

# Economic shocks and the responses of poverty to growth and inequality in South Africa: implications for COVID-19 and future shocks



**GAUTENG PROVINCE**  
ECONOMIC DEVELOPMENT  
REPUBLIC OF SOUTH AFRICA



ECONOMIC DEVELOPMENT  
AND WELL-BEING  
RESEARCH GROUP

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Based on AERC-Funded research

**GPIR Policy dissemination Workshop**

**Paving Pathways to Inclusive Prosperity: Policies for Poverty Reduction and Resilience in Post-COVID South Africa**

**14th September 2023; Sheraton Hotel, Pretoria**

# Introduction: Global Focus on Poverty Reduction

❖ Highlight: Poverty reduction is the foundation of development.

❖ UNGA & MDGs (2000):

❖ Main goal: Eradicate extreme poverty and hunger.

❖ Key targets:

1. Reduce by half the people living on <\$1.25/day by 2015.
2. Ensure decent employment for all genders and ages.
3. Cut in half the number of people facing hunger by 2015.

# Introduction: South Africa's Poverty Challenge

- ❖ History: High poverty after apartheid, majorly among the black population.
  - ❖ Bhorat & Westhuizen (2012): Poverty index at 52.54 in 1995.
  - ❖ Policies over the years:
    - ❖ RDP: Focused on racial justice & decreasing poverty, but missed economic growth.
    - ❖ GEAR (1996): Aimed at unemployment via economic growth but had limited impact on poverty.
    - ❖ ASGISA: Targeted 6% growth & poverty reduction. Faced challenges in implementation.
    - ❖ NDP 2012: Aimed for growth of at least 7% to meaningfully reduce poverty.
- ❖ Growth Statistics: From 0.9% in 1990-95 to 2.8% in 1995-2000, peaking at 3.8% in 2000-2005, then declining. A sharp fall due to COVID-19 in 2020 by 6.5%.

# The Debate & South Africa's Unique Context

## ❖ Economic Growth vs. Poverty Reduction:

- ❖ Dollar & Kraay (2002): Growth benefits the poor in society, e.g., China since 1990.
- ❖ Counter-View: Growth can increase inequality, benefiting the rich more than the poor.
- ❖ Consensus: Growth is crucial but not always sufficient for poverty reduction in specific regions (Besley & Cord, 2007).

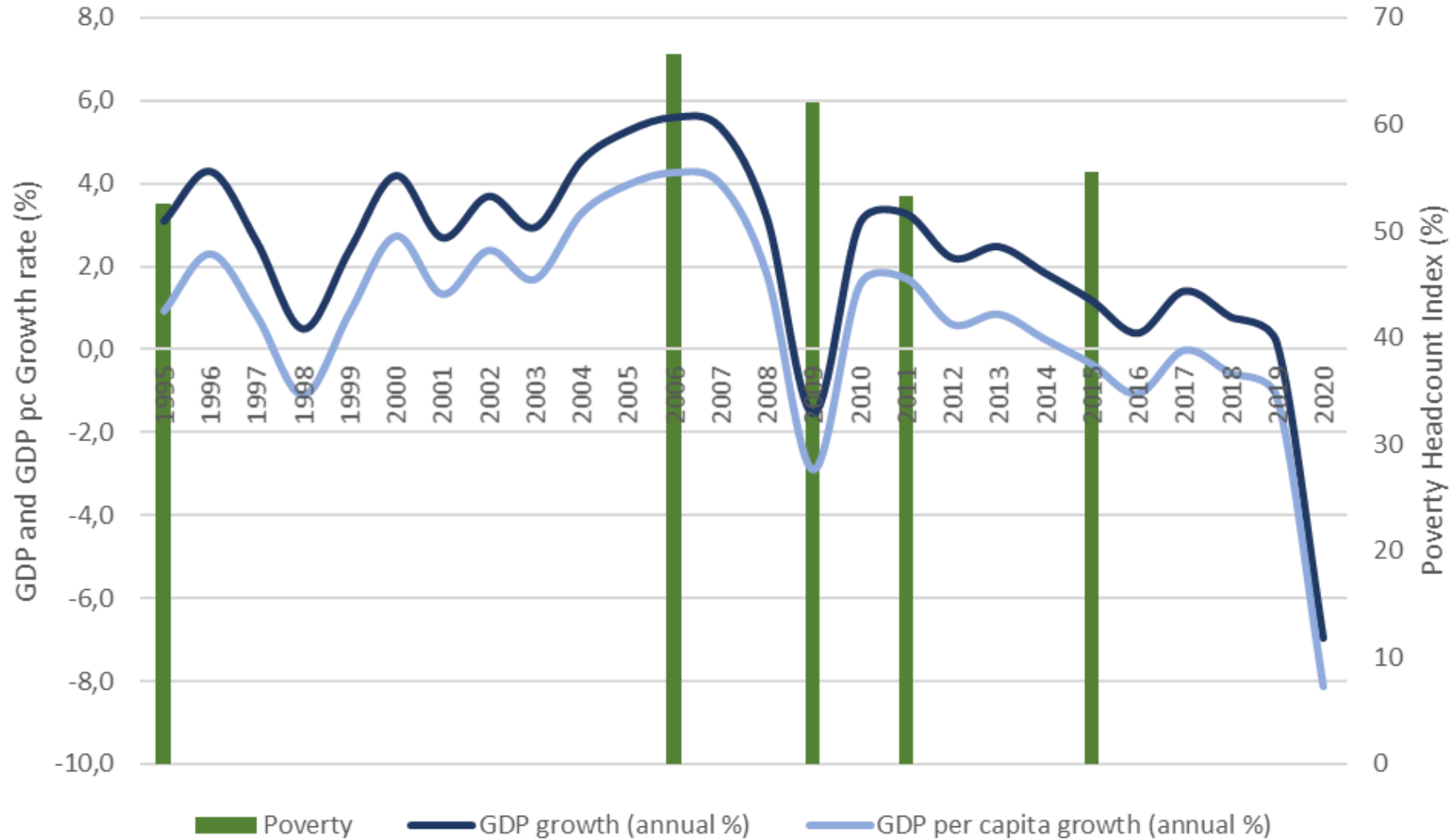
## ❖ South African Scenario:

- ❖ Growth hasn't always led to reduced poverty, unlike other African nations.
- ❖ World Bank (2018): Global poverty dropped 50% between 1990-2015, but only 28% in Sub-Saharan Africa.

## ❖ Inequality's Role:

- ❖ Influences growth's impact on poverty and overall growth rates (Fosu, 2018; Ngepah, 2016).
- ❖ Lakner et al. (2020): Reducing inequality can have a stronger effect than just economic growth.
- ❖ Not just growth, but the type and source of growth matter. South Africa has struggled, especially in rebounding from global crises.

# South Africa's Unique Context



**Global Poverty (\$1.90 Poverty Line):**

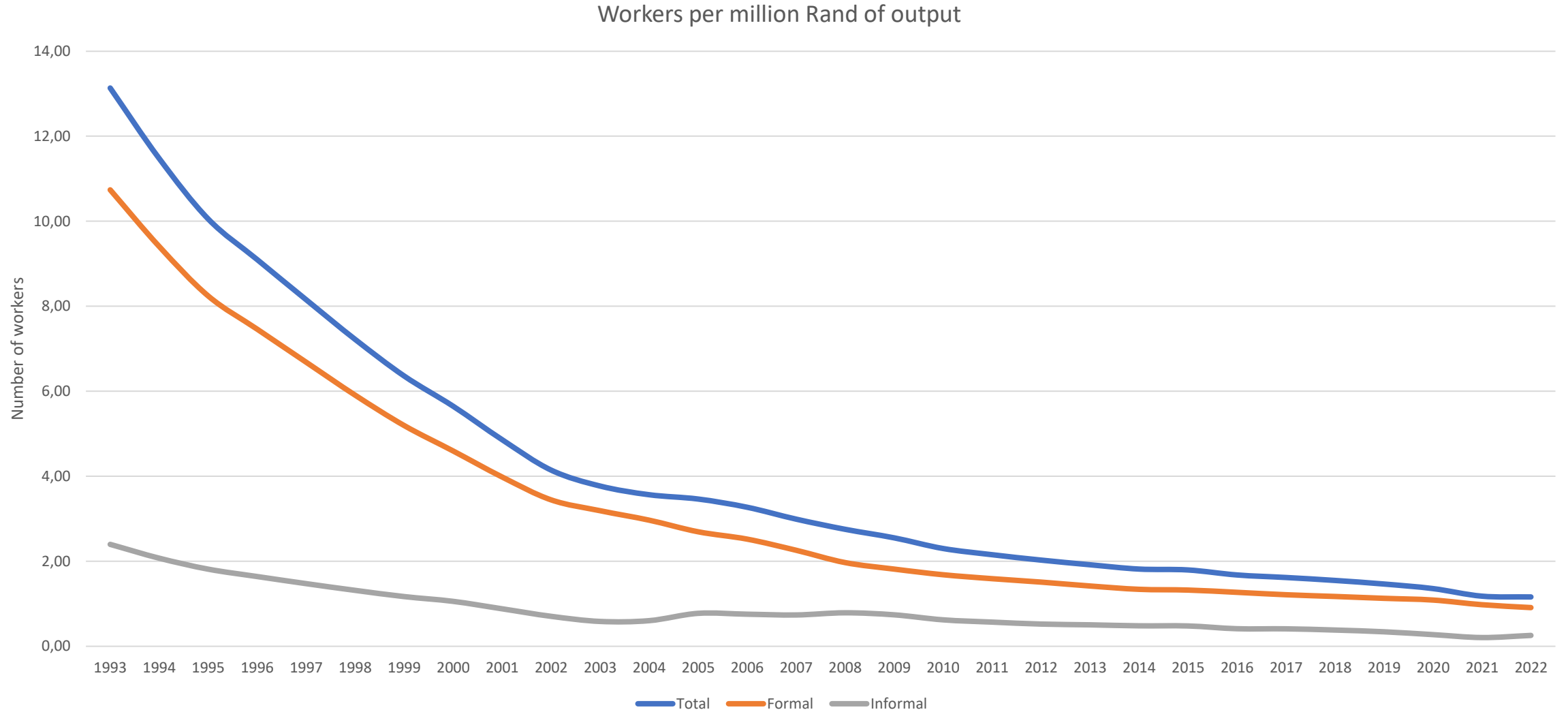
World Bank (2018) data:  
1990: 35.6%  
2015: 10.0%

**Regional Disparities:**

Most regions reduced poverty by over 50%  
Sub-Saharan Africa: Only 28% reduction  
Not all economic growth reduces poverty equally

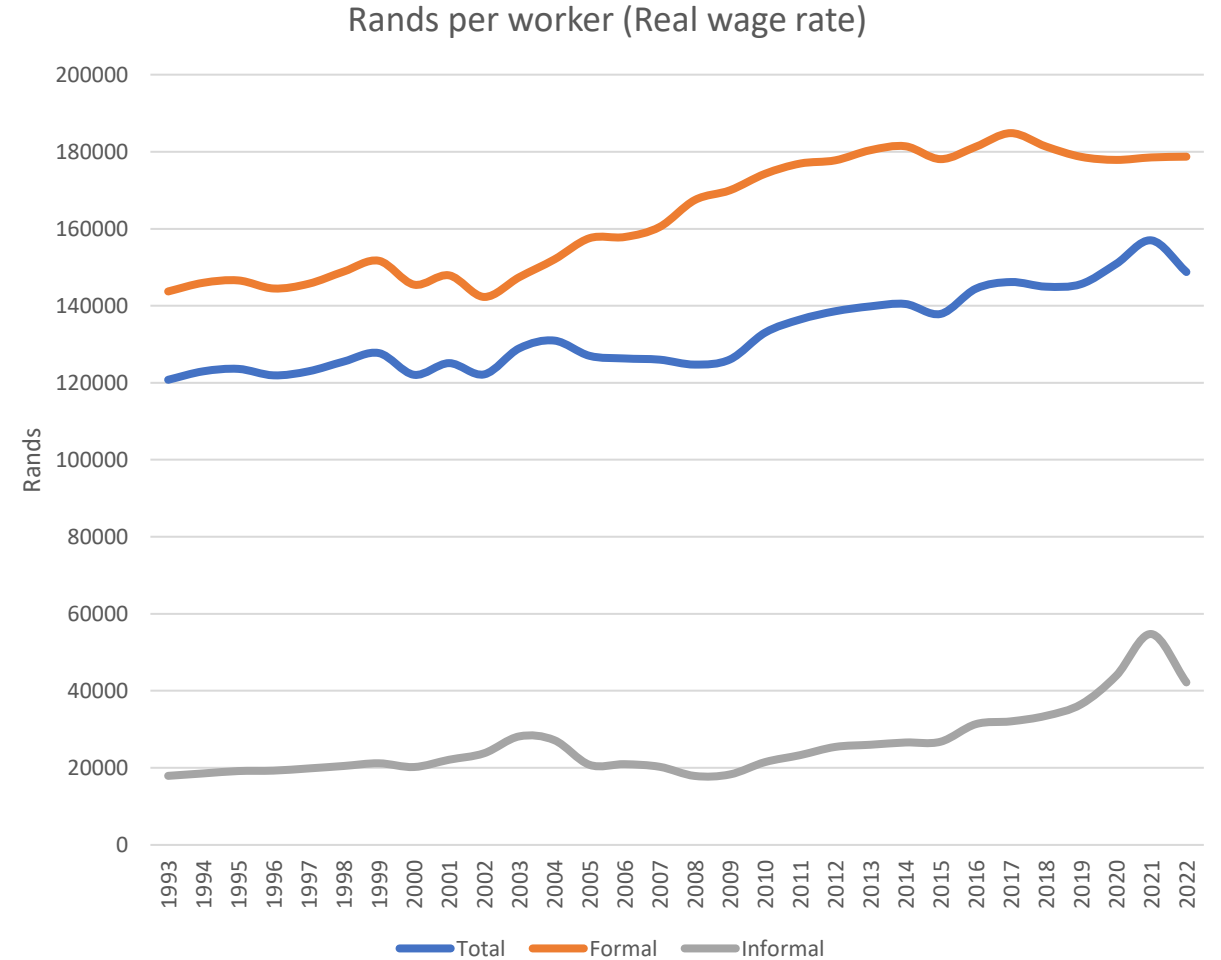
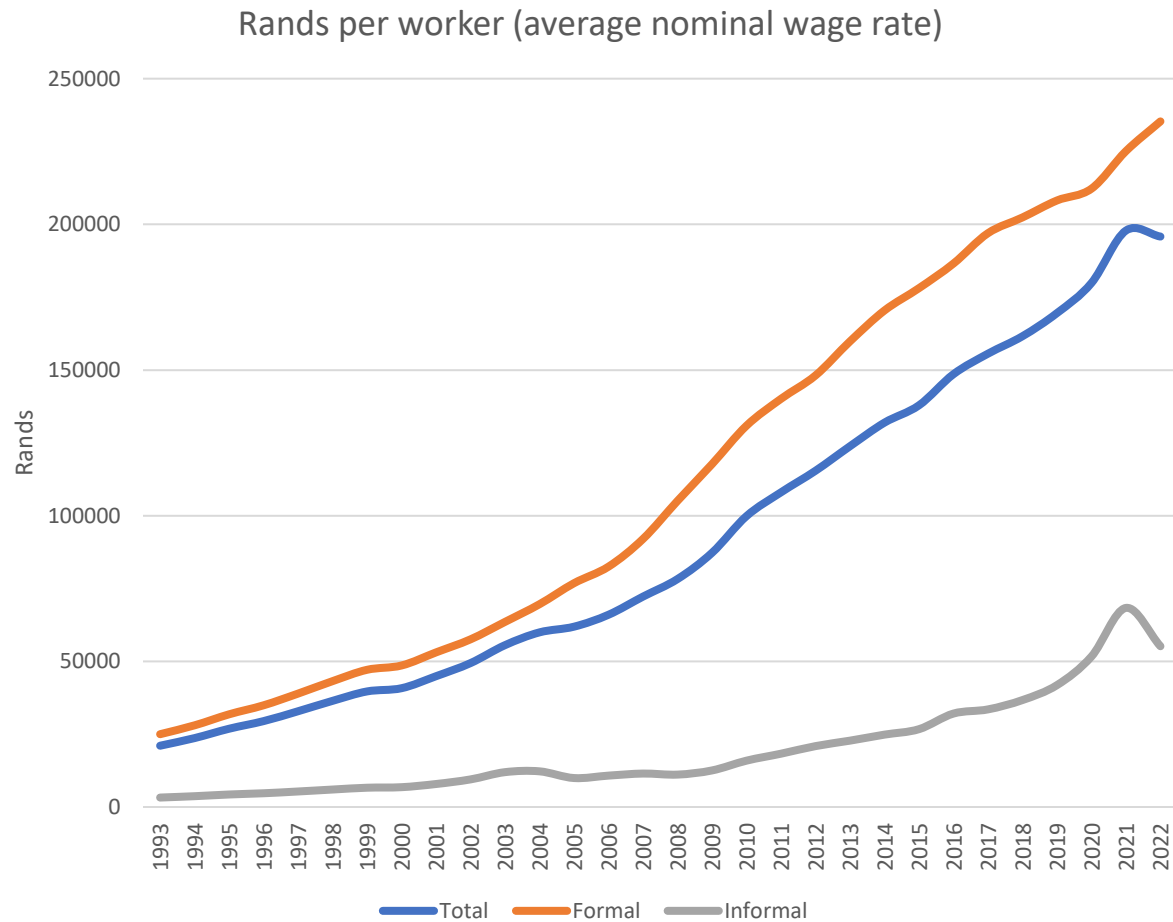
Source: Author's using Statistics South Africa (2017) WDI (2021)

# South Africa's Unique Context



Source: Author's using Statistics South Africa (2017) WDI (2021)

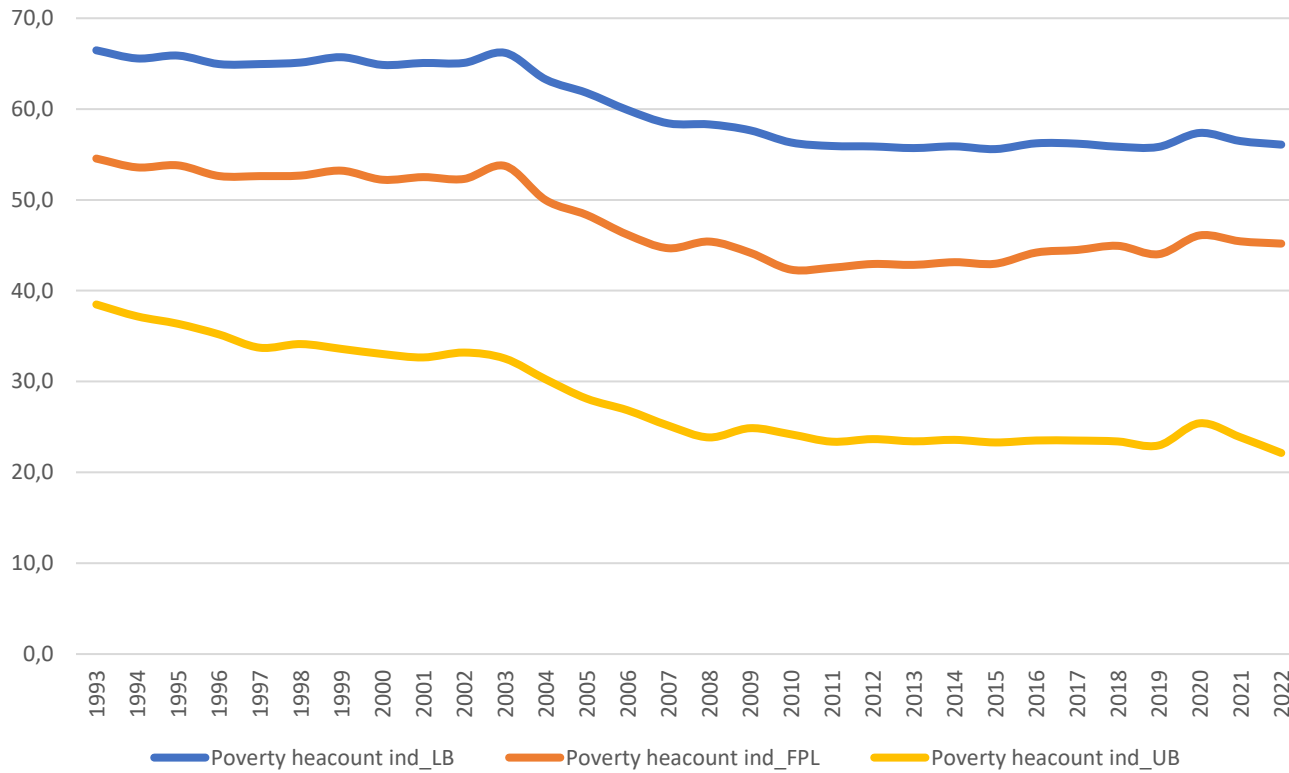
# South Africa's Unique Context



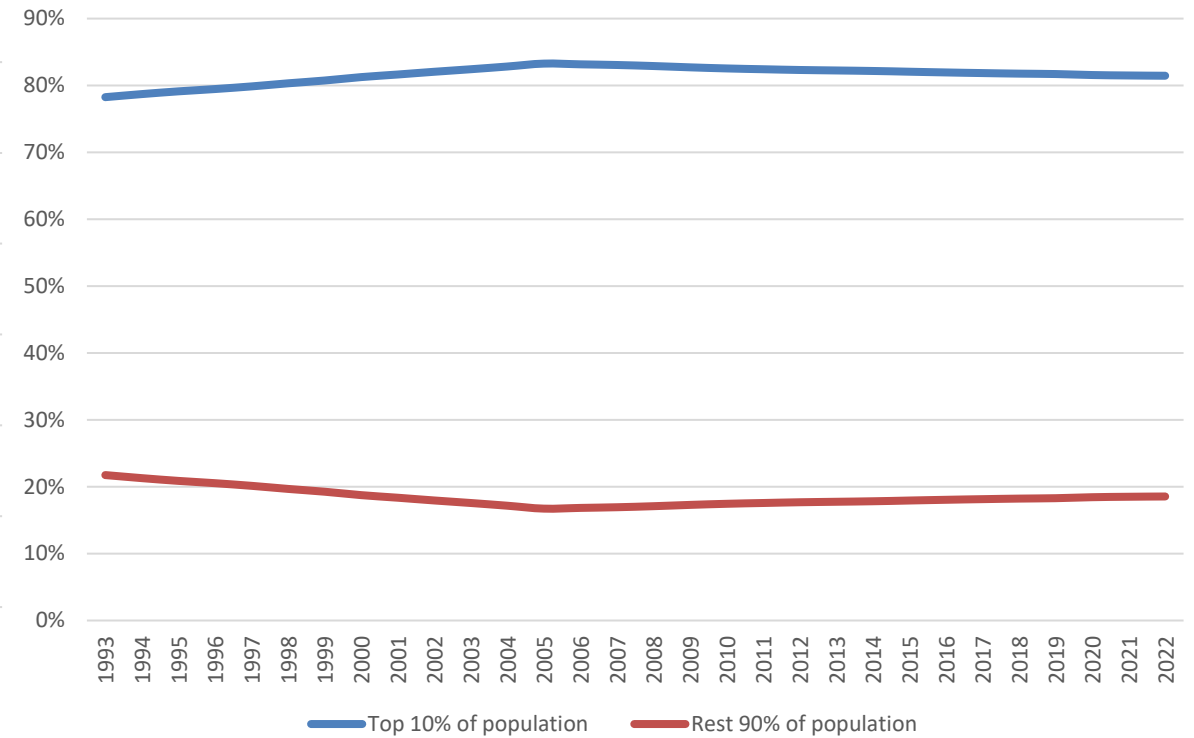
Source: Author's using Statistics South Africa (2017) WDI (2021)

# South Africa's Unique Context

Poverty trends



Income shares



Source: Author's using Statistics South Africa (2017) WDI (2021)

# RESEARCH OBJECTIVES

- This study proposes to investigate how growth and inequality affect poverty during times of recessions and depressions versus times of economic expansion in South Africa and what factors can assist to cushion the poor from economic downturns, with the following guiding questions:
  - What is the effect of economic growth on poverty reduction given inequality at the micro-level?
  - Do the poor suffer more losses of welfare during economic recessions and depressions than they gain during expansions?
  - What, if any, are the factors that can assist the poor to stay afloat during times of economic shocks?

# Methodology: The model

- ❖ Foundation: The model is based on the 'identity' theory by Bourguignon (2003).
  - ❖ It connects poverty with average income, inequality, and the ratio of the poverty line to average income.
  - ❖ It estimates income using a log-normal distribution, factoring in differences between countries and over time (Epaulard, 2003).
  - ❖ Notable Researchers: Fosu (2009, 2015, 2018) and Kalwij & Verschoor (2007) have implemented this model in their studies.

# Methodology: The model

- ❖ Ravallion (2012) Proposition: A simplified equation suitable for developing country data.
- ❖ Focuses on growth in relation to inequality, initial inequality, and average income.
- ❖ *Extended Model*: Includes more factors such as poverty line relative to mean income, growth in inequality, initial inequality, and interactions among them. Inspired by multiple authors like Fosu and Thorbecke & Ouyang.
- ❖ *Framework for Poverty Status*: Relates poverty to factors such as prevailing average income, inequality, initial inequality, and individual factors (age, education, etc.).
  - ❖ Accounts for important starting conditions like initial inequality and initial income.
  - ❖ Unique Factor: Adjusts for both positive and negative changes in average income - vital for understanding impacts like the COVID-19 pandemic in South Africa.

# Methodology: Data Sources

- ❖ **Data Breakdown:** Divided into five quintiles (each 20 percentiles).
  - ❖ Focus on comparing incomes of the bottom 40% and top 20%.
  - ❖ Uses QR (Quantile Regression) technique.
  - ❖ Inspired by frameworks from Dollar & Kraay (2001) and expanded by Gundlach et al. (2001).
- ❖ **Data Sources:**
  - ❖ National incomes Dynamics Survey (NIDS): Provides poverty data covering five waves from 2008 to 2017.
  - ❖ Quantec: Provides municipality-level data on income growth and inequality from 1993 to 2020.
  - ❖ All individual and household data is extracted from the NIDS database.

# RESULTS: growth and absolute poverty

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)
	LOGIT ME	TOBIT PG	TOBIT PG2	LOGIT ME	TOBIT PG	TOBIT PG2
LG_i	0.460***	0.169***	0.098***	0.606***	0.212***	0.124***
LMINC_i	-0.338***	-0.089***	-0.055***	-0.388***	-0.100***	-0.061***
DLNG	0.868***	0.225***	0.134***	1.001***	0.255***	0.152***
INCG	-0.297***	-0.084***	-0.053***			
INCG+				-0.637***	-0.171***	-0.104***
INCG-				0.092***	0.011**	0.003*
Constant	-6.252***	-1.618***	-1.011***	-6.994***	-1.781***	-1.106***
<b>LR Chi2</b>	<b>2695.21</b>	<b>2527.99</b>	<b>2435.10</b>	<b>3289.09</b>	<b>2957.18</b>	<b>2802.43</b>
<b>P &gt; Chi2</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>
<b>Observations</b>	<b>173,406</b>	<b>160,497</b>	<b>160,497</b>	<b>173,406</b>	<b>160,497</b>	<b>160,497</b>

- Judging from the LR Chi2 and the Chi2 p-values, the models fit significantly better
- The coefficients accord with the theoretical predictions and are significant
- initial inequality is +ve and significant
- One % point higher growth rate in inequality raises the probability of poverty by 0.87% and the relative distance to the PL by 0.23%
- One % point increase in mean income growth reduces the probability of poverty by 0.30% and the relative gap from the poverty line by 0.08%

\*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$

## RESULTS: growth and absolute poverty

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- A combination of increasing inequality and negative economic shocks is a dangerous mix for the poor in SA
- Pro-economic growth policies that also reduces inequality, or at least stops its increase will prove beneficial to the poor in SA

\*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$

- +ve growth reduces poverty more in magnitude than -ve growth increases poverty
- This result could be explained by:
  - The fact that although South Africa's unemployment is high, due to unionization and regulated labour market, it difficult to quickly shed jobs.
  - The second possible explanation are the safety nets like the social security programs and free education and health, which we will analyse further
- inequality erodes poverty reduction gains far more than positive economic growth reduces poverty

# RESULTS : Growth and B40 and T20 incomes

VARIABLES	(1) Pool T20	(2) Pool B40	(3) FE T20	(4) FE B40	(5) IV T20	(6) IV B40	(7) SUR T20	(8) SUR B40
LG_i	-0.589***	-1.597***	-0.116***	-0.629***	-2.020***	-0.922***	-0.608***	-0.766***
LMINC_i	0.075***	0.013***	0.102***	0.074***	0.654***	0.266***	0.078***	0.001
DLNG	-0.321***	-1.269***	-0.712***	-0.983***	-0.497***	-0.832***	-0.301***	-0.796***
INCG+	0.827***	0.430***	0.731***	0.417***	0.920***	0.426***	0.824***	0.363***
LNINC-	-0.780***	-0.243***	-0.109***	-0.304***	-1.177***	-1.973***	-0.676***	-0.921***
Constant	0.976***	-0.458***	-0.972***	-0.501***	-0.671***	-0.931***	0.917***	-0.568***
<b>F-STAT</b>	<b>194371</b>	<b>6585</b>	<b>32109</b>	<b>45625</b>	<b>3822</b>	<b>15451</b>		
<b>Observations</b>	<b>173,406</b>	<b>173,406</b>	<b>173,406</b>	<b>173,406</b>	<b>173,406</b>	<b>173,406</b>	<b>173,406</b>	<b>173,406</b>
<b>RMSE</b>					<b>0.25</b>	<b>0.17</b>	<b>19</b>	<b>0.66</b>
<b>CD F-stat</b>					<b>1518(5%)</b>	<b>1518(5%)</b>		
<b>SARGAN P-val</b>					<b>0.611</b>	<b>0.508</b>		
<b>R-squared</b>	<b>0.849</b>	<b>0.160</b>	<b>0.904</b>	<b>0.931</b>	<b>0.669</b>	<b>0.867</b>	<b>0.866</b>	<b>0.103</b>

- the pooled, FE, IV and SUR tend to concur
- A % increase in +ve growth rate raises incomes by about 0.82% for the T20, but only by about 0.36% for the B40.
- -ve growth rate is associated with 0.28% reduction in T20 incomes compared with 0.62% for B40
- Evidently, the poor bear a greater burden of -ve shocks than the rich, but benefit less from +ve growth than the rich
- =>inequality in SA would grow worse with either positive or negative economic shocks

# RESULTS: growth and welfare distribution

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
VAR.	0.2 q	0.4 q	0.6 q	0.8 q	1.00 q	0.2 q	0.4 q	0.6 q	0.8 q	1.00 q
<b>Ln (real income PC)</b>										
INCG+						0.199***	0.225***	0.231***	0.294***	0.145***
						(0.011)	(0.008)	(0.013)	(0.010)	(0.051)
INCG-						-0.140***	-0.104***	-0.120***	-0.024	0.025
						(0.011)	(0.013)	(0.012)	(0.017)	(0.049)
DLNG	-0.251***	-0.207***	-0.171***	-0.103***	-0.039	-0.248***	-0.224***	-0.189***	-0.102***	-0.089
	(0.026)	(0.022)	(0.019)	(0.033)	(0.090)	(0.030)	(0.019)	(0.015)	(0.033)	(0.081)
INCG	0.171***	0.169***	0.180***	0.188***	0.062***					
	(0.007)	(0.005)	(0.004)	(0.007)	(0.016)					
<b>Ln (real expenditure PC)</b>										
INCG+						0.278***	0.290***	0.342***	0.445***	0.135***
						(0.008)	(0.007)	(0.012)	(0.014)	(0.030)
INCG-						-0.049***	-0.055***	-0.008	0.102***	-0.027
						(0.010)	(0.010)	(0.009)	(0.019)	(0.030)
DLNG	-0.463***	-0.363***	-0.214***	-0.072**	0.237***	-0.480***	-0.380***	-0.234***	-0.150***	0.189**
	(0.025)	(0.018)	(0.022)	(0.032)	(0.074)	(0.019)	(0.022)	(0.022)	(0.028)	(0.087)
INCG	0.171***	0.183***	0.186***	0.213***	0.082***					
	(0.006)	(0.004)	(0.006)	(0.011)	(0.015)					

- A % point rise in inequality growth reduces the incomes of those at the 20<sup>th</sup>, 40<sup>th</sup>, 60<sup>th</sup> and 80<sup>th</sup> xtiles by 0.25%, 0.21%, 0.17%, and 0.10% respectively.
- The effects on are 0.46%, 0.36%, 0.21% and 0.07% consumption welfare
- The incomes of the top 20% are not affected by inequality.
- A % point increase in inequality growth increases the consumption of the rich by 0.24%.
- Therefore, in SA, inequality begets even more inequality.

# RESULTS: growth and welfare distribution

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INCG-						-0.140***	-0.104***	-0.120***	-0.024	0.025
						(0.011)	(0.013)	(0.012)	(0.017)	(0.049)
DLNG	-0.251***	-0.207***	-0.171***	-0.103***	-0.039	-0.248***	-0.224***	-0.189***	-0.102***	-0.089
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	(0.006)	(0.004)	(0.006)	(0.011)	(0.015)					

- A % point increase in growth raises the incomes of those at the 20<sup>th</sup>, 40<sup>th</sup>, 60<sup>th</sup> and 80<sup>th</sup> xtiles by 0.17%, 0.17%, 0.18%, 0.19% respectively.
- The magnitudes are slightly higher for consumption
- However, growth raises the incomes-consump. of the top 20<sup>th</sup> xtile by a lower percentage (0.06% and 0.14% respectively)

# RESULTS: growth and welfare distribution

VAR.	(1) 0.2 q	(2) 0.4 q	(3) 0.6 q	(4) 0.8 q	(5) 1.00 q	(6) 0.2 q	(7) 0.4 q	(8) 0.6 q	(9) 0.8 q	(10) 1.00 q
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INCG-						-0.140*** (0.011)	-0.104*** (0.013)	-0.120*** (0.012)	-0.024 (0.017)	0.025 (0.049)
DLNG	-0.251*** (0.026)	-0.207*** (0.022)	-0.171*** (0.019)	-0.103*** (0.033)	-0.039 (0.090)	-0.248*** (0.030)	-0.224*** (0.019)	-0.189*** (0.015)	-0.102*** (0.033)	-0.089 (0.081)
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INCG	0.171*** (0.006)	0.183*** (0.004)	0.186*** (0.006)	0.213*** (0.011)	0.082*** (0.015)					

- +ve growth rates increase:
  - the incomes the 20<sup>th</sup>, 40<sup>th</sup>, 60<sup>th</sup> and the 80<sup>th</sup> by 0.20%, 0.23%, 0.23%, 0.29% and 0.15%(top 20<sup>th</sup> xtile)
  - 0.28%, 0.29%, 0.34%, 0.45% and 0.14%(top 20<sup>th</sup> xtile) for consumptions.
- A % point increase in economic decline reduces incomes in the 20<sup>th</sup>, 40<sup>th</sup>, and 60<sup>th</sup> quantiles by 0.14%, 0.10% and 0.12% respectively
- The coefs of economic decline on incomes are not significant in the last two top quintiles
- We get a similar picture with consumption welfare

# RESULTS: growth and welfare distribution

quantile	Income per capita	Expenditure per capita	Lower Bound	Upper bound	Food
1	266	250	758	1138	531
2	520	474	758	1138	531
3	953	838	758	1138	531
4	1950	1742	758	1138	531
5	10453	9307	758	1138	531
Exact percentile of income			44 <sup>th</sup>	57 <sup>th</sup>	32 <sup>th</sup>
Exact percentile of exp.			48 <sup>th</sup>	60 <sup>th</sup>	36 <sup>th</sup>

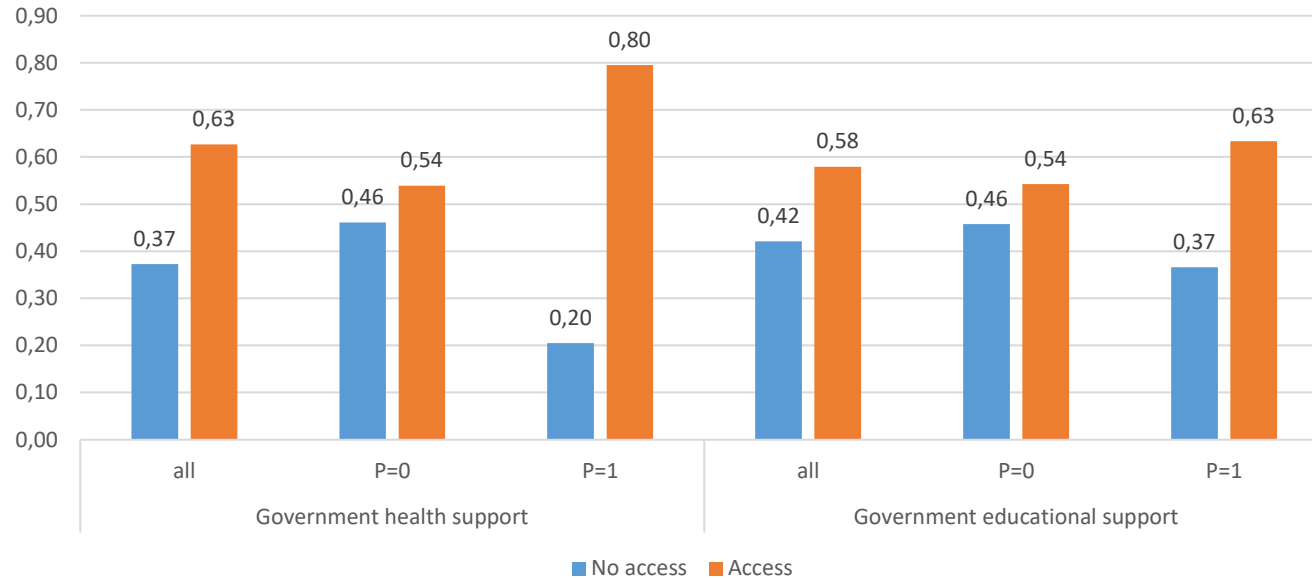
- The upper-bound poverty line is lies at 57th percentile of incomes and 60th percentile of consumptions.
- The lower-bound poverty line lies at the 44th and 48th percentiles for incomes and consumptions respectively.
- This is consistent with Statistics South Africa (2017) which showed that about 55% of the South African population are poor. This shifts the middle class further to the right of the distributions.
- This analysis is to show that right up to the 60th percentile, we are still dealing mostly with the poor, especially when using household survey data which generally excludes the ultra-rich.

## Summary of findings

- So far, we have established that economic growth reduces poverty, but not enough to compensate for the poverty raising effects of inequality;
- Economic decline raises poverty, but economic prosperity more than compensates, by attenuating poverty levels by a higher magnitude;
- inequality poses a welfare penalty on the poor, but leaves the welfares of those at the top untouched.
- Positive economic growth enhances welfare for the poor in % terms relatively more than at the top tier of the distribution;
- economic decline reduces welfare for the lower tier of the distribution without affecting those at the top;
- positive economic growth trumps economic decline in terms of effects on the welfares of the those at the lower end of the distribution;
- The role of initial inequality is still significant
- the combination of high and rising inequality and negative economic growth spells present a significant jeopardy in poverty reduction efforts, increase of the welfares of the poor and reduction in future inequality.

# Policy options

	Pop. Share (All)	Average Amount (All)	Pop share (P=0)	Average amount (P=0)	Pop share (P=1)	Average amount (P=1)
Gov. Social grants	60%	1582	47%	1343	80%	1790
Other Gov non-wage	1%	1710	1%	1830	1%	1432
Wage income	53%	6263	57%	8061	40%	3104



- Some SA's pro-poor measures traceable in the household survey data relate to social grants, free healthcare services and free education, also assessed by Kirii et al. (2020) for Kenya

- Up to 80% of SA's poor access social grants with an average monthly amount of 1790 Rands
- compared with 40% accessing labour incomes averaging 3104 Rands per month.
- For the non-poor 47% access social grants averaging 1343 Rands
- compare with 57% of labour incomes averaging 8061 Rands.
- a number of health and educational policy programs undertaken are accessible through the public health and education system

# Policy options: Poverty models

VARIABLES	(1) Logit	(2) Logit	(3) Tobit PG	(4) Tobit PG	(5) Tobit SPG	(6) Tobit SPG
LG_i	0.388***	0.604**	0.138***	0.172***	0.091***	0.099***
LMINC_i	-0.218***	-0.397***	-0.055***	-0.107***	-0.031***	-0.063***
DLNG	0.657***	1.155***	0.191***	0.255***	0.114***	0.134***
INCG+	-0.296***	-0.445***	-0.089***	-0.122***	-0.054***	-0.076***
INCG-	0.728***	-0.139	0.153***	-0.048	0.088***	-0.027
GOVHC		-1.023***		-0.261***		-0.151***
GOVHC#INCG-		-0.013		-0.010		-0.007
GOVED		-0.864***		-0.228***		-0.133***
GOVED#INCG-		-0.140		-0.035		-0.020
EDU1		-0.444		-0.126		-0.077
EDU2		-0.755*		-0.191*		-0.113*
EDU3		-1.673***		-0.428***		-0.251***
EDU1#INCG-		0.178		0.074		0.037
EDU2#INCG-		-0.382		-0.099		-0.052
<b>EDU3#INCG-</b>		<b>-0.455</b>		<b>-0.118*</b>		<b>-0.070</b>
SSG	-0.366***		-0.100***		-0.058***	
<b>SSG#INCG-</b>	<b>-0.079</b>		<b>-0.025</b>		<b>-0.017*</b>	
LLMI	-0.551***		-0.143***		-0.085***	
<b>LLMI#INCG-</b>	<b>-0.076***</b>		<b>-0.014***</b>		<b>-0.008***</b>	
Constant	7.237***	5.265***	1.834***	1.440***	1.030***	0.843***
var(e.)			0.238*** (0.002)	0.201*** (0.006)	0.088*** (0.001)	0.071*** (0.002)
<b>LR Chi2</b>	<b>11592</b>	<b>1498</b>	<b>11411</b>	<b>1581</b>	<b>10753</b>	<b>1488.</b>
<b>Prob(chi2)</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>
<b>Pseudo R2</b>	<b>0.208</b>	<b>0.107</b>	<b>0.056</b>	<b>0.14</b>	<b>0.12</b>	<b>0.20</b>
Observations	97,926	9,298	97,915	9,298	97,915	9,298

# Policy options: Bottom40 incomes

VARIABLES	(1) FE	(2) FE	(3) FE	(4) Panel IV	(5) Panel IV	(6) Panel IV
LG_i	-1.893***	-1.138***	-0.976***	-0.902***	-0.613***	-0.535***
LMINC_i	0.070**	0.106***	0.123***	0.094***	0.163***	0.100***
DLNG	0.796***	1.154***	0.787***	0.986***	0.585***	0.950***
INCG+	0.124***	-0.049***	0.068***	0.284***	0.183***	0.132***
INCG-	-0.535***	-0.064*	-0.020***	-0.383***	-0.823***	-0.315***
LSSGA	0.003			0.092***		
<b>LSSGA#INCG-</b>	<b>0.266***</b>			<b>0.259*</b>		
LOGI	0.024**			0.048***		
LOGI#INCG-	0.016			0.052		
LLMI	0.078***			0.001**		
<b>LLMI#INC-</b>	<b>0.047</b>			<b>0.339***</b>		
GOVHC		0.096***			0.167***	
<b>GOVHC#INCG-</b>		<b>0.023</b>			<b>0.415***</b>	
GOVED		0.319***			0.387***	
<b>GOVED#INCG-</b>		<b>0.081**</b>			<b>0.670***</b>	
EDU1			0.035***			0.272***
EDU2			0.086***			0.303***
EDU3			0.141***			0.323***
<b>EDU1#INCG-</b>			<b>0.013</b>			<b>0.070***</b>
<b>EDU2#INCG-</b>			<b>0.012</b>			<b>0.774***</b>
<b>EDU3#INCG-</b>			<b>0.020</b>			<b>0.839***</b>
Constant	10.201***	9.252***	9.559***	8.296***	8.474***	-1.249***
<b>F-STAT</b>	<b>536</b>	<b>6363</b>	<b>81891</b>	<b>107</b>	<b>973</b>	<b>9884</b>
<b>Observations</b>	<b>749</b>	<b>9,132</b>	<b>159,097</b>	<b>749</b>	<b>9,132</b>	<b>159,097</b>
<b>RMSE</b>				<b>0.30</b>	<b>0.44</b>	<b>0.35</b>
<b>CD F-stat</b>				<b>11.04(10%)</b>	<b>36(5%)</b>	<b>1440(5%)</b>
<b>SARGAN P-val</b>				<b>0.112</b>	<b>0.211</b>	<b>0.108</b>
<b>R-squared</b>	<b>0.89</b>	<b>0.86</b>	<b>0.85</b>	<b>0.62</b>	<b>0.49</b>	<b>0.41</b>

## Discussion: Health & Education

- While health and educational interventions are poverty reducing, their respective interactions with negative economic shocks, though negative, are not significant.
- Both education and health policies have the potential, but falls short of easing the effects of negative shocks.
- However, the instrumental variable regressions suggest that health and educational policies do raise the incomes of the poor including in times of negative economic shocks.
- Combining the results with those of poverty models suggests that the respites that these policies give to the incomes of the poor are not enough to have significant effects on poverty during economic downturns

## Discussion: Free Public Health

- The provision of free public health services in South Africa can have both positive and negative effects on the poor.
  - On one hand, it has increased access to healthcare for the poor, who are often unable to afford private healthcare.
  - On the other hand, it has been hampered by a number of challenges, including inadequate funding, poor infrastructure, and human resource shortages, which have limited its effectiveness.
- One of the positive effects of free public health in South Africa is increased access to healthcare services for the poor.
  - According to Health Systems Trust, the percentage of South Africans who visited a public health facility increased from 54.6% in 2002 to 70.4% in 2015, with the poorest quintile of the population showing the greatest increase (from 42.2% to 66.8%).
  - The study found that free public health services have reduced the financial burden on the poor, as they no longer have to pay out of pocket for healthcare services.

## Discussion: Free Public Health

- However, the provision of free public health services in South Africa has also been hampered by a number of challenges.
  - inadequate funding, which has resulted in shortages of essential medicines, equipment, and personnel.
  - The Department of Health, highlights that the public health sector is underfunded by approximately R22 billion, which has led to a range of challenges, including equipment and medicine shortages, staff shortages, and poor infrastructure.
- The public health sector has also been affected by human resource shortages, with many health professionals leaving the country to work abroad or moving to the private sector.

## Discussion: Free Education

- Free education in South Africa has had a significant impact on the poor, particularly in terms of increasing access to education and reducing financial barriers to education.
- However, there are also concerns about the quality of education and the sustainability of the funding model.
- Spaul and Kotze (2020) have established that the introduction of free primary education in South Africa in 1994 led to a significant increase in school enrolment rates among the poorest households, particularly in rural areas.
- The study also found that the policy led to a reduction in the poverty gap among households with school-aged children.

## Discussion: Free Education

- However, there are concerns about the quality of education in South Africa, particularly in public schools.
- A report by the Department of Basic Education (2021) found that only 37% of Grade 5 learners in public schools achieved the expected level of proficiency in reading in 2019.
- The report also found significant disparities in educational outcomes between different provinces and socioeconomic groups.
- Moreover, there are concerns about the sustainability of the funding model for free education. A report by the National Treasury (2019) found that the cost of free higher education was projected to increase significantly over the next decade, placing a strain on government finances.

## Discussion: Social Grants

- Social grants do help the poor in times of economic downturns, however it does not go far enough.
  - The results show that social grants assist in reducing poverty severity during negative economic shocks, but not significantly so for poverty incidence and intensity.
  - Like free health and education, social grants do raise the incomes of the poor within the bottom 40 percentile especially in times of economic downturns.
  - Again, the respite is not significant enough to be detected in poverty models.
- Woolard and Leibbrandt (2016) corroborates this finding that the social grant system played a critical role in reducing extreme poverty in the country, with grants covering over 50% of the food poverty line for the poorest households

## Discussion: Social Grants

- However, concerns have been raised about the sustainability of the social grant system:
  - particularly given the significant cost of the program.
  - According to the National Treasury (2021), social grant spending accounts for around 12% of government expenditure, and is projected to increase further in the coming years.
- The impact of the grants on work incentives, with some critics arguing that the grants discourage recipients from seeking employment.
- Tregenna (2017) found that while the social grant system had a positive impact on poverty and inequality, it also had a negative impact on labor force participation rates.

## Discussion: Levels of Education & Labour Incomes

- The coefficients of levels of education and labour income, with their respective interaction terms suggest that:
  - while all forms of education from secondary reduces poverty and raises the incomes of the poor,
  - only tertiary education can keep the poor afloat in times of economic shocks.
  - Labour incomes reduce all forms of poverty and raises the incomes of the poor including in times of negative economic shock.

## Discussion: Key policy message

- The implication is that:
  - while various social programs like free health, education and social grants do help, they do not go far enough.
  - There is room to improve efficiency of these programs to better assist the poor in times of economic crises and shocks like during the Covid-19.
  - However, what can sustainably keep the poor afloat remains programs that give the poor good education up to tertiary and also give them access to the labour market.

## Conclusion

- This research provides important insights into the relationship between economic growth, inequality, and poverty in South Africa.
- The findings highlight the negative impact of high and persistent inequality on poverty reduction efforts, and the crucial role of positive economic growth in reducing poverty.
- Economic growth, while beneficial to reducing poverty, is not enough to compensate for the poverty-raising effects of inequality in SA
- The study finds that initial inequality is a stronger hindrance to poverty reduction than initial income levels, and that rising inequality erodes poverty reduction gains far more than positive economic growth reduces poverty.

## Conclusion

- The poor suffer more losses of welfare during economic recessions and depressions than they gain during expansions
- the factors that can assist the poor to stay afloat during times of economic shocks are good education up to tertiary and access to the labor market.
- The results suggest that policies that reduce inequality and promote economic growth would be beneficial to the poor
- While social programs like free healthcare, education, and social grants do help, they do not go far enough to cushion the poor during times of significant economic decline

## Conclusion

- The study highlights the need for the government:
  - to formulate policy measures to curb or reverse the effects of rising inequality and negative economic growth
  - help propose a path to balanced and equitable development in South Africa.
- Moreover, the study underscores the need for pro-growth policies that also reduce inequality, as well as effective social safety net programs that can provide respite during times of economic downturns.
- It also suggests that sustained poverty reduction efforts in SA will require a combination of pro-growth policies that reduce inequality, access to tertiary education, and better access to the labor market for the poor.

# Thank You

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