


Article

Wealth Inequality in South Africa—The Role of Government Policy

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Abstract: In South Africa, high levels of wealth inequality have persisted since 1994, to the extent that 1% of the population owns 50% of the wealth. This study examines how macroeconomic policies influenced wealth inequality in South Africa over the period 2010 to 2019 using a behavioural life-cycle model. Despite a decrease in wealth inequality over this period, the extent of this decrease is almost negligible. Results show government's current policy model to redirect wealth from a very small tax base that is under increasing financial strain is unable to meet wealth redistributive targets. The South African government should change the wealth redistribution policy from redistribution through predominantly lump sums to creating an environment in which private enterprises are able to absorb the labour capital that South Africa possesses. An open labour market would support private and foreign direct investment into the economy, thereby strengthening economic growth and upliftment through increased income and the consequent ability to accumulate wealth.

Keywords: wealth inequality; wealth redistribution; wealth accumulation; quality of life; macroeconomic policy; behavioural life cycle model; South Africa

JEL Classification: D14; D15; D31; E21; E24; G5



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1. Introduction

High levels of wealth inequality continue to persist in South Africa, to the extent that 1% of the population owns 50% of the wealth (von Fintel and Orthofer 2020). Since the abolishment of the Apartheid in 1994, the South African government has implemented several policies aiming to address the wealth and economic imbalance in the country. The Apartheid legacy of economic exclusion of the majority black South African population has, however, left a lasting impact in democratic South Africa. Even though expenditure on economic development, education, social development, and wealth redistribution per capita has increased in line with inflation since the global financial crisis of 2007–2008, inequality has remained unchanged across the same period (Michie 2020; National Treasury 2020). This persistently high level of wealth inequality has several negative effects on society, such as suppressed economic growth and a decrease in standard of living (SoL) and quality of life (QoL) factors. Similar to Susniene and Jurkauskas (2009), we acknowledge that there is no universal definition of quality of life, nor for the concept of standard of living. QoL is a multi-dimensional concept, applicable across disciplines. In economics, QoL is affected by a person's physical, spiritual, mental, emotional, and health state, as well as the degree of independence and social status brought about by their finances. The seminal work of Ringen (1991) considered standard of living to be a measure of how people live, based on their levels of income and consumption, at both micro- and macro-economic levels. Negative effects on democratic political systems include reduced regulation, decreased investment in infrastructure, and economic distortions that benefit the rich more than the poor (Nowatzki 2012; Bagchi and Svejnar 2015; Lusardi et al. 2017;

Tyler and Felix 2020). To reduce wealth inequality in South Africa, it is advised that governments should devote attention towards promoting good governance conducive to economic growth, restructuring the labour market, expanding the revenue base, increasing investment in education and physical infrastructure, reducing debt and the public wage bill, and privatising unproductive SOEs (Omilola and Akanbi 2014; Mdluli et al. 2019).

The aim of this study was to investigate how socioeconomic policy affects wealth inequality in South Africa for the period from 2010 to 2019, with the objective of proposing a model on how to decrease wealth inequality in South Africa. The remainder of this paper is structured as follows: after the introduction, section two provides a brief literature review on macroeconomic policy and its effects on wealth inequality, and section three provides the model framework. Section four presents the data analysis and results obtained, and section five concludes the study.

2. Literature Review

2.1. Theoretical Literature Review

Okun (1975) proposed that a trade-off exists between social equality and market efficiency. When government decision-making is biased towards social and economic equality, economic growth may weaken and the population is disincentivised to work and save, worsening inequality. Bluestone et al. (1982) maintain that the increase in inequality can be attributed to a bifurcated earnings distribution, originating through globalisation, economic restructuring, minimum wage erosion, technological transformation, and declining unionisation (Korzeniewicz and Moran 2005). Lindbeck (1983) expands on the negative consequences of welfare redistributive effects on labour incentives through means of increasing progressive taxation. As marginal tax rates increase, the willingness to relocate for employment opportunities and the willingness to invest in human capital decreases. Galor and Moav (2006) suggests that wealth inequality increases due to a collapse in the structure of the working class.

The accumulation of capital by capitalists increases the significance of human capital in sustaining the rate of return on capital. This shift in capitalist opinion on the provision of public education, unless publicly financed, exists due to limited incentive for capitalists to invest in employees, since this would lead to declining returns on capital. Capitalists and workers therefore both gain from public education. Lupu and Pontusson (2011) propose that the structure of inequality determines the redistributive policies required, not the level of inequality. Middle-income voter support is necessary for the implementation of redistributive policies, and middle-income voters will empathise with the poor and support redistributive policies when the income distance, termed as the social distance, between the middle and the poor is relatively small compared to the income distance between the middle and the affluent. Piketty (2014) proposes that if the rate of return on capital exceeds the growth rate of GDP, wealth inequality increases. Increased wealth inequality will subsequently lead to a new class of social elites, where wealth will be less readily created by individuals, but instead inherited and becoming increasingly concentrated. To decrease wealth inequality, a global wealth tax is proposed.

2.2. Empirical Literature Review

Saiki and Frost (2014) examined the effect of unconventional monetary policy on inequality in Japan for the period of 2008–2014. The results indicate that monetary policy interventions undertaken by Japan after the global financial crisis of 2007–2008 widened inequality via the portfolio channel. Asset prices rose disproportionately compared to economic fundamentals, which benefit wealthier households that own a larger share of savings in equities. The analysis is limited by the inability to provide causality from either inequality or monetary policy. O'Farrell and Rawdanowicz (2017) analysed the effects of monetary policy on wealth inequality over the business cycle via investment returns, debt-cost servicing, and asset prices. Their results show that monetary policy has ambiguous effects on wealth inequality, with increased property prices decreasing wealth inequality,

and increasing stock and bond prices increasing wealth inequality. Progressive taxation, social welfare, and equitable access to education decreases wealth inequality. [Causa et al. \(2018\)](#) investigated the drivers of tax and income redistribution for the period 1990–2014 in Organisation for Economic Co-operation and Development (OECD) countries. Their results showed that social spending on income support to the working-age population has the greatest redistributive effect, decreasing inequality. An increase in 1% of GDP yields an increase of 4% in redistribution. Tax revenue raised from personal income yields a 3% increase in redistribution for an increase in 1% of GDP spending. Increased global economic integration decreases the effect of tax redistribution to reduce inequality.

[Konstantakopoulou \(2020\)](#) finds that in high-income countries, an increase in inequality leads to an increase in import demand. Policies that aim to reduce inequality should thus lead to an improvement in trade balance and a smoothing out of potential social outbursts. [Mumtaz and Theophilopoulou \(2020\)](#) support this finding by considering the relationship between monetary policy and the evolution of redistribution measures. They found that expansionary monetary policy shocks lead to an increase in wealth inequality. The effect is heterogeneous across the wealth distribution, with the monetary shock affecting the lower wealth median household to a greater degree.

[Chatterjee et al. \(2021\)](#) combine survey, tax, and historical administrative data to measure the effect of taxes and social transfers on the distribution of growth in South Africa. The results indicate a divergence in the growth of the top and bottom income groups: between 1993 and 2019, the pre-tax income of the top 1% rose by 50%, while that of the poorest 50% fell by a third. The implementation of redistribution in the form of progressive taxation, social grants, and transfers in health and education has compensated most of the decline in real incomes at the bottom, yet it has been largely insufficient to substantially reduce the extreme disparities inherited from a century of racial discrimination and oppression.

[Černiauskas et al. \(2022\)](#) study how changes in the labour market structure, economic returns in labour, and capital markets, and taxation and social benefit policies affected inequality in Lithuania between 2007 and 2015. The results show that implementing fiscal consolidation by reducing social benefit expenditure can have important negative distributional consequences. This is due to progressive changes implemented in the tax and benefit system that led to a reduction in inequality up to 2011. Social benefits only slightly increased thereafter, whilst tax rates were lowered up to 2011 and not raised thereafter, leading to a sharp increase in inequality over the next period.

2.3. Contribution to Literature

This paper makes a two-fold contribution to the existing literature.

Firstly, the study contributes to understanding the relationship between the degree of wealth inequality and the consequential impact on QoL. The literature does not disseminate the impact of wealth inequality on QoL into tangible, practical factors concerning living requirements and the weighting of each of these requirements. [Chatterjee \(2019\)](#) suggests that given the unique nature of South Africa's economy historical economic injustice, wealth inequality theories need to go beyond standard savings and distribution models. Hereditary modes of wealth transmission must be accounted for and intergenerational mobility regarding the impact of wealth regarding future employability, income, job duration, and labour market progression must be considered. In this manner, wealth inequality in South Africa can be described and analysed more accurately. This, in turn, allows households to make more informed decisions on education and which labour market segments to target regarding higher income levels to assist in wealth accumulation.

Second, the study aims to explain how wealth inequality in South Africa is affected by policies that target wealth redistribution. [Chatterjee et al. \(2021\)](#) propose that current literature does not disseminate how expenditure is related to infrastructure development, industrial and labour market policy, or how housing programs at the macro-level have effectively accrued to low-income groups in South Africa.

3. Model Framework

This study uses, as foundation, the behavioural life-cycle theory proposed by Shefrin and Thaler (1988), incorporating policy effects into the behavioural life-cycle model through inclusion of macro-policy variables for the period 2010–2019, treating each year in the time series as a distinct tranche. The adoption of this approach culminates from the fact that the population generally selects the macro policies adopted by the government by virtue of the democratic election process. The behavioural life-cycle theory has proved to provide an adequate approximation to financial decision-making of individuals in numerous studies (Levin 1998; Browning and Crossley 2001; Schooley and Worden 2008; Griesdorn et al. 2014). The proposed model assumes that an individual follows the life cycle as described in Figure 1, where the individual is born at T_0 , attains education, enters the labour market and buys property at T_1 , has children at T_2 , retires at T_3 , and passes away and bequeaths their estate to the next generation at time T_4 .

Time					
Events	<ul style="list-style-type: none"> • Individual is born 	<ul style="list-style-type: none"> • Individual attains education • Individual enters labour market • Individual buys property 	<ul style="list-style-type: none"> • Individual has children 	<ul style="list-style-type: none"> • Individual retires 	<ul style="list-style-type: none"> • Individual dies • Estate bequeathed to next generation

Figure 1. Life cycle model and events during the individual’s life cycle.

An average QoL cost of living is constructed using South African General Household Survey data (Statistics South Africa 2021) in conjunction with the life cycle described in Figure 1. This QoL is defined as what would constitute a reasonable SoL concerning basic human needs, such as subsistence, reproductive, and security needs (Costanza et al. 2007). For this study, budget expenditures related to wealth redistribution, lifestyle consumption concerning foodstuffs and living requirements, healthcare consumption, education consumption, retirement savings, and the cost associated with unemployment were used as factors. Various studies support these factors as having a direct impact on wealth inequality and associated impact on QoL (Krivo and Kaufman 2004; Lentz and Tranaes 2005; Wolff and Zacharias 2007; Subramanian and Jayaraj 2013; Dickman et al. 2017; Pfeffer 2018).

The distribution of household wealth in South Africa is then estimated using the method proposed by Chatterjee et al. (2020) to generate an average lifetime level of accumulated wealth. This is achieved by rescaling the above factors across the working age population. In this study, the population consists of all South Africans of working age (15–64 years old) and post-retirement age. The average lifetime level of wealth required to sustain an average QoL is determined for the different percentile income groups using a set of underlying equations discussed in the next section of this paper. The percentile income groups are the 0th percentile income group, PI_0 ; the 0–50th percentile income group, PI_{0-50} ; the 50–90th percentile income group, PI_{50-90} ; and the 90–100th percentile income group, PI_{90-100} . Wealth redistributive transfers, the budget expenditure related to wealth redistribution across the population, are estimated using data from the National Treasury (National Treasury 2022) regarding social development and redistributive expenditures. These results are used in conjunction to determine the policy impact on wealth redistribution over time. The area of non-equilibrium between QoL and the level of wealth inequality is then determined.

3.1. Quality of Life, Cost of Living, and Lifetime Level of Accumulated Wealth

A meaningful QoL can be approximated as the average monetary lifetime requirements with respect to specific QoL indicators. The level of wealth W at which a meaningful QoL can be attained by the average South African is described by Equations (1a) and (1b).

$$W_{QoL}(T) = (1 + q_5) \times \left(\sum_{i=1}^3 q_i \right) + q_4 + \alpha \tag{1a}$$

$$W'_{QoL}(T) = (1 + q_5) \times \left(\sum_{i=1}^3 q_i \right) \tag{1b}$$

where $W_{QoL}(T)$ is the quality of life wealth variable, $W'_{QoL}(T)$ is the 0th generation quality of life wealth, q_1 refers to material living conditions, q_2 refers to healthcare requirements, q_3 refers to educational requirements, q_4 refers to bequeathed estate passed onto the next generation, T refers to the life expectancy of the average South African, q_5 refers to quality of employment, and α is the bequeathed estate received from the previous generation. Each q_i variable can be approximated to a specific monetary value required. q_1 is determined by income levels and can be approximated as the lifetime subsistence requirements, retirement savings contribution, retirement withdrawals, and household savings of an average South African, represented as consumption, accounting for the period where there are child dependents in the household. q_2 is determined as the lifetime cost of healthcare associated with the individual, accounting for periods of excess cost across the life cycle, associated with periods where the individual bears responsibility for their children’s healthcare needs. q_3 is calculated as the expected cost of education requirements for further development and growth in the labour market regarding career growth and costs associated with education requirements regarding children, determined across the time period from T_2 to T_3 . q_4 is determined as the bequeathed estate, approximated as the real-return value of the average transferred property plus the remaining real-return pension asset at the cessation of the individual at time T_4 . q_5 is the opportunity cost of unemployment. This cost of unemployment is calculated using the average rate of unemployment as a measure of lost income between the period T_3 and T_1 . The model aims to determine the quality of life wealth $W_{QoL}(T)$ and the 0th generation quality of life wealth $W'_{QoL}(T)$ for each year for the period 2010 to 2019, by fixing each year in the period as a separate state, and then extending each state by the respective period T for all independent variables as determined by each state’s underlying data. The lifetime level of wealth accumulated is given by Equation (2)

$$W(T) = \frac{1}{N_{RT}} \sum_{23}^{60} \frac{t_{PI}}{r_{ET}} - t_{PI} \tag{2}$$

where $W(T)$ is the lifetime level of wealth accumulated over the period $T = 60 - 23$. T is fixed at 38 since this corresponds to the same employment period for $W'_{QoL}(T)$. N_{RT} represents the number of registered personal income taxpayers. The total amount of tax collected on personal income is the variable t_{PI} . The effective tax rate on personal income is represented by r_{ET} . $W(T)$ is thus the average total lifetime after-tax personal income of an individual. $W(T)$ is also determined for the different percentile income groups: the 0th percentile income group, PI_0 ; the 0–50th percentile income group, PI_{0-50} ; the 50–90th percentile income group, PI_{50-90} ; and the 90–100th percentile income group, PI_{90-100} . The percentile income groups 0–50 (PI_{0-50}), 50–90 (PI_{50-90}), and 90–100 (PI_{90-100}) are determined from the number of employed individuals registered for pay-as-you-earn (PAYE) income tax. The 0th percentile income group is defined as either unemployed, discouraged work seekers, or employed individuals not registered for PAYE income tax. The individuals in the latter case earn below the income threshold for PAYE income tax. Individuals in this group may be employed in the informal sector or as seasonal employees. The model assumes that the population in this income group earn zero income, since the

population is so large relative to the income generated. It is for this reason that $W(T)$ is fixed at zero across all years in the period.

3.2. Macro-Economic Wealth Inequality Model

The government’s ability to address wealth inequality is constrained by government expenditures related to wealth transfers and expenditures on factors related to reducing wealth inequality in the long-term. Such expenditure on social welfare, education, and economic development is constrained by how the total budget is allocated. Equation (3) describes the composition of the annual budget with respect to source revenue

$$B = R_t + R_{nt} + \varepsilon \tag{3}$$

where B is the total budget, R_t is the budget attributed to tax revenue, R_{nt} is the budget attributed to non-tax revenue, and ε is other revenue contributors. Since the total budget is determined by both tax revenue, non-tax revenue, and other revenue sources, the government is constrained by the degree of wealth redistribution that can be allocated through reasonable tax revenue on the population. Equations (4) and (5) describe how the budget allocated to wealth redistribution is related to the total budget.

$$B = B' + B_{WI} \tag{4}$$

$$B_{WI} = k B = k (R_t + R_{nt} + \varepsilon) \approx k (R_t + R_{nt}), 0 \leq k \leq 1 \tag{5}$$

where B_{WI} is government expenditure related to healthcare, social welfare, education, and economic development, B' is the budget remainder and k representing a factor whereby B_{WI} can be levered up or down. Equation (6) describes B_{WI} in relation to the budget allocations for healthcare, social welfare, education, and economic development.

$$B_{WI} = B_H + B_{SW} + B_E + B_{ED} \tag{6}$$

where B_H is expenditure related to healthcare, B_{SW} is expenditure related to social welfare and development, B_E is expenditure related to education, and B_{ED} is expenditure related to economic development. Since wealth redistributive transfers are targeted to the lower end of the wealth and income distributions, irrespective of employment status, the population targeted by these policies are those belonging to the 0th and 0–50th percentile income groups, PI_0 and PI_{0-50} . Equation (6) is thus adjusted to Equation (7) to describe the average government expenditure related to healthcare, social welfare, education, and economic development expenditure related to wealth redistributive policies to each member of this population.

$$\bar{B}_{WI} = \bar{B}_H + \bar{B}_{SW} + \bar{B}_E + \bar{B}_{ED}, N = N(PI_0) + N(PI_{0-50}) \tag{7}$$

Each component function \bar{B}_i of Equation (7) is determined using respective equations that are in turn determined by other variables (Fortuin 2021). The redistributive wealth transfer distance is described by Equation (8).

$$7W_G = W'_{QOL}(T) - \bar{B}_{WI} + W(T) \tag{8}$$

where $W(T)$ is the level of wealth accumulated over the period T as per the personal finance wealth inequality model, $W'_{QOL}(T)$ is the level of wealth W at which a meaningful QoL can be attained as per the personal finance wealth inequality model, and \bar{B}_{WI} is the average government expenditure related to healthcare, social welfare, education, and economic development expenditure related to wealth redistributive policies to each member of the population N , where N is the population defined to be fit for the labour market, excluding the 50–90th and 90–100th percentile income groups, PI_{50-90} and PI_{90-100} .

4. Data Analysis and Results

4.1. Quality of Life, Cost of Living, and Lifetime Level of Accumulated Wealth

The summary results for the 0th generation quality of life wealth $W'_{QOL}(T)$ is given in Table 1.

Table 1. Quality of life cost of living $W'_{QOL}(T)$.

Year	q1 (ZAR)	q2 (ZAR)	q3 (ZAR)	q4 (ZAR)	q5 (%)	W'_{QOL} (ZAR)
2010	8,108,224	2,816,900	946,734	2,644,016	49.7	17,773,438
2011	6,480,462	2,922,634	837,898	2,299,716	50.1	15,367,950
2012	5,894,897	2,982,316	752,682	2,110,880	49.7	14,418,277
2013	6,433,143	3,335,832	783,642	2,374,146	47.4	15,556,807
2014	6,948,248	3,661,267	861,002	2,515,992	47.1	16,872,728
2015	7,800,180	4,141,359	879,790	2,718,180	45.4	18,664,229
2016	8,374,092	4,335,774	814,602	2,829,587	46.3	19,781,370
2017	8,193,179	4,752,234	832,123	2,724,402	44.7	19,931,661
2018	10,714,026	4,985,666	890,485	3,913,170	44.8	24,027,591
2019	9,509,116	5,256,561	954,278	3,375,730	45.3	22,842,512

Source: Authors' own computations.

Table 1 shows that $W'_{QOL}(T)$ is largest for the 2018 year tranche, and lowest for the 2012 year tranche. The large magnitude of the 2018 year tranche can be attributed to the results obtained for q_1 and q_4 , which are markedly higher in this tranche as opposed to other tranches. The 2012 tranche shows the same variable sensitivity as the 2018 tranche, in reverse fashion. Healthcare variable q_2 has a strong linear increasing trend across the year tranches in the series. The education variable q_3 showcases a parabolic trend over the tranche series. The bequeathed estate variable q_4 has the same maximum and minimum values as variable q_3 . Variable q_5 , cost of unemployment, is largest in the 2011 tranche and smallest in the 2017 tranche, with a negative linear trend across the tranche range. This indicates that there has been a general increase in employment across the different tranches.

The results for the lifetime level of wealth $W(T)$ for the different percentile income groups as outlined in Section 3 (model framework) are shown in Table 2 below.

Table 2. Lifetime level of wealth $W(T)$.

Year	$W(T): PI_0$ (ZAR)	$W(T): PI_{0-50}$ (ZAR)	$W(T): PI_{50-90}$ (ZAR)	$W(T): PI_{90-100}$ (ZAR)	$W(T)$ (ZAR)
2010	0	923,506	4,488,777	35,951,182	1,084,633
2011	0	552,126	2,832,832	23,416,578	1,196,454
2012	0	370,246	2,248,147	20,532,971	1,306,807
2013	0	362,556	2,221,121	20,237,569	1,374,112
2014	0	365,749	2,269,376	20,623,813	1,497,411
2015	0	383,790	2,381,316	21,641,105	1,673,409
2016	0	399,391	2,478,120	22,520,854	1,794,887
2017	0	399,318	2,477,662	22,516,689	1,848,064
2018	0	400,219	2,483,258	22,567,546	1,924,657
2019	0	396,591	2,460,746	22,362,961	1,972,229

Source: Authors' own computations.

The results in Table 2 show that $W(T)$ varies widely between the different percentile income groups. All income groups show a negative linear trend across the different tranche years, except for the 0th percentile income group. $W(T)$, however, increases between the 2010 and 2019 tranches at an average rate of 7% per tranche year. This increase in $W(T)$ over the tranche years can be attributed to a continuous shift of population members from lower percentile income groups to higher percentile income groups.

The results show that richer individuals have experienced a lower decline in wealth over this period as opposed to lower wealth individuals that generate a taxable income.

This implies that all these individuals have experienced decreased wealth over time. This marginal decrease in wealth inequality and decreased levels of wealth for income earners were driven largely by three factors. First, $W'_{QOL}(T)$ increased at a much faster rate across the time period than $W(T)$. This creates a net negative effect on wealth inequality reduction. Second, the large population in the 0th percentile income group, who possess zero wealth, has a large net negative effect on the determination of $W(T)$, since this income group yields zero growth in wealth. Despite a substantial decrease in this population over the time period, the number of employed individuals increased by 25% across the time period, whilst the labour force and population of working age individuals increased by 32% and 20% respectively. By starting off on a base of high unemployment, the increase in the number of employed individuals had little effect on increasing $W(T)$ in the context of a somewhat proportional increase in unemployed individuals. Third, the results show that the average South African allocates a much higher proportion of wealth to consumption and healthcare, and smaller contributions to education and bequeathed estate.

4.2. Macro-Economic Wealth Inequality Model

The redistributive wealth transfer distance (W_G) is determined for each tranche year for the period 2010 to 2019. The summarised results for the model’s dependent and independent variables are shown in Table 3 below.

Table 3. Macro-economic wealth inequality model W_G .

Year	\bar{B}_H	\bar{B}_{SW}	\bar{B}_E	\bar{B}_{ED}	\bar{B}_{WI}	W_G
2010	379,437	290,783	777,482	498,866	1,946,568	14,742,237
2011	393,851	310,205	823,132	572,443	2,099,632	12,071,864
2012	410,648	329,887	855,758	633,635	2,229,927	10,881,543
2013	443,251	358,822	900,865	594,472	2,297,410	11,885,285
2014	473,336	386,352	975,671	634,131	2,469,490	12,905,827
2015	504,686	425,221	1,038,699	592,512	2,561,117	14,429,703
2016	524,920	458,921	1,117,020	508,492	2,609,354	15,377,129
2017	574,990	505,071	1,189,139	529,321	2,798,522	15,285,076
2018	617,643	540,150	1,260,058	502,851	2,920,703	19,182,231
2019	656,616	570,184	1,341,443	520,392	3,088,635	17,781,648

Source: Authors’ own computations.

Table 3 above shows that W_G is the smallest in the 2012 year tranche, and largest in the 2018 year tranche. W_G decreases between the 2010 and 2012 tranche years, and then increases between successive tranche years between 2012 and 2019. \bar{B}_H increases positively at a strong positive linear rate across all the tranche years. \bar{B}_{SW} shows a strong positive linear trend across all the tranche years. Variable \bar{B}_E positively increases at a strong positive linear rate across all the tranche years. \bar{B}_{ED} has a strong positive linear trend over all the tranche years.

5. Conclusions

The aim of the study was to investigate how policies focused on addressing wealth inequality by the South African government affects wealth inequality, with a focus on reducing wealth inequality. The results show that despite increases in wealth redistributive expenditure, this expenditure dwindled over the time period. Expenditures related to wealth redistributive policies have not sufficiently increased at large enough rate to decrease wealth inequality significantly over the period. For government expenditure to provide sufficient wealth redistribution to the population, additional expenditure over the lifetime of each member in the population to minimise the redistributive wealth transfer distance to zero is required. This result agrees with empirical results from Leibbrandt et al. (2012); Lannegren and Ito (2017); Padayachee (2019), and Polus et al. (2021). The study results and literature agree that government policies related to redistribution have failed to minimise wealth inequality.

The government is, however, constrained in the ability to increase such expenditures, since they can only be increased at a higher rate through either budget reallocation, which would most likely have a detrimental effect on other areas of society, or through either increasing taxes or increasing government debt. The average South African is, however, already severely constrained in their ability to be taxed more. Increased government debt increases the risk of creating an inflationary economic environment and increased levels of taxation in the future.

The results show that the government's policy model to redirect wealth, through either increased taxation on a very small tax base that is under increasing financial strain, or through further increases in expenditure through government debt, is unable to meet the wealth redistributive target to meaningfully decrease the redistributive wealth transfer distance sufficiently to increase QoL for most South Africans. The working age population consists predominantly of unemployed, zero to low-income earners with zero wealth. A net decrease in the redistributive wealth transfer can be achieved sustainably through aggressive policy focus on reducing the unemployment rate. Instead of targeting wealth redistribution largely through lump sum transfers to individuals and households, the optimal use of resources necessitates a change in policy to provide a much larger focus on increasing the labour market participation rate of the working-age population. The key policy focus should be to create an environment in which private enterprises are able to absorb the labour capital South Africa possess. The government should also refrain from assuming the increasing role of absorbing more labour. Through turning public enterprises profitable, revenue can be employed to invest in public-private ventures to increase labour market absorption. These results are similar to the findings of [Lentz and Tranaes \(2005\)](#), [Dickens et al. \(2017\)](#), [Arendse and Stack \(2018\)](#), [Padayachee \(2019\)](#), and [Bond and Malikane \(2019\)](#).

A key limitation of this study is that it did not include all forms of wealth currently owned by South Africans as part of determining wealth distribution in the models. Including these assets in future studies could provide greater sensitivity in the models to changes in personal finance and macro-economic factors. In addition, by including population dynamics, such as age and gender, future studies could further enhance and show differentials in wealth inequality to a more sensitive degree, especially in light of persistently high youth unemployment and wage and wealth disparities between genders, not only in South Africa, but in many developing countries across the world.

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