Modelling value-added tax (VAT) in South Africa

Assessing the distributional impact of the recent increase in the VAT rate and options for redress through the benefits system

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Outline

- ❑ Recent Vat and social benefit policy changes
- ❑ Use of SAMOD and LCS 2014/15
- ❑ Assumptions
- ❑ Findings
- ❑ Policy recommendations

Tax – social benefit changes in 2018

- The standard rate of VAT was increased from 14% to 15% on 1 April 2018
- Annual changes were made to social benefits with further increases on 1 October 2018 to minimise the impact on poorer households
- Further zero-rating of items were implemented with effect from 1 April 2019

Relation to literature

- Consensus view (Mirrlees Review): direct taxes and transfers are better instruments for redistribution than commodity taxes

- The case is stronger in more advanced economies with well developed tax-benefit systems

- South Africa has numerous social benefits but not for all without income – new instruments needed

- Earlier work (e.g. Oordt: 2018) for SA confirms that direct benefits will outperform zero-rating in poverty and inequality reduction

Methodology

- South African static tax-benefit microsimulation model, SAMOD version 6.6
- Underpinned by the Living Conditions Survey 2014/15
- Simulated tax-benefit policies for each year and tested hypothetical reform scenarios
- Assess distributional impact of scenarios in terms of post-fiscal income (i.e. after adding social benefits and deducting direct tax and VAT)

Assumptions

- Uprate expenditure items from 2014/15 to 2018/19 using sub components of CPI
- Assume full take-up of social benefits and total compliance
- Assume that full incidence of VAT is on consumers
- Assume that revenue forgone can be multiplied by a factor of 1.5 prior to redirecting through the social benefit system
- Simulate first order effects, direct financial impact with no behavioural changes

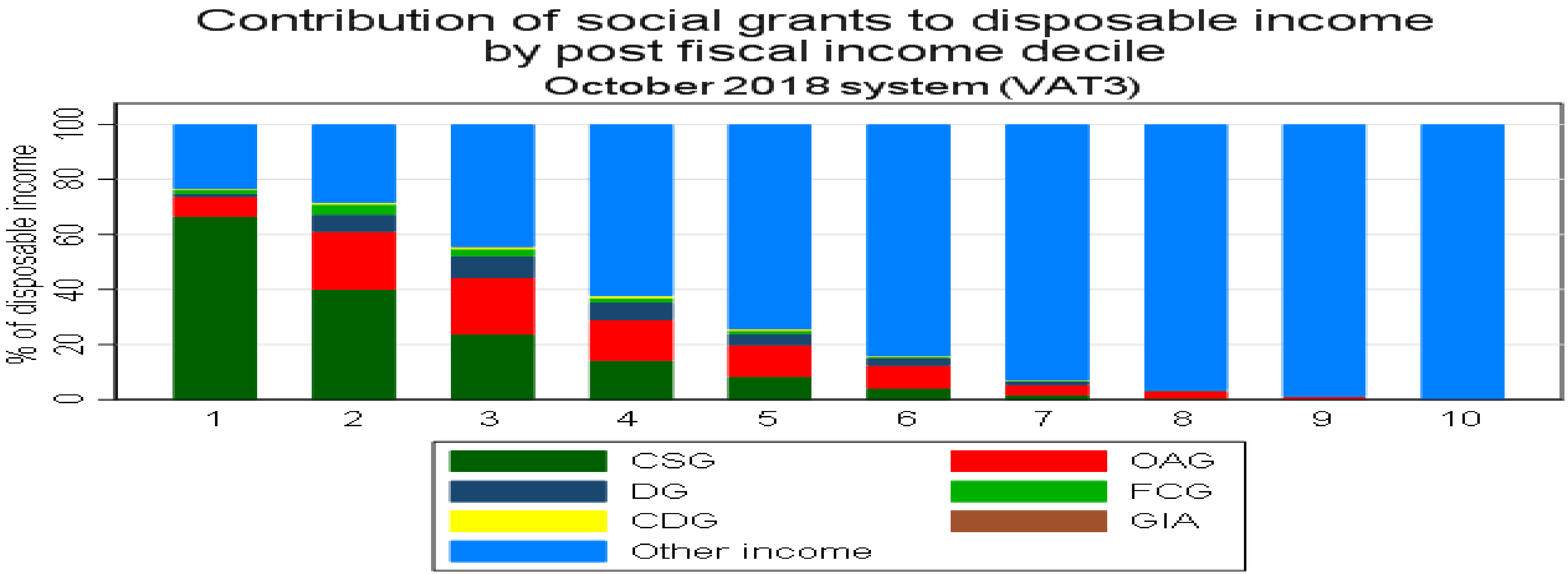
Results

Each of the different scenarios were modelled and the outcomes evaluated both in terms of overall impact on poverty and inequality, and also in terms of the distribution of post-fiscal income.

The results section is in four parts:

1. Analysis of the impact of the VAT rate increase and the second increase in social grant amounts that was implemented in October 2018;
2. Explores the impact of various hypothetical means-tested benefits that are financed by applying the standard-rate of VAT to items that are currently zero-rated;
3. Explores the impact of introducing two types of basic income grant, again having applied the standard rate of VAT to items that are currently zero-rated; and
4. Explores the impact of reversing the VAT hike, eliminating the zero-rating of certain items, and increasing the amount of an existing grant – the Child Support Grant (CSG).

Contribution of social grants to disposable income by post fiscal income decile, October 2018 (VAT3)



Simulated scenarios
(1) Status quo versus counterfactual

VAT 1 (Counterfactual	VAT 2 (Actual)	VAT 3 (Actual)
June 2018 applicable tax-benefit rule	June 2018 applicable tax-benefit rules	October 2018 applicable tax-benefit rules
Counterfactual VAT rate of 14% is assumed	VAT rate of 15% is applied	VAT rate of 15% is applied

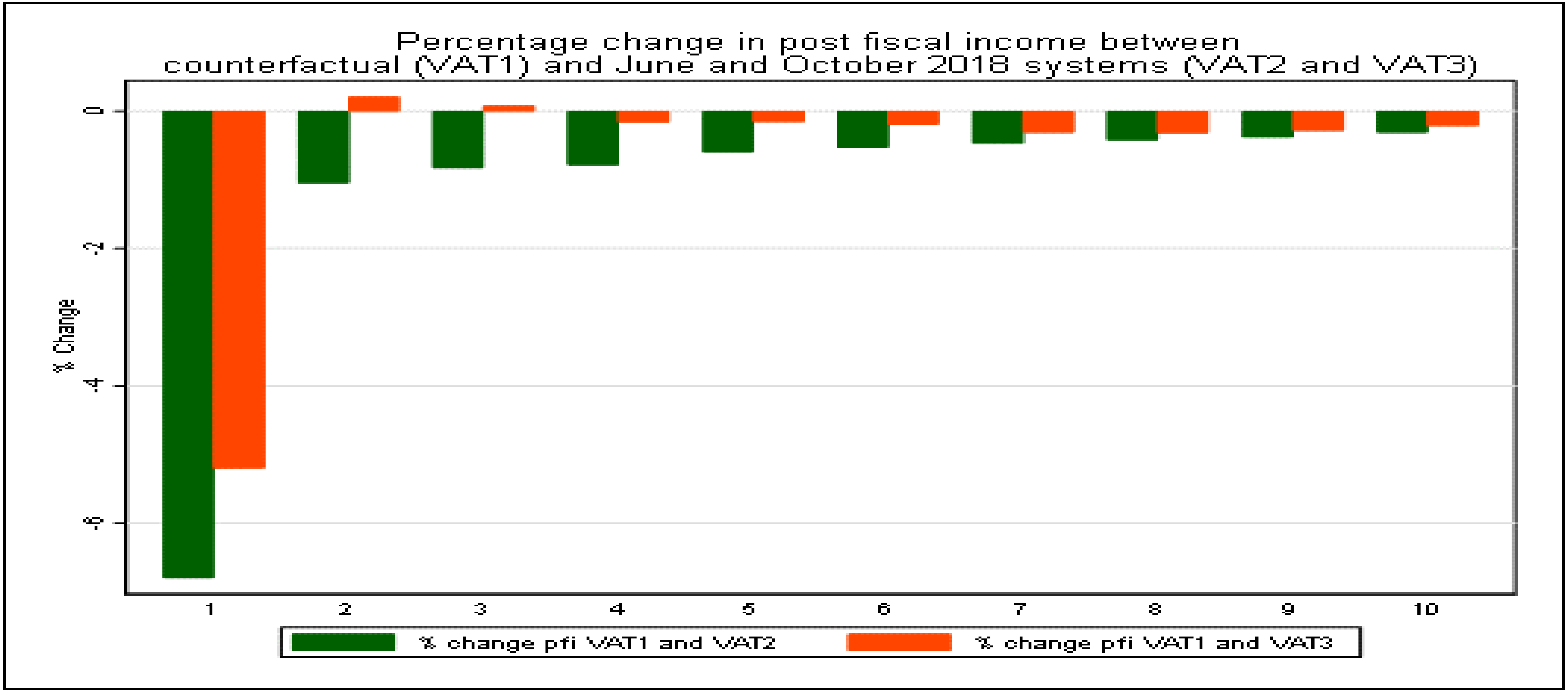
Poverty and inequality
(1) Status quo versus counterfactual

Impact of the April 2018 VAT rate increase (VAT2) and the October 2018 increase in social grant amounts (VAT3) on post-fiscal income

Scenario	Indirect taxes change (R Billion) Compared to VAT1	Benefit expenditure change (R Billion) Compared to VAT1	Post-fiscal income Poverty	Inequality
VAT 1 (Counterfactual)	0	0	33.5	0.638
VAT 2 (June 2018)	+ R7.5	0	33.6	0.639
VAT 3 (October 2018)	+ R7.5	+2.7	33.2	0.637

Source: Authors' calculations using SAMOD V6.8x and LCS 2014/15 dataset.

Percentage change in post-fiscal income by decile



Scenarios

(2) Redirect to means-tested benefit

Vat 4	Vat 5	Vat5a	VAT5b
October 2018 rules with standard rate of VAT on zero-rated items	October 2018 rules with standard rate of VAT on zero-rated items	October 2018 rules with standard rate of VAT on zero-rated items	October 2018 rules with standard rate of VAT on zero-rated items
	Introducing a new revenue neutral benefit system R225 benefit Ages 18-25 Not receiving DG	Introducing a new revenue neutral benefit system R200 benefit Ages 18 to 30 Not receiving DG	Introducing a new revenue neutral benefit system R280 benefit Ages 18 to 25 Not receiving DG
	CSG means test (single and couple)	No employment / self employment income. If married apply CSG couple means test	No employment / self employment income

Scenarios
(2) Redirect to means-tested benefit

VAT 6	VAT 6a	VAT 6 b
October 2018 rules with standard rate of VAT on zero-rated items	October 2018 rules with standard rate of VAT on zero-rated items	October 2018 rules with standard rate of VAT on zero-rated items
Introducing a new revenue neutral benefit system R120 benefit Age 26 -59 Not receiving DG	Introducing a new revenue neutral benefit system R225 benefit Age 36-59 Not receiving DG	Introducing a new revenue neutral benefit system R200 benefit Age 26-59 Not receiving DG
CSG means test (single and couple)	CSG means test (single and couple)	No employment / self employment income

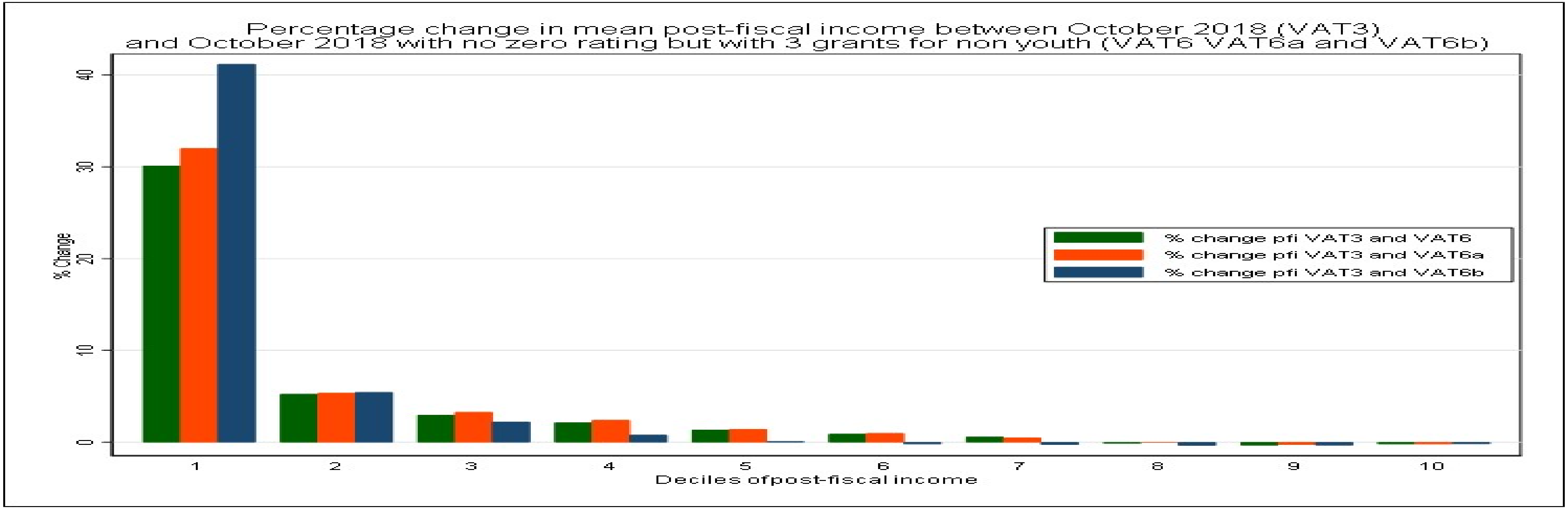
Poverty and inequality
Redirect to means-tested benefit

Impact of various reform scenarios on post-fiscal income

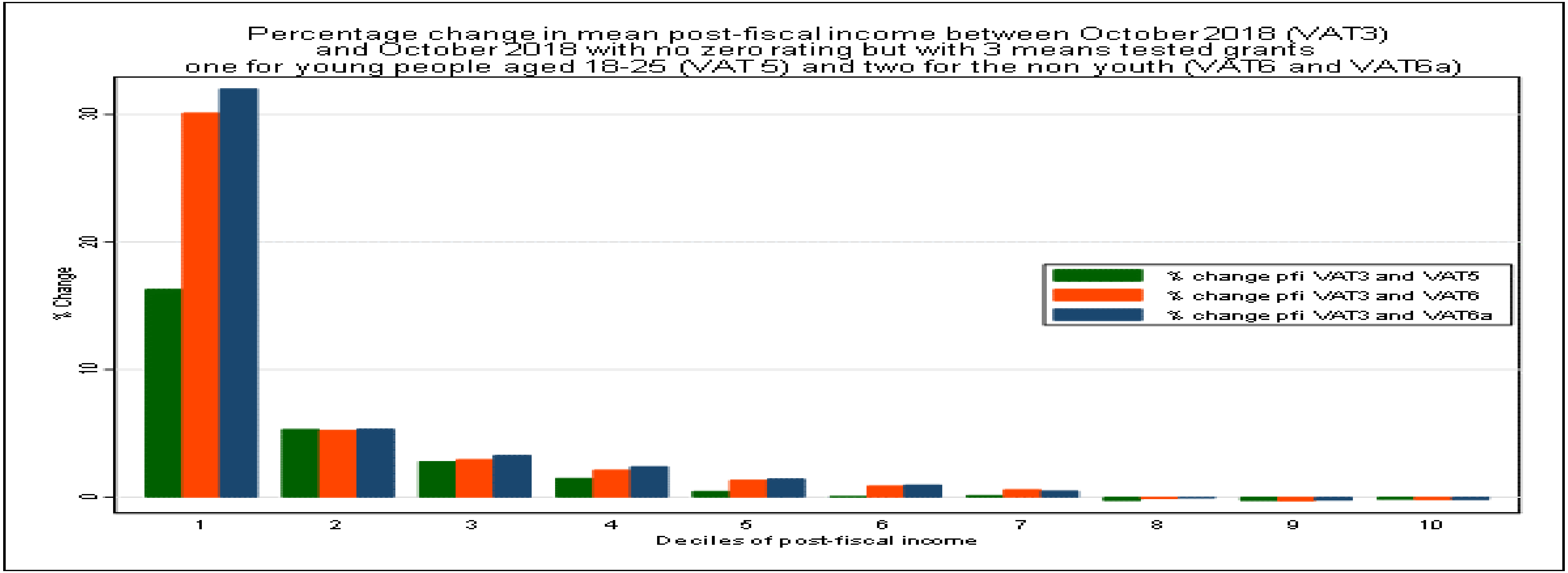
Scenario	Indirect taxes change (R Billion) Compared to VAT3	Benefit expenditure change (R Billion) Compared to VAT3	Post-fiscal income Poverty	Inequality
VAT 3 (October 2018)	/	/	33.2	0.637
VAT 4	+ R13.0	/	34.0	0.641
VAT 5	+ R13.0	R19.6	32.2	0.633
VAT 5a	+ R13.0	R19.6	32.2	0.632
VAT 5b	+ R13.0	R19.8	31.9	0.632
VAT 6	+ R13.0	R19.6	32.3	0.633
VAT 6a	+ R13.0	R19.8	32.3	0.632
VAT 6b	+ R13.0	R19.0	32.5	0.632

Source: Authors' calculations using SAMOD V6.8x and LCS 2014/15 dataset.

Percentage change in post-fiscal income by decile, comparing actual October 2018 arrangements (VAT3) with reform scenarios where zero-rated items are taxed at the standard rate of VAT (15 percent) and new grants are introduced for older people of working age (VAT6, VAT6a, Vat6B)



Percentage change in post-fiscal income by decile, comparing actual October 2018 arrangements (VAT3) with reform scenarios where zero-rated items are taxed at the standard rate of VAT (15 percent) and new grants are introduced with the CSG means-test (VAT5, VAT6, Vat6a)



Scenarios
(3) Redirect to universal benefit

VAT 7	VAT 8
October 2018 rules with standard rate of VAT on zero-rated items	October 2018 rules with standard rate of VAT on zero-rated items
Introducing a new universal benefit system	Introducing a new universal benefit system
R200 benefit Ages 18 - 59 Not receiving DG Non means tested	R200 benefit Ages 18 - 30 Not receiving DG Non means tested

Poverty and inequality
Redirect to universal benefit

Impact of various reform scenarios on post-fiscal income

Scenario	Indirect taxes change (R Billion) Compared to VAT3	Benefit expenditure change (R Billion) Compared to VAT3	Post-fiscal income Poverty	Inequality
VAT3 (October 2018)	/	/	33.2	0.637
VAT7	+ R13.0	R70.8	29.6	0.620
VAT8	+ R13.0	R31.7	31.7	0.630

Source: Authors' calculations using SAMOD V6.8x and LCS 2014/15 dataset.

Scenarios

(4) Reverse rate hike and redirect to CSG

VAT 9	VAT 10
October 2018 rules but reverse standard rate to 14%	October 2018 rules but reverse standard rate to 14%
	Introducing a new revenue neutral benefit system
	Increase CSG by R40 to R450

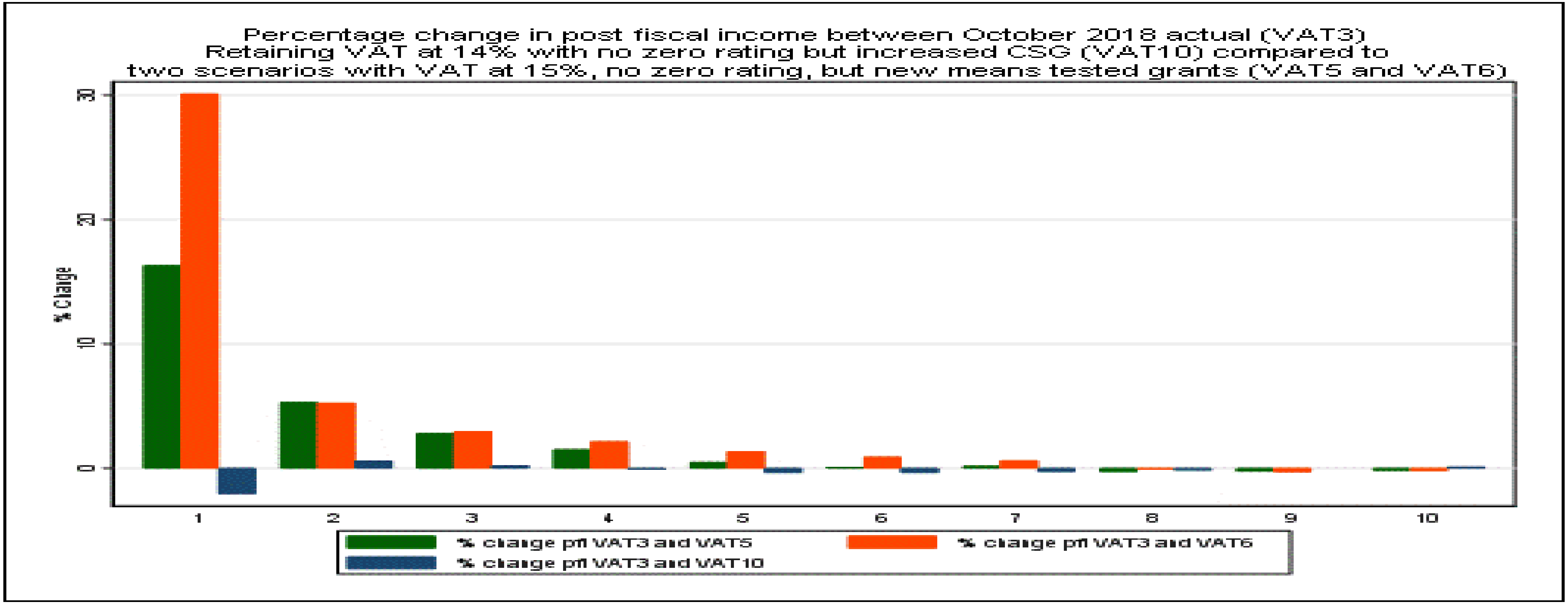
Poverty and inequality
Reverse rate hike and redirect to CSG

Impact of various reform scenarios on post-fiscal income

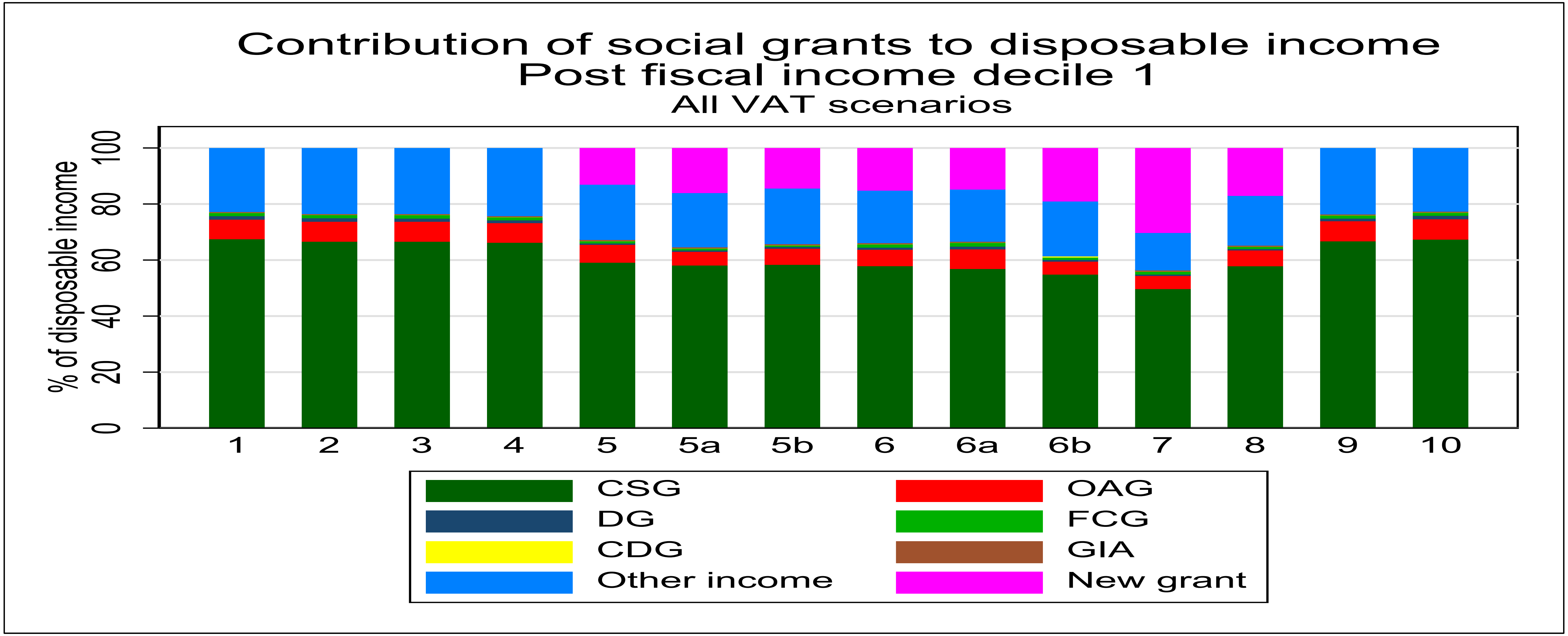
Scenario	Indirect taxes change (R Billion) Compared to VAT3	Benefit expenditure change (R Billion) Compared to VAT3	Post-fiscal income Poverty	Inequality
VAT3 (October 2018)	/	/	33.2	0.637
VAT9	+R4.7	0	33.7	0.640
VAT10	+R4.7	R7.0	32.8	0.637

Source: Authors' calculations using SAMOD V6.8x and LCS 2014/15 dataset.

Percentage change in post-fiscal income by decile, comparing actual October 2018 arrangements (VAT3) with reform scenarios VAT5, VAT6 and VAT10



Contribution of social grants to disposable income for post fiscal income decile 1, for all modelled scenarios



Conclusion and policy recommendations

- Increases in social benefits in 2018 successfully mitigated the impact of the overall VAT increase, but not for the poorest households as certain low-income households are ineligible for benefits currently

- A new benefit for low-income people of working age would reduce poverty overall and raise the incomes of the poorest households, financed by eliminating the current zero-rating of goods in the VAT system

- Scenario simulations demonstrate the superiority of using direct taxes and social benefits rather than provisions in indirect taxes for achieving redistribution

For reference purposes kindly refer to the link to the working paper
https://www.wider.unu.edu/publication/modelling-value-added-tax-vat-south-africa