reweighting for demographics (by race, age, gender, and province), for changes in nominal income over time, and for the distribution of taxable income, and by shocking the dataset to take account of the change in employment from 2015 to 2020. For more detail refer to Goldman et al. (2021). We then adjust to 2023 prices using consumer price index (CPI) growth. Given this, we cannot observe who receives the SRD, and must instead simulate it. Attempts to simulate the SRD are imperfect:

While, in theory, the South African Department for Social Development applies a test on individual income rather than a per capita means test, in reality the nature of the bank test applied by the South African Social Security Agency (SASSA) is that any type of income (including loans and intra-household transfers) is picked up by the test. This suggests that the test will pick up loans and intra-household transfers (and therefore may count income of household members twice—once in the original recipient's wages and once in a household member's gifts).

Empirically, we find that applying the means test to individual incomes in the survey results in too many beneficiaries compared to the actual numbers of recipients (16 million vs. 7.7 million), while applying a means test on both individual *and* household per capita income results in slightly too few beneficiaries (6.2 million). Given that we are seeing an average of 7.7 million beneficiaries in the SASSA data over 2023,[4] we select randomly from the 2.5 million eligible individuals with per capita income above the food poverty line (FPL) but below the lower-bound poverty line (LBPL) until we simulate the 7.7 million recipients.

To examine the distributional implications of the tax and transfer packages examined here, we work with survey data rather than administrative data, which has the problem of missing top incomes. We view 54 per cent of VAT and 76 per cent of PIT in the survey, and then scale up to reach the fiscal positions in the national accounts to estimate total costs. These estimates assume that the PIT and VAT *not* observed in the survey will increase at the same rate as the PIT and VAT *observed* in the survey.

3 Transfer instruments

In this section we summarize some of the important arguments for expanding the existing SRD and the arguments for implementing a BIG.

[4] Communication with National Treasury staff, 02 July 2024.

3.1 Expanding the Social Relief of Distress grant

On the back of their WIDER working paper, Task Team on Basic Income Support (2023) wrote a policy note which summarized the conclusions of the article and recommended that the budget allocation to the SRD be increased and the following reforms implemented:

- that the income ceiling for the SRD means test be increased to the size of the UBPL (R1,417 per month);[5]
- that an average measure of income inflows rather than a point-in-time measure be used to means test applicants (for example, over three to six months);
- that Unemployment Insurance Fund registration be removed as a criterion for excluding grant recipients (this has already been implemented); and
- that the size of the grant be increased to R510 per month.

The authors argued this for the following reasons. Firstly, the R36 billion allocated by the National Treasury for the fiscal year 2023/24 was sufficient to cover the costs of only 9 million recipients despite 16.9 million people theoretically being eligible for the grant at the FPL threshold. Secondly, the low threshold for the means test exacerbated the unfair nature of the banking test, which was resulting in large numbers of false exclusions (Goldman et al. (2021) estimate roughly 1 in 3).[6] Thirdly, the current grant has not been adjusted to keep pace with inflation and increasing the size of the grant would disproportionately increase the impact on poverty. Finally, the cost increase of such a scenario (on top of a baseline of the existing CSG, OAG, and SRD) would be roughly 21 per cent, with expenditure on the SRD increasing by 124 per cent (from R34.1 to R76.3 billion) (Table 1).

3.2 Implementing a basic income grant

Devereux (2021) summarizes the main arguments for providing basic income support in a short article in *The Conversation*. He mentions the moral case for and constitutional right to provide support to the poor; the positive economic impact on local economic growth and livelihoods;[7] the importance of solidarity and cohesion; the ability to provide emergency support during times of distress; and improvements in the effectiveness of existing grants such as the CSG. These points seem fairly uncontroversial in a country like South Africa which is still reckoning with its recent past (even if the frequently disproven myth that welfare claimants are lazy does persist). What is slightly more controversial is whether or not we should be funding a *universal* BIG or targeting the grant to individuals below a certain income threshold, which would be cheaper and more efficient—at least in theory.

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[5] The UBPL is now R1,558.

[6] Task Team on Basic Income Support (2023: 4) write that: 'The banking means test (which is the current method used to assess an individual's eligibility for the SRD grant) has seen the number of approved individuals drop from 11 million (March 2022) to around 5 million (April 2022). As of April 2022, all those applying for the SRD grant are required to undergo the banking means test. This test involves verifying a grant applicant's monthly income against the total inflows into their bank account within a given month. As the total inflows into an individual's bank account may include both their own income and household transfers and loans—this often leads to those who actually fall below the R663 threshold, appearing as though they have income above the food poverty line and thus being rejected'.

[7] While we cannot know that a basic income support will increase total economic growth by more than spending on, for example, infrastructure, it is fairly obvious that additional spending money in poorer communities must stimulate local economic growth.

There are many reasons to advocate for a U-BIG, however. Some of these are more philosophical in nature, and some are more practical. According to Bregman, the U-BIG is 'all about freedom' (Klein 2019. He argues for a society in which we all have the ability to say yes to the things we want and no to the things we do not want.[8]

In their systematic review of 38 protection schemes across low- and middle-income countries, Kidd and Athias (2019: vi) conclude that 'universal and affluence-tested schemes are much more effective than poverty-targeted programmes in reaching both their intended recipients and those living in poverty'.[9]

We run two different BIG scenarios. For the first we implement a universal BIG (U-BIG) (we allocate it to the entire population), and we remove the CSG and the OAG. For comparability we make the U-BIG the same size as the SRD, namely R510 per month. In this scenario we include a clawback of the U-BIG using a reduction in the PIT primary rebate for all working-age individuals. See Appendix B for a detailed explanation of how this mechanism would work.

The attraction of this design is that, at least theoretically, it allows for a 100 per cent clawback of the U-BIG grant for those above the tax threshold.[10] In reality the clawback is imperfect because of informality and tax evasion, and the model shows this. After including the U-BIG clawback mechanism, we find that the universal rebate reduction recuperates R66.5 billion per annum with the PIT baseline rates at a grant size of R510 per month. The total cost increase of such a scenario would be 38 per cent of the existing system (Table 1).

For the second scenario we retain the CSG and the OAG, and we allocate a BIG to all working-age adults (ages 18 to 59). We find that the working-age rebate reduction recuperates R65.5 billion per annum with the PIT baseline rates for a W-BIG of R510 per month. The total cost increase of such a scenario (the grant and the clawback mechanism combined) on the baseline would be 51 per cent (Table 1).

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[8] Bregman makes the persuasive argument that a society in which we all had shorter working weeks, and greater freedom to decide for ourselves what to make of our lives and how to spend our working hours, would be a better one. He claims that we need to design institutions based on the assumption that humans are fundamentally cooperative and to be trusted to make their own choices.

[9] Their paper has been used as evidence that in South Africa 'a universal BIG is clearly a preferable, more efficient, and more impactful policy option' (IEJ 2021). We would argue that the above conclusion ignores the affluence-tested option. Kidd and Athias are specifically referring to South Africa when they mention 'affluence-tested schemes'. The authors show that South Africa's affluence-tested schemes are not far off the error rates of universal schemes (with the best universal schemes having errors of about 2 per cent). South Africa's affluence-tested OAG's exclusion error was 8 per cent, while most of the poverty-targeting schemes had error rates of more than 50 per cent.

[10] Proponents of a BIG often claim that the cost of the grant will be made feasible by recuperating the amount of the transfer from those citizens earning above a certain threshold, but, in reality, it is not straightforward to claim back 100 per cent of the grant amount using PIT marginal tax rates or even a surcharge on the PIT. For earners in the top income bracket of the PIT in 2023, only 45 per cent of each additional rand earned is collected, and so a maximum of R229.5 of the R510 would be reclaimed for the top earners.

Table 1: Cost of social protection expansion

Scenario	Cost of grant (R billion, annual)	Cost of system* ** (R billion, annual)	Change from baseline (R billion, annual)	Percentage change from baseline (%)
Current SRD370	34.1	220	-	-
Expanded SRD510	76.3	263	42	19.2
Universal BIG510 with clawback***	302.7	303	83	37.4
Working-age BIG510 with clawback***	145.5	332	111	50.6

Note: *CSG, OAG, and grant. **The budget for the CSG and the OAG is R81.0 and R98.6 billion respectively in 2023/24 (National Treasury 2024b). ***The rebate claws back R66.2 (W-BIG) and 67.2 (U-BIG) billion per annum.

Source: authors' estimates based on the LCS 2014/15, uprated to 2021 with income and consumption adjusted for employment loss over the 2020/21 lockdown period, and adjusted to 2023 using CPI.

3.3 Results

The rest of the section will focus on measuring and comparing the impact of the direct transfers presented in Table 1. We present three direct transfer scenarios that the South African government could choose from to alleviate poverty and inequality and compare these to the baseline scenario comprising the current SRD370, CSG, and OAG. Scenario 1 consists of the SRD510, with the existing CSG and OAG. Scenario 2 includes only the U-BIG, i.e. this grant consolidates the existing SRD, CSG, and OAG into one grant. The third scenario comprises the W-BIG, the CSG, and the OAG.

3.3.1 Incidence

Incidence by decile is a measure of the total value of the spending (or tax collected) in that decile, divided by the total income allocated to that decile.[11] In this section we examine the incidence of the different transfer scenarios to get a sense of the distributional impact that the different options might have.

In all scenarios the grants constitute a large portion of income in the first three deciles, with the poorest deciles receiving a larger share of their income in grant money than the richer deciles (Figure 1). This is driven by two effects. Firstly, the high level of income inequality in South Africa means that incomes increase sharply by decile, thereby reducing the incidence of the grants in the upper deciles. Secondly, the CSG and OAG are affluence tested with a means test designed to exclude wealthier deciles from receiving the grant, while the SRD is means tested. In the baseline scenario the CSG constitutes the largest share of grant income for the first four deciles, while the OAG has the largest share from the fifth to tenth deciles. The SRD grant as a share of disposable income is unsurprisingly relatively small because the value of the grant received is much smaller than the OAG, and it is substantially smaller than the CSG in the baseline, while it is also allocated to fewer beneficiaries than the CSG (Table 2).

[11] In Figure 1 we rank households by the consumption aggregate (also called disposable income)—in other words their private income less any taxes on income and gross of any transfers that directly increase income. We use this measure of income partly due to the high levels of inequality in South Africa, which mean that a substantial portion of the population has zero market income, making incidence graphs based on market income difficult to interpret.

Table 2: Number of beneficiaries

Scenario	CSG	OAG	SRD	W-BIG***	U-BIG****
Grant value (R per month)	530	2,180/2,200*	370/510**	510	510
Beneficiaries (million)	13.2	3.9	7.7	34.6	60.4

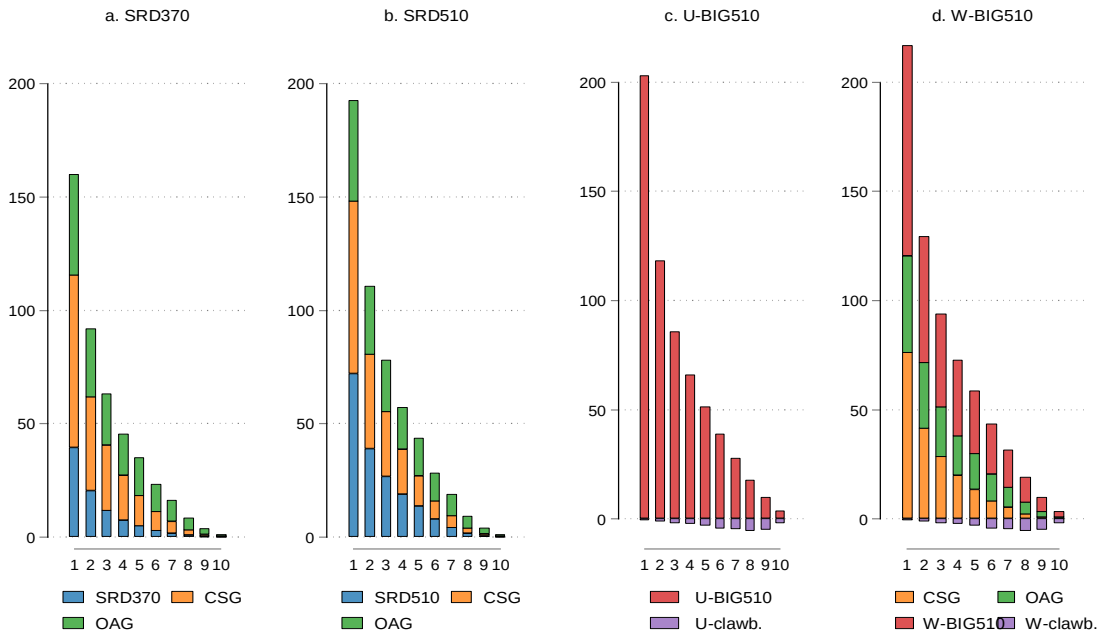
Note: *the OAG is R2,180 per month for adults between 60 and 70 years of age, and R2,200 per month for those above 70 years of age. **R370 per month in the baseline scenario, and R510 per month in the expansion scenario. ***W-BIG = working-age BIG. ****U-BIG = universal BIG.

Source: authors' estimates based on the LCS 2014/15, uprated to 2021 with income and consumption adjusted for employment loss over the 2020/21 lockdown period, and adjusted to 2023 using CPI.

In the SRD510 scenario the number of grant recipients does not change from the SRD370, and so there is no change in the slope of the incidence of the SRD. (That said, the size of the SRD grant changes relative to income and relative to the CSG and OAG, and so the slope of the combined incidence changes.) The size of the SRD increases by the same factor in all deciles (although this is harder to see in the tenth decile where the incidence of the grant is negligible) (Figure 1a, 1b).

While the U-BIG has by far the largest incidence of any single grant in the poorer deciles, if we take into account that it replaces the CSG and the OAG, we see that the incidence of the W-BIG combined with the CSG and the OAG is larger for the poor than the incidence of the U-BIG (Figure 1c, 1d).

Figure 1: Incidence of transfer scenarios, per cent of disposable income



Note: deciles are based on the consumption welfare aggregate.

Source: authors' estimates based on the LCS 2014/15, uprated to 2021 with income and consumption adjusted for employment loss over the 2020/21 lockdown period, and adjusted to 2023 using CPI.

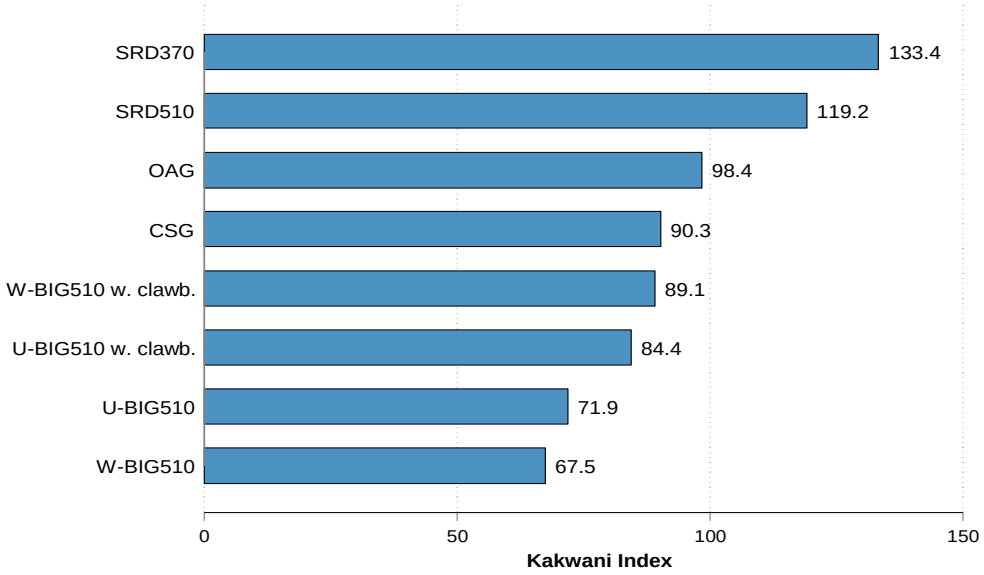
See Appendix C for a comparison of the W-BIG and the U-BIG with and without the clawback mechanism.

3.3.2 Progressivity

Progressivity is measured here by the Kakwani Index—a summary statistic of the concentration of the tax or transfer relative to the distribution of income. It is calculated for taxes by subtracting the Gini coefficient from the concentration coefficient, and for transfers by subtracting the concentration coefficient from the Gini coefficient. A value greater than zero represents a progressive tax or transfer, a value below zero represents a regressive tax or transfer, and a value close to zero represents a neutral instrument. The minimum and maximum values of the Kakwani Index depend on the size of the Gini coefficient.

All the transfers analysed in this paper are progressive (Figure 2). The SRD grants are the most pro-poor of all the transfers, with a Kakwani Index of 133.4 (SRD370) and 119.2 (SRD510). This is because they have the strictest means test and are allocated to the extreme poor. The OAG and the CSG are in the middle, with a Kakwani between 90 and 100—still extremely pro-poor and well-targeted comparative to other grants around the world. The two BIGs are the least progressive transfers (ranging between 67.5 and 71.9), and while they become almost as progressive as the CSG when we include the clawback mechanism (ranging from 84 to 89 vs. 90 for the CSG), they nonetheless remain much less progressive than the SRD.

Figure 2: Progressivity of transfers



Note: calculated using market income Gini.

Source: authors' estimates based on the LCS 2014/15, uprated to 2021 with income and consumption adjusted for employment loss over the 2020/21 lockdown period, and adjusted to 2023 using CPI.

3.3.3 Impact on poverty and inequality

The marginal contribution to poverty refers to change in the poverty headcount when a transfer or tax is introduced to (or removed from) the fiscal system. In this paper the marginal contribution to poverty is measured by the change in the poverty headcount at the FPL (R760 per month) and the UBPL (R1,558 per month).[12] A positive marginal contribution means that the transfer or tax

[12] These are 2023 poverty lines. For more information, see Department of Statistics South Africa (2023).

in question decreases poverty, while a negative contribution indicates an increase. By definition direct transfers decrease (or do not change) the poverty headcount as they increase a household's purchasing power, while taxes increase (or do not change) poverty.

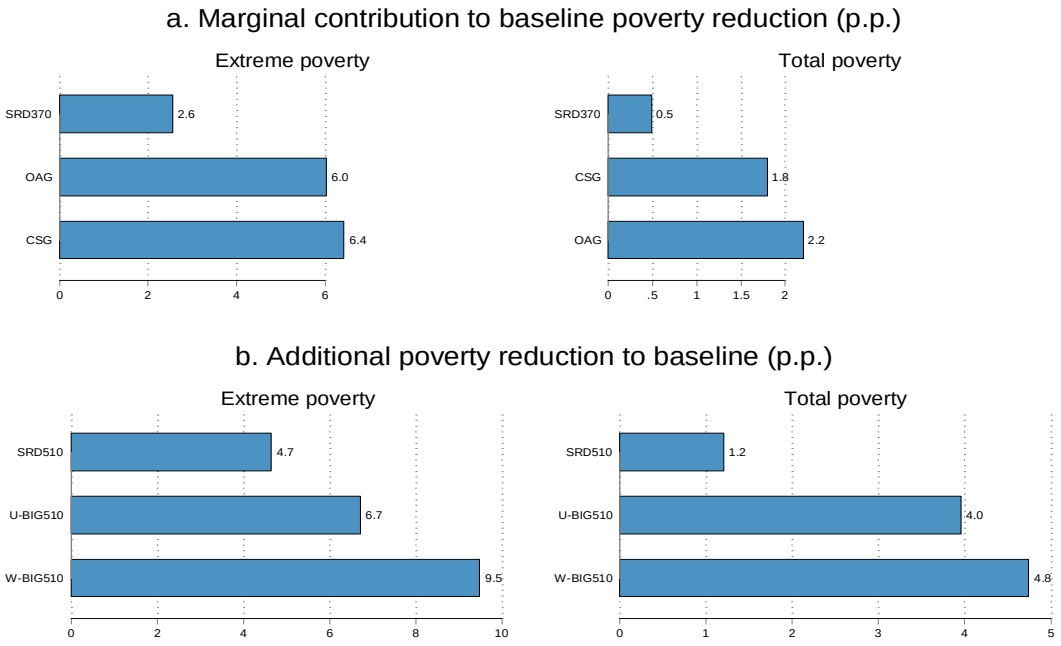
The OAG and the CSG both decrease poverty by substantially more than the SRD370 (Figure 3a). As discussed in Section 3.3.1, this is because the OAG pays out a much larger monthly value and because the CSG has greater coverage than the SRD.

Increasing the SRD370 from R370 per month to R510 per month lifts 1 million individuals out of extreme poverty (4.7 percentage points, Figure 3b). Introducing a U-BIG lifts 1.3 million individuals out of extreme poverty (6.5 percentage points), while the most expensive option, the W-BIG, lifts 2 million people out of extreme poverty (9.5 percentage points).

The grants lift fewer people out of total poverty because all of them are significantly smaller than the UBPL of R1,558 per month. A grant of R370 per month is only 24 per cent of the UBPL, while a grant of R510 is only 33 per cent of the poverty line.

Note that there is only a small difference in poverty reduction whether we include the clawback or not because most people receiving a tax rebate are above the poverty line. However, there are some households with a large household size and only one individual earning above the threshold, which are therefore poor, or with a main breadwinner working in the informal sector, and therefore not paying taxes. With a U-BIG or W-BIG with a clawback mechanism, there would of course be a strong incentive for these sectors to become formalized, but we do not take that into account here.

Figure 3: Impact of direct transfers on poverty



Note: a positive marginal contribution suggests that the transfer or tax in question decreases poverty, while a negative change indicates that the transfer or tax increases poverty. The U-BIG and W-BIG shown here include a clawback mechanism. 'p.p.' means 'percentage points'.

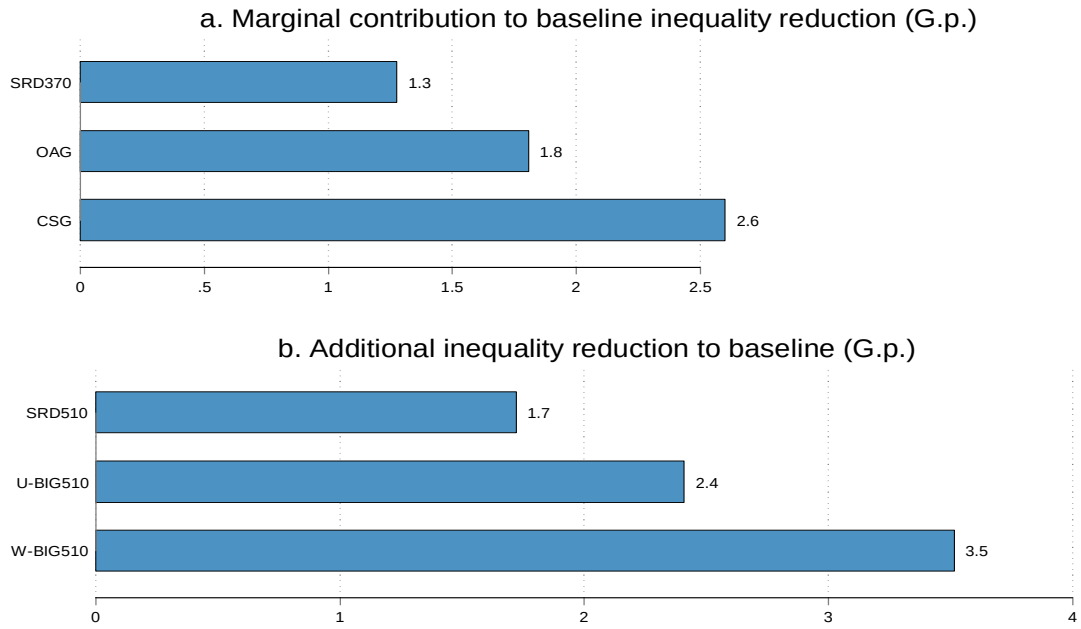
Source: authors' estimates based on the LCS 2014/15, uprated to 2021 with income and consumption adjusted for employment loss over the 2020/21 lockdown period, and adjusted to 2023 using CPI.

The marginal contribution to inequality is similar to the marginal contribution to poverty, except that it measures the change in the Gini index (or another similar measure of inequality).

The impact on inequality follows the same pattern as the impact on extreme poverty. The CSG makes the largest contribution to baseline inequality reduction (2.6 Gini points), while the SRD370 makes the smallest contribution (1.3 Gini points), and the OAG is in between at 1.8 Gini points (Figure 4a).

Compared to the baseline, expanding the size of the SRD reduces inequality by an additional 1.7 Gini points, while implementing a U- or W-BIG with a clawback mechanism reduces inequality by 2.4 and 3.5 Gini points more than the baseline, respectively (Figure 4b).

Figure 4: Impact of direct transfers on inequality



Note: a positive marginal contribution suggests that the transfer or tax in question decreases inequality, while a negative change indicates that the transfer or tax increases inequality. 'G.p.' means 'Gini points'.

Source: authors' estimates based on the LCS 2014/15, uprated to 2021 with income and consumption adjusted for employment loss over the 2020/21 lockdown period, and adjusted to 2023 using CPI.

In summary, expanding the SRD or implementing a BIG presents viable options for addressing poverty and inequality in South Africa. Each scenario offers different levels of impact and feasibility, with the SRD510 being more straightforward to implement, cheaper, and having less impact, while the BIG scenarios provide broader coverage and a larger impact. The choice between these options depends on the balance between ease of implementation and the desired level of social protection. See Appendix D for a comparison of the efficiency scores of each of these instruments.

4 Tax instruments

The question we now turn to is how we might fund such an expansion of social protection. In a country like South Africa where a narrow tax base is funding a population with large, persistent

structural employment, it is important to understand both the feasibility of financing such measures and the equity implications of raising such large sums through the fiscal system alone.

The additional revenue collection instruments modelled here include changes to the PIT rates and tax rebate threshold, an increase in the VAT rate, and implementation of a new direct tax on incomes, hereafter called a surcharge, levied on top of the existing PIT schedule.

4.1 Personal income tax

A significant caveat to the PIT model is that we do not model behavioural effects. When PIT rates rise sharply, this may reduce work effort among high earners and increase tax avoidance and even tax evasion behaviour. As the empirical literature on this for South Africa is thin and the data is out of date, we do not feel confident in the reasonableness of our estimates of the reduction in tax collected.[13]

We use two different 'algorithms' for examining rate increases in the PIT: the first algorithm adds an X percentage point increase to each bracket across the board until we reach the target amount of additional tax revenue required, while the second increases the existing marginal tax rates by the same percentage to enhance progressivity in the PIT system. While applying the same percentage point increase to each bracket will be less progressive, by definition, it is likely that 'across-the-board' increases will be less likely to result in aggressive tax avoidance behaviour.

We find that a substantial increase in income tax rates would be required to fund any of the scenarios proposed above, even without taking behavioural changes into account. If we apply the same percentage point increase to all brackets, then the increase is 1.68 percentage points and 3.69 percentage points in the SRD and W-BIG scenarios, respectively. If we apply the same percentage increase to all brackets, then the SRD scenario results in an increase ranging from 1.19 percentage points in the lowest bracket to 2.97 percentage points in the highest bracket, while the W-BIG scenario requires an increase ranging from 2.61 percentage points in the lowest bracket to 6.53 percentage points in the highest income bracket. See Appendix A for a summary of the results from all the PIT scenarios.

[13] Kemp (2020), using a panel of confidential tax return data ranging from 2011/12 to 2016/17, finds an elasticity of taxable income (ETI) of 0.197 for broad income, noting that changes in the bottom and middle of the distribution are not significant, while they are significant and large for the top two income tax brackets. Importantly, these estimates are produced using bracket creep phenomena, rather than tax reforms. However, the degree to which a large PIT reform would change the ETI parameters is unclear. Kemp writes that 'it likely affects taxpayers only on the margin. The average taxpayer might not be fully aware of the small change to the tax code and, as such, any estimated behavioural response will be muted'. In addition, we do not expect these estimates to remain constant over time, as perceptions change.

Box 1: A note on how income tax is calculated

The PIT in South Africa is calculated as a graduated rate. This means that a portion of an individual's income can fall into a lower bracket, with another portion falling into a higher bracket.

For example, an individual earning R300,000 per year will pay an 18 per cent tax rate on their income below R237,100, and a 26 per cent (marginal) tax rate on their income above R237,100. This means that, even if an individual is earning more than R1.5 million per year, they will still pay 18 per cent tax on the first R237,100.

The implication is that keeping the lowest tax rate at 18 per cent benefits not only the poorer deciles but all taxpayers, and in absolute terms will benefit taxpayers with income above R237,100 more than taxpayers with income below R237,100. This is also why we see such a large increase in potential revenues at R15.4 billion moving from scenario a to scenario b in Table 5. When we keep the 18 per cent rate fixed, we are not just 'losing' additional revenue on poorer individuals, but on all taxpayers.

4.2 Value-added tax

Increasing the VAT by 1 per cent would raise R28.4 billion in additional revenues. Relying on the VAT as the sole instrument to reach the amounts required for the two scenarios would require a rate increase of between 1.8 and 3.9 percentage points (Table 3).

Table 3: Value-added tax rates

Grant expenditure	Rate
Baseline	15.0
R28.4 billion	16.0
R50 billion	16.8
R110 billion	18.9

Note: we observe 54 per cent of total VAT tax collection in the survey. Estimates are then scaled up to the administrative totals based on the assumption that the VAT not observed in the survey will increase at the same rate as the VAT observed in the survey.

Source: authors' estimates based on the LCS 2014/15, uprated to 2021 with income and consumption adjusted for employment loss over the 2020/21 lockdown period, and adjusted to 2023 using CPI.

4.3 Surcharge on incomes

A surcharge on incomes would be an additional levy on the same tax base as the PIT. In some ways it is like a PIT rate increase, but the benefit of using a separate instrument to the PIT is that it allows for ringfencing of the revenue for the grant, the rebate mechanism does not have to be applied in the case of the surcharge (unless desirable), and there is greater design flexibility in choosing a different set of income brackets to the existing PIT mechanism.

We model three different options, shown in Table 4. One option is a model proposed by the Institute for Economic Justice (IEJ 2021) which generates four surcharge brackets and broadens the tax base. The two other options were requested by the Presidency for a policy note put together by the Task Team on Basic Income Support (2023), and they implement two and three brackets respectively. Option 1 broadens the tax base, and option 3 increases the progressivity of the existing PIT by adding a higher tax rate for those with incomes above 1.5 million.

Table 4: Surcharge on income

Option 1		Option 2		Option 3	
Income bracket	Statutory rate (%)	Income bracket	Statutory rate (%)	Income bracket	Statutory rate (%)
i. R80,000	1.5	i. R500,000	-	i. R500,000	-
ii. R350,000	2	ii. > R500,000	1	ii. R1.5 million	1
iii. R1 million	2.5			iii. > R1.5 million	3
iv. >R1 million	3				

Source: adapted from IEJ (2021) and Task Team on Basic Income Support (2023).

4.4 Financing scenarios

Putting all these options together, we come up with the following menu of scenarios for policy makers. We combine these into a set of three example scenarios which we combine with the direct transfers to form a set of tax and transfer packages, and which we analyse in Section 5.

Table 5: Menu of options

Tax instrument	Additional revenue (R billion)
PIT	
a. PIT 1% (additive, excl. 18% rate)	14.4
b. PIT 1% (additive)	29.7
Surcharge	
a. 1% surcharge (>R500,000)	12.7
b. 1 & 3% surcharge (>R500,000 & >R1.5 million)	18.8
c. IEJ surcharge	67.4
VAT	
a. VAT 1%	28.4
Scenarios	
a. PIT 1%, 1% VAT	58.1
b. PIT 1%, 1 & 3% surcharge, 1% VAT	76.8
c. PIT: 1%, IEJ surcharge, VAT 1%	125.5

Source: authors' estimates based on the LCS 2014/15, uprated to 2021 with income and consumption adjusted for employment loss over the 2020/21 lockdown period, and adjusted to 2023 using CPI.

4.5 Results

4.5.1. Incidence

In South Africa the richer deciles bear the brunt of PIT. Figure 5 shows the incidences of the three proposed financing scenarios compared with the baseline.

In the baseline, PIT is applied according to the tax brackets and current rates in which each individual's income falls (see Section 4.1). The graph shows that only the last two deciles pay a PIT that is more than 8 per cent of their total disposable income, with the eighth decile at 11 per cent, followed by the ninth and tenth deciles at 18 per cent and 31 per cent, respectively.

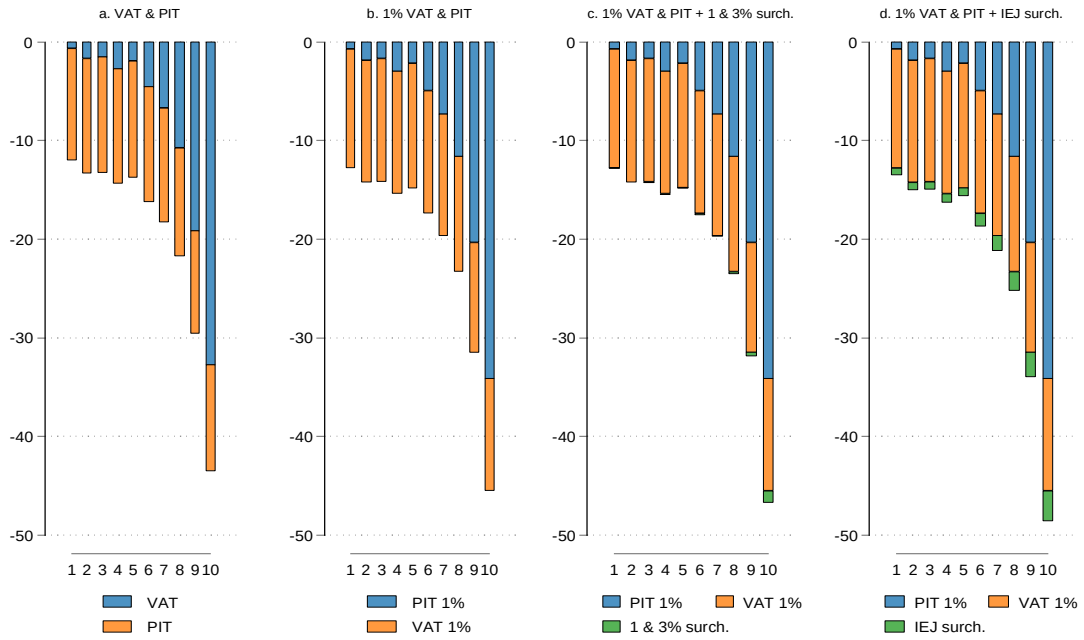
In the baseline scenario, the VAT rate is 15 per cent and the incidence is flat across the deciles, with the poorest decile, just like the richest decile, spending 11 per cent of their disposable income on VAT. Informality is not yet taken into account in this model, which means that in reality the distribution of the VAT is likely more progressive than is shown here. Including informality in the model would be an area for improvement moving forward.

An increase in all the PIT and VAT rates of 1 per cent raises R58.1 billion (Table 5), enough to fund an increase in the SRD expenditures of R42 billion, which would cover an increase in the grant value from R370 to R510 per month.

If we further add a surcharge on incomes, at a simple 1 and 3 per cent rate on incomes over R500,000 and R1.5 million respectively, we raise an additional R19 billion (Table 5). Combined with the increase in VAT and PIT rates of 1 per cent, we are able to raise R77 billion, which is close to covering the U-BIG scenario expenditure increase of R82 billion. The surcharge only affects those in the ninth and tenth deciles (Figure 5c).

The scenario which raises the most at R126 billion is constituted by a 1 per cent increase in the VAT and PIT rates and a surcharge on incomes following the IEJ proposition (Table 5). The IEJ surcharge is much more broad-based than the one shown in Figure 5c and affects all income deciles (Figure 5d).

Figure 5: Incidence of tax scenarios, per cent of disposable income



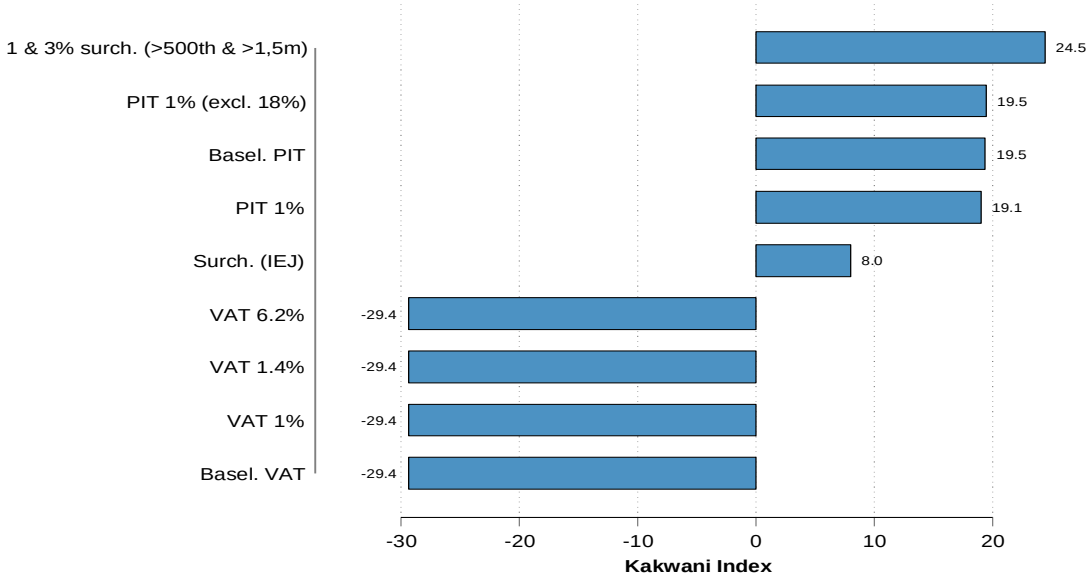
Notes: deciles are based on the consumption welfare aggregate.

Source: authors' estimates based on the LCS 2014/15, uprated to 2021 with income and consumption adjusted for employment loss over the 2020/21 lockdown period, and adjusted to 2023 using CPI.

4.5.2 Progressivity

All VAT policy scenarios are regressive (with a Kakwani Index of -29.4), which does not change with a change in the rates. The direct taxes are all progressive, ranging between 8.0 on the Kakwani Index for the IEJ surcharge and 24.5 for the 1 and 3 per cent surcharge on incomes above R500,000 and R1.5 million (Figure 6).

Figure 6: Progressivity of taxes



Source: authors' estimates based on the LCS 2014/15, uprated to 2021 with income and consumption adjusted for employment loss over the 2020/21 lockdown period, and adjusted to 2023 using CPI.

4.5.3 Impact on poverty and inequality

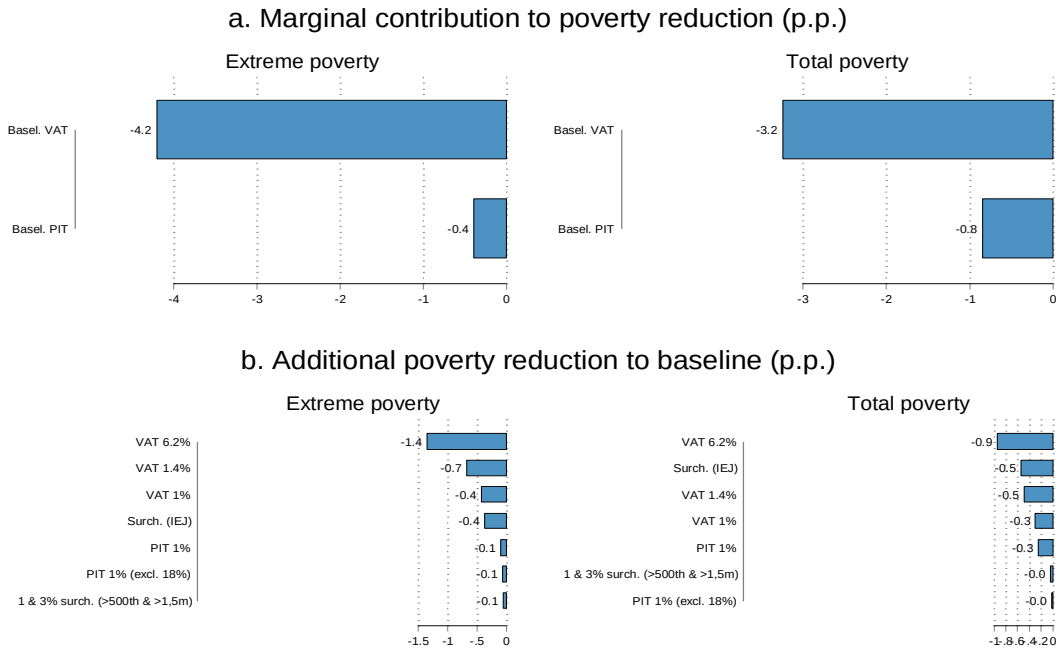
Only the increases in the VAT and the implementation of the IEJ surcharge increase poverty substantially. The impact of each of the PIT scenarios on poverty is negligeable at both poverty lines, as is the impact of the surcharge on incomes over R500,000 and R1.5 million.

In the baseline, the VAT is the most poverty-increasing instrument. It tips 0.9 million individuals into extreme poverty in the baseline (the equivalent of a 4.2 percentage point increase in extreme poverty). In comparison the PIT, due to its high threshold, only tips 0.1 million individuals into extreme poverty (a 0.4 percentage point increase) (Figure 7a).

At the FPL, the VAT scenarios are the most poverty-increasing. An increase in the VAT rate of 1 per cent would tip an additional 0.1 million individuals into extreme poverty (0.4 percentage points more than in the baseline) (Figure 7b). This paper is, however, likely to overestimate the poverty-increasing impact of the VAT because the model has not yet been adjusted to take account of the distribution of informal consumption in South Africa. This could be a future improvement on this paper.

The IEJ surcharge has a large impact on total poverty, however, pushing 0.2 million additional individuals below the poverty line (a 0.5 percentage point increase) (Figure 7b).

Figure 7: Impact of direct taxes on poverty



Note: 'p.p.' means 'percentage points'.

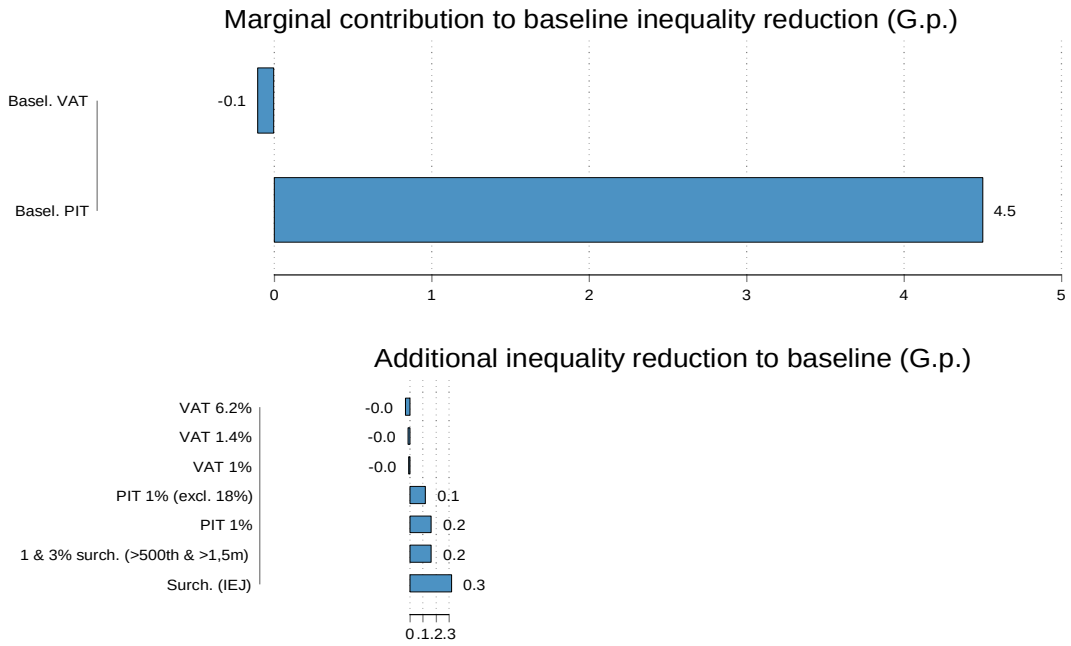
Source: authors' estimates based on the LCS 2014/15, uprated to 2021 with income and consumption adjusted for employment loss over the 2020/21 lockdown period, and adjusted to 2023 using CPI.

The baseline PIT makes a strong contribution to inequality reduction of 4.5 Gini points (Figure 8). The VAT is shown to cause a slight increase in inequality. However, as mentioned above, this is because informality is not taken into account in the model. With a model which includes informality we would likely see a reduction in inequality.

Only the taxes on income have a non-negligeable impact on inequality above the impact already achieved in the baseline. The impact is still small but it may be somewhat underestimated given that survey data tends to under-represent the number and size of top incomes in the dataset.

The IEJ surcharge results in the largest inequality reduction (at 0.3 Gini points), followed by a 1 per cent increase in PIT rates (0.2 Gini points).

Figure 8: Impact of direct taxes on inequality



Note: 'G.p.' means 'Gini points'.

Source: authors' estimates based on the LCS 2014/15, uprated to 2021 with income and consumption adjusted for employment loss over the 2020/21 lockdown period, and adjusted to 2023 using CPI.

In conclusion the tax instruments discussed offer a set of example options for financing an expanded social protection system in South Africa. The more broad-based the tax, the greater the likelihood that poverty will increase as a result. However, it is also more likely that the expected revenue will materialize from a more broad-based tax and not be eroded through tax evasion or avoidance, as is likely to be the case with a tax that falls purely on the rich. Each instrument has different implications for equity and revenue generation, which we model here, but this needs to be balanced out with a consideration of political feasibility, which is not taken into account in the model. See Appendix D for a comparison of the efficiency scores of each of these instruments.

5 Tax and transfer packages

In this section we examine and compare the cost, incidence, progressivity, poverty, and inequality impacts of the combination of direct transfer and tax scenarios ('packages'). We again analyse the incidence of each package to understand how the burden of the tax measures compares with the benefits provided by the corresponding transfer measures. We then examine the poverty and inequality impacts of each.

5.1 Net expenditures

In package 1 we aim to raise an additional R42 billion in order to finance the expansion of the SRD from R370 per month to R510 per month. With a 1 per cent increase in the baseline PIT and VAT rates, without taking behavioural effects into account, we raise an additional R58.1 billion, which results in a net revenue gain of R15.9 billion.

In package 2 we aim to raise an additional R83 billion to finance the replacement of the CSG, OAG, and SRD370 with a U-BIG plus clawback mechanism. With a 1 per cent increase in the baseline PIT and VAT rates and a 1 and 3 per cent surcharge on incomes above R500,000 and R1.5 million, we fall slightly short of the amount required, the result being a net revenue loss of R5.5 billion.

In package 3 we aim to raise an additional R111 billion in order to finance the replacement of the SRD370 with a W-BIG510 with a clawback mechanism. We provide an example package to finance this, consisting of a 1 per cent increase in the baseline PIT and VAT rates and the introduction of a surcharge on incomes as proposed by the IEJ. We raise R125.5 billion, and therefore gain a net revenue of R14.1 billion.

Table 6: Tax and transfer packages

Tax and transfer packages	Target exp. (R billion)	Add. rev. (R billion)	Net rev. (R billion)
SRD370: baseline PIT & VAT rates			
SRD510: 1% increase in baseline PIT & VAT rates	42	58.1	15.9
U-BIG510: 1% increase in baseline PIT & VAT rates; 1 & 3% surcharge on incomes above R500,000 and R1.5 million	83	76.8	-5.5
W-BIG510: 1% increase in baseline PIT & VAT rates; IEJ surcharge	111	125.5	14.1

Source: authors' estimates based on the LCS 2014/15, uprated to 2021 with income and consumption adjusted for employment loss over the 2020/21 lockdown period, and adjusted to 2023 using CPI.

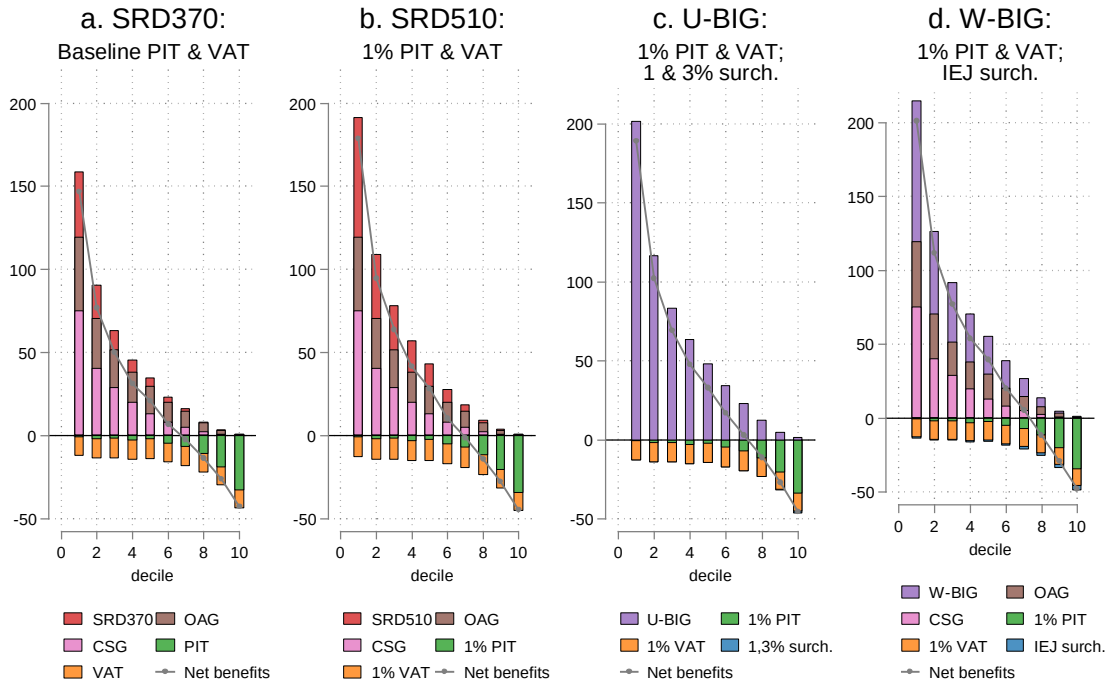
5.2 Net cash beneficiaries

In Figure 9, as we move from the left-hand side package to the right-hand side package, we see that the system becomes gradually more generous to the poorer deciles.

The two BIG scenarios are also more generous to some of the upper-middle deciles. In the two SRD scenarios (left), the poorest six deciles are net beneficiaries from the portion of the tax and transfer system examined here, while deciles seven to ten are net payers. In the two BIG scenarios (right), the poorest seven deciles are net beneficiaries: they are more generous towards a portion of the population that might technically not be considered poor but are nonetheless still vulnerable to poverty. They are below the tax threshold or in informal employment.

The BIG scenarios also collect more from the tenth decile, however. In the W-BIG scenario, a larger share of income is collected from the ninth and tenth deciles than in the SRD scenarios, while in the U-BIG scenario, a larger share of income is collected from the tenth decile than in the SRD scenarios, while in decile nine the share is roughly the same.

Figure 9: Net beneficiaries of tax and transfer packages



Note: deciles are based on the consumption welfare aggregate. The U-BIG and W-BIG grants are net of the clawback mechanism.

Source: authors' estimates based on the LCS 2014/15, uprated to 2021 with income and consumption adjusted for employment loss over the 2020/21 lockdown period, and adjusted to 2023 using CPI.

5.3 Poverty and inequality impact

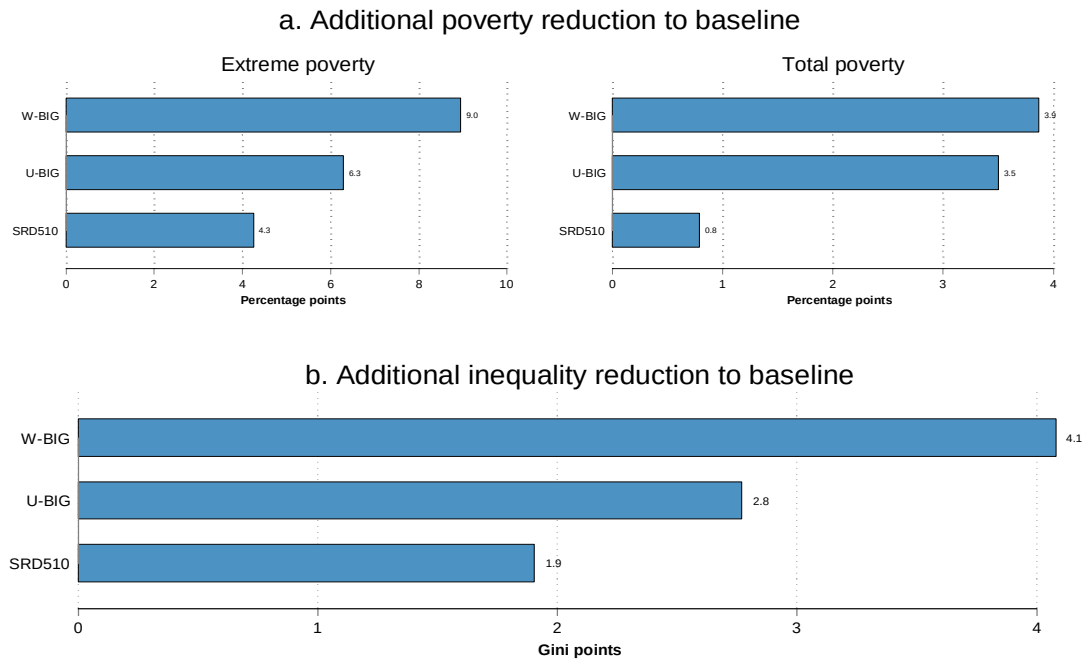
The packages examined here have been designed to earn a similar amount of net revenue to the baseline, and therefore the costs and efficiency measures can be set aside for the time being and we can focus on the total impact of the package on poverty and inequality reduction.

While the W-BIG is the most expensive package, we theoretically manage to finance 102 per cent of the required expenditures while increasing poverty by very little and reducing inequality. The poverty and inequality reduction far outweighs any increases due to increases in the PIT and VAT rates and the additional surcharge that we apply. The question we are faced with, however, is how much will behavioural effects erode the revenue collection capacity of our changes to the tax instrument, and how feasible are these changes politically.

The U-BIG package also makes very substantial inroads into poverty and inequality and is perhaps slightly more palatable than the W-BIG. The South African elite might perceive it as being more just in that both the rich and the poor make some 'sacrifices'. The rich make sacrifices in the form of larger tax burdens, as do the poor in that the CSG and OAG are removed in favour of a universal grant which covers the whole population but which has a lower rand value per month than the OAG. Given that the OAG is often used to support other members of the household, some recipients may end up gaining from this policy change as other household members will receive their own grant funding, while other recipients who did not share their grant amount with other household members may end up losing out. Nonetheless the number of unfair exclusions should be reduced dramatically to a negligeable number compared to the current SRD grant.

Finally, while the SRD510 has the lowest impact of the three packages examined here, it is easy to implement and still reduces extreme poverty by 4.3 additional percentage points (0.9 million people) and total poverty by an additional 0.8 percentage points (0.3 million people). It also reduces inequality by 1.9 Gini points more than the current scenario (Figure 10).

Figure 10: Net poverty and inequality impact by package



Source: authors' estimates based on the LCS 2014/15, uprated to 2021 with income and consumption adjusted for employment loss over the 2020/21 lockdown period, and adjusted to 2023 using CPI.

6 Conclusion

Given the country's fiscal constraints, the purpose of this paper was to examine the feasibility of only relying on taxes to finance the expansion of the South African social protection system. Three example packages were examined with the goal of better understanding the net impact of a large increase to the social protection system, funded by taxes. While the exact combination of instruments can be further tweaked by policy makers, we found that all three example packages substantially improve levels of poverty and inequality reduction, highlighting the significant potential of expanding social protection in South Africa through targeted tax financing. Each proposed package demonstrates a clear path to reducing poverty and inequality, with varying degrees of feasibility and impact.

Our analysis could be improved in the future by finding a robust means of including behavioural effects and including informality estimates into the VAT model. Behavioural effects may influence the feasibility of some of our financing options, particularly those which are less broad-based, or perceived as unfair by the elite. In addition the impact of the VAT on inequality and poverty is likely underestimated and overestimated, respectively, given that we do not take informality into account in our current model of VAT. Finally, the analysis could be made more robust once a new official income and expenditure dataset is released.

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Appendix A

A1 Fixed percentage point increase

Table A1 shows the percentage point increase that would need to be applied to all brackets to reach the grant amounts shown in Table 1 if we applied the same percentage point increase to each bracket across the board. To fund the cheapest scenario (that is, to collect the additional R50 billion needed to fund the SRD scenario) using an across-the-board percentage point increase, all the rates would need to be raised by 1.68 percentage points. To fund the more expensive scenario (R110 billion, the universal BIG scenario) would require all tax rates in all tax brackets to be raised by 3.69 percentage points.

Table A1a: Personal income tax rates, additive method:

Grant expenditure	< R237,100	< R370,500	< R512,800	< R673,000	< R857,900	< R1.8 million	> R1.8 million
Baseline	18.0	26.0	31.0	36.0	39.0	41.0	45.0
R40 billion	19.7	27.7	32.7	37.7	40.7	42.7	46.7
R110 billion	21.7	29.7	34.7	39.7	42.7	44.7	48.7

Table A1b: Percentage point increase:

Grant expenditure	< R237,100	< R370,500	< R512,800	< R673,000	< R857,900	< R1.8 million	> R1.8 million
R40 billion	1.68	1.68	1.68	1.68	1.68	1.68	1.68
R110 billion	3.69	3.69	3.69	3.69	3.69	3.69	3.69

Note: we observe 76 per cent of total PIT tax collection in the survey. These estimates are then scaled up to the administrative totals based on the assumption that the PIT not observed in the survey will increase at the same rate as the PIT observed in the survey.

Source: authors' estimates based on the LCS 2014/15, uprated to 2021 with income and consumption adjusted for employment loss over the 2020/21 lockdown period, and adjusted to 2023 using CPI.

A2 Fixed per cent increase

The rates below show the percentage point increase that would need to be applied to all brackets, to reach the grant amounts shown in Table 1 if we applied the same per cent increase to each bracket across the board. The cheapest scenario (R50 billion, SRD scenario) would result in a 1.19 percentage point increase in the lowest bracket and a 2.97 percentage point increase in the top bracket, while the more expensive scenario would result in a 2.61 percentage point increase in the bottom bracket and a 6.53 percentage point increase in the top bracket (R110 billion, universal BIG scenario).

Table A2a: Personal income tax rates, multiplicative method:

Grant expenditure	< R237,100	< R370,500	< R512,800	< R673,000	< R857,900	< R1.8 million	> R1.8 million
Baseline	18.0	26.0	31.0	36.0	39.0	41.0	45.0
R40 billion	19.2	27.7	33.0	38.4	41.6	43.7	48.0
R110 billion	20.6	29.8	35.5	41.2	44.7	46.9	51.5

Table A2b: Percentage point increase:

Grant expenditure	< R237,100	< R370,500	< R512,800	< R673,000	< R857,900	< R1.8 million	> R1.8 million
R40 billion	1.19	1.72	2.05	2.38	2.58	2.71	2.97
R110 billion	2.61	3.77	4.50	5.22	5.66	5.95	6.53

Note: we observe 76 per cent of total PIT tax collection in the survey. These estimates are then scaled up to the administrative totals, based on the assumption that the PIT not observed in the survey will increase at the same rate as the PIT observed in the survey.

Source: authors' estimates based on the LCS 2014/15, uprated to 2021 with income and consumption adjusted for employment loss over the 2020/21 lockdown period, and adjusted to 2023 using CPI.

Appendix B: BIG clawback through rebate reduction

For an individual with taxable income below or exactly equal to the current 'threshold' (R95,750 per year), tax liability post-rebate is currently zero, because their tax liability is matched by the size of the rebate.[14] This is demonstrated in Figure B2: the dark blue line ('tax liability pre-rebate') is equal to the height of the blue area ('current rebate'), and the light blue line (tax liability post-rebate) is zero. An individual with annual taxable income above the current threshold has a non-zero tax liability—we see that, post the threshold, the light blue line starts to climb above the x-axis.

Using a rebate reduction as a mechanism to claw back the BIG could take place as follows: the rebate reduction would *increase* the tax liability of wealthier individuals, and their tax liability would shift upwards from the light blue line to the purple line ('proposed tax liability').

Changing the size of the rebate necessarily entails a change in the size of the threshold. If we reduced the rebate by the size of the BIG (and if the BIG was R510 per month, for example), then the threshold for paying non-zero tax would, by definition, reduce to R61,750.

$$T = \frac{R}{r_1} = \frac{(17{,}235 - 510 * 12)}{0.18} = \frac{11{,}115}{0.18} = 61{,}750$$

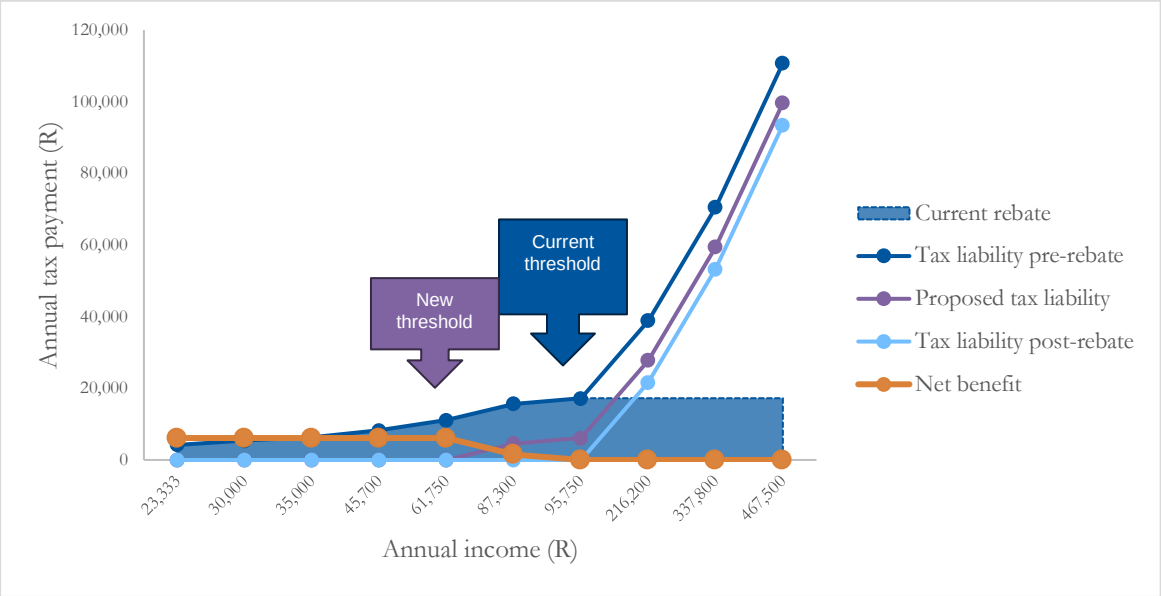
where T stands for threshold, R stands for rebate, and r1 is the lowest tax rate.

A negative tax payment (a grant) would then be administered to those with taxable income smaller than the size of the BIG. The maximum negative tax payment would be equal to the size of the BIG for those with income below the new income threshold, who have zero tax liability (Figure B1, orange line, 'net benefit').[15] This would then slowly decrease until the current threshold, at which point the proposed tax liability would match the size of the maximum negative tax payment (BIG grant). Beyond this, the net benefit to individuals would be zero.

[14] The threshold is applied through a rebate provided to all taxpayers in the form of a credit subtracted from their tax liability. The value of the rebate received is up to a maximum of a taxpayer's existing tax liability, i.e. an individual cannot receive a rebate higher than their pre-rebate tax liability. The rebate protects the tax threshold, so that workers are not taxed from the first rand earned. In practice it functions somewhat like a BIG for formal workers. However, it is regressive at the bottom end in that those with a tax liability of less than 17,235 per year do not benefit from the full rebate.

[15] Currently, one cannot receive a tax credit from a rebate which is higher than one's tax liability, otherwise individuals would pay negative tax (i.e. a transfer). All those who earn below the new threshold, then, would continue to receive the same rebate as previously (at the size of their tax liability).

Figure B1: BIG clawback through rebate reduction

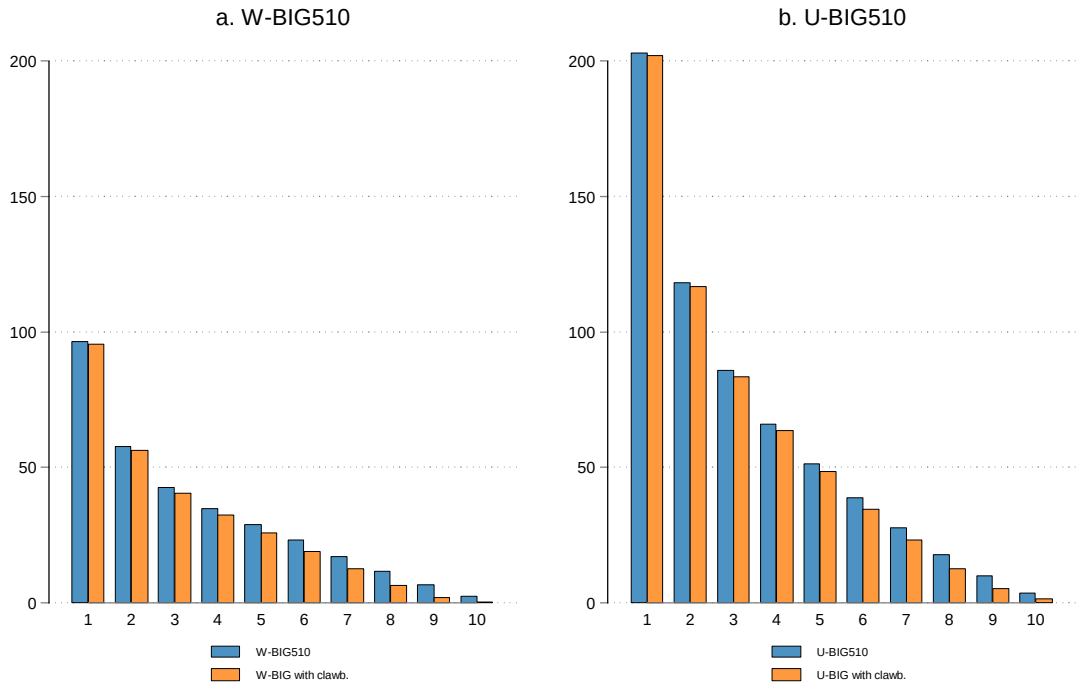


Source: authors' estimates based on the LCS 2014/15, uprated to 2021 with income and consumption adjusted for employment loss over the 2020/21 lockdown period, and adjusted to 2023 using CPI.

Appendix C: BIG transfers with and without clawback

If we drill down into the difference between the W-BIG and the U-BIG, with and without the clawback mechanism, we can see that there is a slight drop in incidence in the poorer deciles (Figure C1). This is because some individuals in households may have enough income to be liable for tax but they may be the sole breadwinners, and when their income is spread amongst a large household, their per capita consumption is very low. However, as we would expect, the drop in the incidence of the BIG is increasing with income in both scenarios, given that the incidence of PIT is much higher in households with more income.

Figure C1: Incidence of the W-BIG and U-BIG with and without the clawback mechanism, per cent of disposable income



Note: deciles are based on the consumption welfare aggregate.

Source: authors' estimates based on the LCS 2014/15, uprated to 2021 with income and consumption adjusted for employment loss over the 2020/21 lockdown period, and adjusted to 2023 using CPI.

Appendix D: Efficiency of simulated tax and transfer measures

Table D1: Efficiency of simulated tax and transfer measures

Fiscal instrument	Efficiency (Impact per R million collected or spent)		
	Inequality (G.p./R million)	Extreme poverty (p.p./R million)	Total poverty (p.p./R million)
Simulated transfers			
SRD510	40.8	110.4	28.6
W-BIG510 with clawback	31.6	85.2	42.6
U-BIG510 with clawback	29.3	81.6	48.2
Simulated taxes			
PIT 1%	5.7	-3.5	-8.5
1% surcharge (>R50,000)	8.5	-4.4	-3.1
1 & 3% surcharge (>R50,000 & >R1.5 million)	9.0	-3.0	-2.2
PIT 1% (excl. 18%)	8.4	-4.7	-1.0
Surcharge (IEJ)	4.7	-5.6	-8.0
VAT 1%	-0.3	-15.0	-10.4
VAT 1.4%	-0.3	-13.5	-9.7
VAT 6.2%	-0.3	-12.3	-8.5

Note: ‘G.p.’ means ‘Gini points’ and ‘p.p.’ means ‘percentage points’.

Source: authors’ estimates based on the LCS 2014/15, uprated to 2021 with income and consumption adjusted for employment loss over the 2020/21 lockdown period, and adjusted to 2023 using CPI.