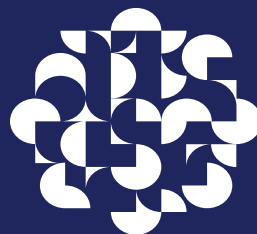


Social Security Coverage among the Working-Age Population in South Africa

By Haroon Borhat, Timothy Köhler and Jabulile Monnakgotla

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June 2024



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Abstract

Comprehensive and well-designed social security systems are critical to ensure that populations are adequately covered against various sources of adverse risk and volatility. Using descriptive and micro-econometric techniques on household survey and administrative data, this report provides an analysis of social security coverage among the working-age population in South Africa from 2010 to 2022. We show that coverage of social assistance has improved but remains low and varies considerably across demographic groups. Social assistance coverage is low among both the unemployed as well as a non-negligible share of the employed who are in working poverty. Social insurance coverage is also low, particularly among the unemployed and informally employed, and conversely has fallen in recent years. We also examine the performance of labour centres in the processing of unemployment insurance claims and highlight the limitations of and potential for existing datasets to better track social security coverage to aid future research and evidence-based policymaking.

JEL codes:

I38; H53; H55: J32; J65

Keywords:

Social security; social protection; social assistance; social insurance; working-age; coverage; South Africa

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1. Introduction

To be effective in providing protection against various risks and volatility, social security systems need to be designed with the social, economic, fiscal and policy context of a country in mind (World Bank, 2021). In South Africa, it is well-documented that widespread poverty and unemployment accompanied by extreme inequalities continue to be three of the country's most pressing challenges. In this context, the country's long-standing and well-developed contemporary social security system serves one of the country's most important policy successes in the post-apartheid period (Woolard et al., 2011; World Bank, 2021; Gronbach et al., 2022). The country's system consists of both social assistance – which aims to protect the poor using cash or in-kind transfers - and social insurance – which aims to protect individuals from adverse events.

Despite spending more on social security than most other countries globally and supporting a relatively large share of its population in a progressive manner, social security in South Africa has been argued to be inaccessible for a large share of the working-age population. It has been argued that this dearth of support relies on the assumption that only 'dependent' categories, such as children and the elderly, need support while working-aged, able-bodied individuals are presumed to be able to support themselves through the labour market (Ferguson, 2015). However, such a view neglects the persistent, structural, and often long-term nature of unemployment in South Africa. While progress has been made with respect to social assistance following the onset of the pandemic, notable inequalities in access to social security in the country among the working-age persist.

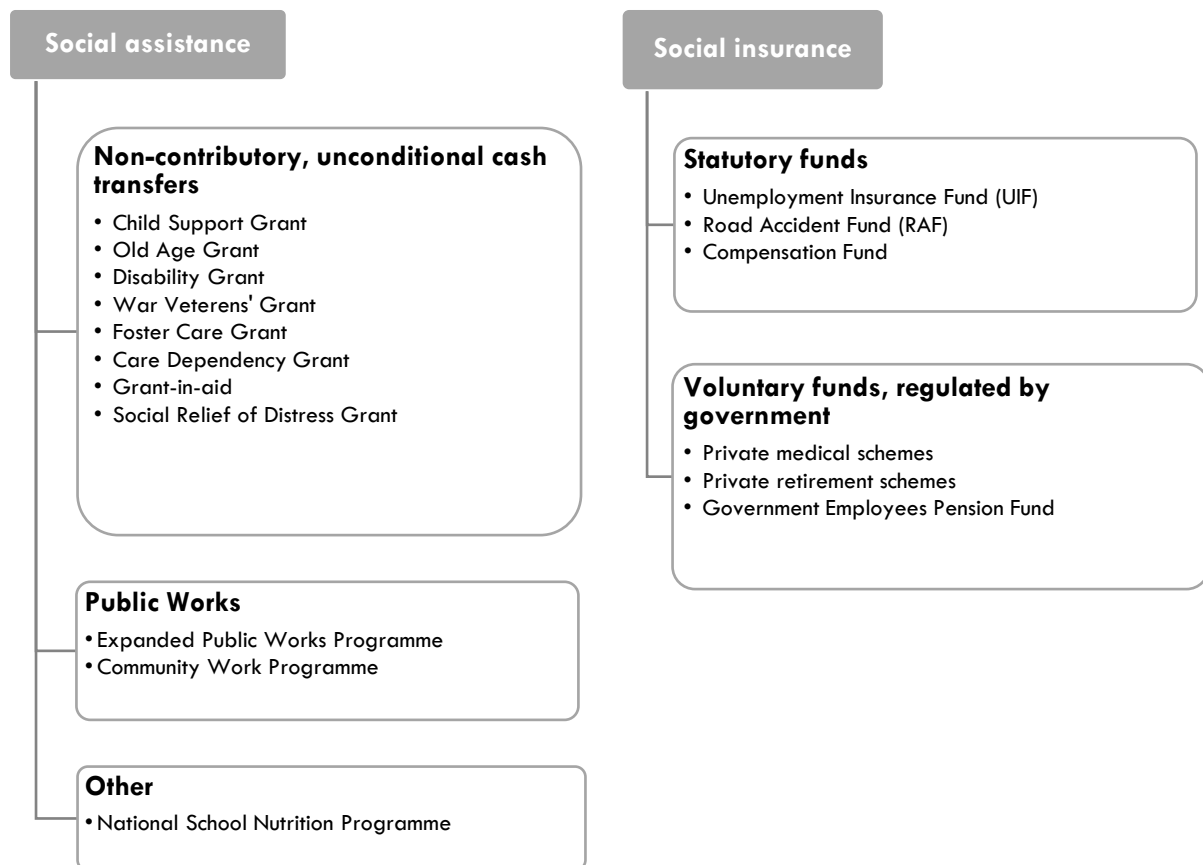
In this context, this report provides a quantitative analysis of social security coverage among the working-age population in South Africa, defined as those between the ages of 15 and 64 years inclusive, from 2010 to 2022. To do so, the analysis makes use of descriptive and micro-econometric modelling techniques on two sources of individual-level, nationally representative, sample-based household survey data, as well as anonymized, administrative unemployment insurance data, to examine trends in coverage both on aggregate and between varied demographic and socioeconomic groups. Variation in coverage by employment status is of particular interest, given that doing so allows one to gain an understanding of who has access to varying levels of support, such as through the labour market alone, income or in-kind support from the state alone, both, or neither. Overall, the analysis here seeks to provide a comprehensive understanding of the existence and magnitudes of coverage gaps to social assistance and insurance - broadly as well as the policies within each component – across and within varied subpopulations among the working-aged, how these gaps have varied over time, and what the demographic and socioeconomic factors which most strongly predict access to social security are. In doing so, the results seek to inform how policy might intervene to better target social security to least covered groups.

The rest of this report is structured as follows. Section 2 provides an overview of South Africa's existing and contemporary social security system, while Section 3 outlines the data and methodologies used in this analysis here. In Section 4, following a brief overview of the South African labour market, the results are presented. Thereafter, Section 5 presents a discussion of the results and implications for policy. Finally, Section 6 concludes.

2. An overview of South Africa’s contemporary social security system

South Africa has a relatively comprehensive social security system given its level of economic development. Figure 1 presents an overview of the system and its various components. Broadly, the system consists of two pillars: social assistance – which aims to protect the poor using cash or in-kind transfers – and social insurance – which aims to protect individuals from adverse events. While social assistance is funded from general tax revenues, social insurance is funded from contributions by employers and workers.

Figure 1: The basic structure of South Africa’s contemporary social protection system



Authors’ own compilation.

Spending on social assistance is relatively high given the country’s level of economic development, at approximately 3.3 percent of GDP in comparison to 1.4 percent for countries of a similar level of economic development (upper middle-income countries) (World Bank, 2021). Social assistance comprises tax-financed, unconditional, and means-tested cash transfers (also referred to as social grants) that are mostly targeted at vulnerable children, the elderly, and the disabled in poor households, as well as public works programs and other interventions such as school feeding schemes. As of May 2023, approximately 26 million grants are paid monthly to 19 million recipients in the

population (SASSA, 2023).¹² In 2022, over two-thirds (68 percent) of individuals in the country lived in a household where at least one member received a social grant.³ These grants are available to both citizens as well as permanent residents and refugees, and spending on these transfers in the country is widely documented to be relatively well-targeted towards the poor, largely due to the use of means testing as a targeting device in addition to the observation that poorer households have more children (Van der Berg, 2014).

At the time of writing, eight grants were available: the Child Support Grant (CSG), Old Age Grant (OAG, also referred to as the Old Age Pension or Older Persons' Grant), War Veterans' Grant (WVG), Disability Grant (DG), Foster Care Grant (FCG), Care Dependency Grant (CDG), the Grant-in-Aid (GIA), and the more recently-introduced Social Relief of Distress (SRD) grant.⁴ The CSG represented the largest grant in the system in terms of number of grants distributed, accounting for over half (13.2 million grants to 7.4 million recipients) of all grants distributed (SASSA, 2023).⁵ The SRD grant serves as the second largest grant on these terms, and was introduced in response to the COVID-19 pandemic and served as the first grant to explicitly target support to the unemployed who do not have any other source of income support. As of May 2023, the grant reached around 7 million recipients, but more than 10 million at its peak in March 2022. The OAG and DG, with the latter being the only grant intended for working-age adults until the introduction of the SRD grant, together reached about 5 million recipients. The remaining four grants collectively represent only 3 percent of recipients (or 800 000).

The monthly monetary values of grants vary considerably, for instance R350 for the SRD grant,⁶ R510 for the CSG, and R2 090 for the OAG and DG.⁷ A large academic literature now exists which document the effects of receipt of these grants on an array of outcomes, including positive effects on life satisfaction (Alloush and Wu, 2023), mixed effects on labour supply (Bertrand et al., 2003; Samson, 2004; Ardington et al., 2009; Eyal and Woolard, 2011; Mutasa, 2012; Tondini, 2017; Abel, 2019; Scarlato and d'Agostino, 2019; Bhorat et al., 2023), positive effects on mental health (Eyal and Burns, 2019; Ohrnberger et al., 2020a; 2020b), and positive effects on food expenditure (d'Agostino and Scarlato, 2018) to name a few.

In addition to grants, social assistance also includes public works programs which seek to provide poverty and income relief, skills development, and work experience through temporary work for the unemployed. At the time of writing, the Expanded Public Works Programme (EPWP) served as the

1 The discrepancy between the number of grants distributed and number of recipients is because (i) primary caregivers receive the Child Support Grant (CSG) not for their own benefit but on behalf of their eligible child(ren) and (ii) some recipients are eligible to receive multiple grants simultaneously.

2 These numbers include the 7.1 million Social Relief of Distress (SRD) recipients, a number which can vary significantly from month-to-month.

3 Own calculations using microdata from Statistics South Africa's 2022 General Household Survey.

4 In 2022, the extended Child Support Grant (CSG) was additionally introduced to provide income support to primary caregivers of orphans, and was distributed to approximately 50 000 recipients as of July 2023 (SASSA, 2023).

5 The grant's large take-up is largely attributable to gradual increases in the age eligibility threshold and a less stringent means test.

6 Notably and unlike other grants, the SRD not been adjusted for inflation since its roll-out in April 2020. Accounting for inflation using data from Statistics South Africa's Consumer Price Indices, the real value of the grant has fallen by over 18 percent and is hence equivalent to approximately R285 in May 2023 Rands.

7 The OAG is R2 090 for individuals aged 60 to 75 years but R2 110 for those aged above 75 years.

state's flagship programme.⁸ The program provides work opportunities – equivalent to up to 100 days of work – in four sectors: infrastructure, non-state (for instance, in non-profit and community organisations, which also encompass the Community Work Programme introduced in the EPWP's second phase), environment, and culture and social. The EPWP was first introduced in 2004 and was in its fourth phase at the time of writing. Importantly, the scale of this programme is determined by the government's capacity to create employment opportunities, and therefore, they are not able to provide jobs to all the work-seeking unemployed.

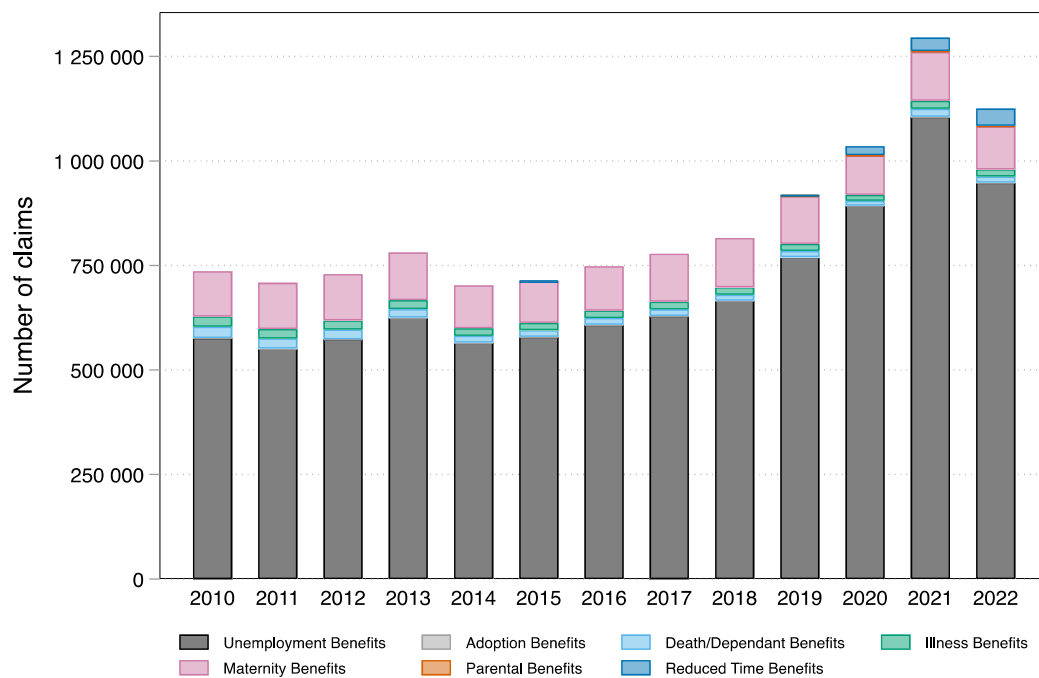
Finally, social assistance also comprises the National School Nutrition Programme (NSNP) which aims to provide one nutritious meal to all learners in poorer, public primary and secondary schools to enhance their learning capacity. Notably, South Africa's NSNP serves as the second-most comprehensive school feeding scheme *globally* in terms of the share of schoolchildren reached (Global Child Nutrition Foundation, 2019). Data from the 2022 General Household Survey (GHS) suggests that, every weekday, 78 percent of public school learners (or over 9 million) receive a free meal (Statistics South Africa, 2022a).

With respect to social insurance, South Africa's system consists of contribution-based mandatory and voluntary funds. The three mandatory funds broadly provide conditional income to eligible individuals and include the Unemployment Insurance Fund (UIF), the Compensation Fund, and the Road Accident Fund (RAF). The UIF provides benefits in the event of unemployment to previously employed formal, private sector workers for up to one year after the loss of employment, funded by contributions by both employees and employers. In addition to unemployment, it also provides benefits for other events such as illness, death, and maternity benefits. Figure 2 presents the evolution of UIF claims by claim type from 2010 to 2022. Over the period, between 700 000 and 1.3 million claims were made per year, with the majority (78 – 86 percent) of claims pertaining to unemployment. The number of claims is much lower than the number of unemployed in the population (approximately 11 million in 2022 using the broad definition), which is not surprising given that most of the unemployed have either been so for at least one year and nearly half are first-time jobseekers, deeming most of the unemployed ineligible for UIF benefits.⁹

⁸ This excludes the more recent Presidential Employment Stimulus program introduced in the aftermath of the COVID-19 pandemic as part of the government's economic recovery agenda.

⁹ Data from Statistics South Africa's 2023Q2 Quarterly Labour Force Survey indicates that, of the 7.9 million searching unemployed of working-age (15-64 years), 77 percent have been unemployed for more than one year, and 45 percent have never worked before.

Figure 2: Annual Unemployment Insurance Fund claims, 2010 - 2022



Authors' own calculations. Source: UIF claims data provided by the Department of Employment and Labour. Notes: Claims restricted to the working-aged (15 - 64 years).

The Compensation Fund provides income and medical benefits for death, diseases, or injuries caused by occupational injuries in the workplace. During the above period, the Fund benefitted between 129 000 and 352 000 workers per year (World Bank, 2021). Like the UIF, this fund also only covers formal sector workers, and thus excludes both the unemployed and informal sector workers. The RAF, broadly similar in terms of number of beneficiaries to the Compensation Fund, provides income benefits for road accident victims to cover a loss of income, damages, and medical and funeral costs. Given its mandatory nature, the Fund operates like a universal social insurance scheme (Moore and Seekings, 2019). Finally, voluntary funds which are regulated by government include private health insurance (medical aid) and retirement fund schemes for those who can afford them, as well as the Government Employees Pension Fund – a pension fund mandatory for all government employees. Owing to the fact that only formal sector workers are eligible for benefits and the chronically-poor are largely excluded, South Africa's social insurance system has instead been described as a 'semi-social' system (Woolard et al., 2011; Seekings and Matisonn, 2012).

The above overview shows that adults of working-age (15 to 64 years) are covered by four types of social grants intended for their own benefit depending on their characteristics (the DG conditional on having a disability, the newer SRD grant conditional on unemployment, the CSG conditional on being below the age of 18 years and living in a poor household, and the OAG conditional on being at least 60 years old and living in a poor household), temporary public works programmes, the NSNP conditional on attending a poorer public school, any mandatory fund conditional on formal sector employment or being in a road accident, and any voluntary fund presumably conditional on being a dependent of a member or being employed. As such, with the exception of the SRD grant, social

security coverage for able-bodied individuals between the ages of 18- and 59-years appears largely ‘earned’ through employment, particularly formal sector employment. Given the aforementioned high levels of and long-term nature of unemployment in South Africa, this implies that a large share of the working-age population has no access to social security. The magnitude of this coverage gap, and how it has evolved over time, serves as two key empirical questions which this report aims to address.

3. Data and methodology

3.1. Overview

In this report, we estimate and analyse social security coverage among the working-age population, defined here as 15 to 64 years, both overall and across various subgroups of individuals. This includes estimates of the level and share of individuals who have access to any type of social security as well as specific components of both social assistance and insurance. While we will explore variation in coverage at a given point in time, we also consider how coverage has varied over time from 2010 to 2022. The analysis makes use of individual-level microdata from two distinct, nationally-representative, cross-sectional, sample-based household surveys conducted by Statistics South Africa (StatsSA) in South Africa: the Quarterly Labour Force Surveys (QLFS) and the General Household Surveys (GHS). We also make use of individual-level administrative data on UIF claims provided by the Department of Employment and Labour. These are described in more detail below. Unfortunately, no single, nationally representative survey dataset exists in the country which contains items on all components of both social assistance and insurance. As such, the primary justification for the usage of both relates to data availability for the variables of interest – that is, coverage for a given component of social security. However, the use of both the QLFS and GHS simultaneously is complementary and, together, allows one to gain a comprehensive outlook of social security coverage in the country over time. This latter point also highlights the secondary justification for this choice: although data is collected at different frequencies, the continuation of time-consistent items in each survey over time allows one to analyse coverage over a relatively long-time horizon (in this report, a 13-year period).

Trends in both social assistance and social insurance coverage, as well as the policies within each, are examined throughout the aforementioned period. We also analyse heterogeneity in coverage among the employed and non-employed (inclusive of jobseekers, the discouraged unemployed, and the economically inactive). For this latter group, we adopt a broad approach for two reasons. First, analysing coverage by this distinction allows one to identify and gain an understanding of who has access to varying levels of support: income and in-kind support from social security in addition to income from the labour market, income or in-kind support from social security only in isolation, or neither. Second, data on some components of social security are collected for either the employed or non-employed only.

Table 1 presents an overview of the datasets which pertain to each component and policy relevant to the working-age population. Because the GHS collects data on social grant receipt (and by grant type), public works programme participation, and receipt of meals in public school feeding schemes, regardless of employment status, data on social assistance is entirely sourced from the GHS.¹⁰ The

¹⁰ It should however be noted that data on public works programme participation was unfortunately not collected in five years in our study period: 2011, 2012, 2020, 2021, and 2022.

QLFS is disadvantageous in this regard because it only collects data on one aspect of social assistance – social grant receipt – and only asks the non-employed.¹¹ Data on social insurance is primarily sourced from the QLFS in addition to the administrative UIF claims data, while data on one policy is sourced from the GHS. This is because social insurance is often employment-linked, as discussed above, and the QLFS, being a labour market-orientated household survey, thus includes items relating to social insurance among the employed. On the other hand, the GHS is designed with a focus on data on service delivery and is very limited with respect to labour market and hence social insurance data.¹² For the employed, the QLFS collects data on UIF registration, retirement fund contribution, and private health insurance membership. However, for the non-employed, only data on UIF receipt is collected. As such, data on private health insurance membership for the non-employed is sourced from the GHS. Because estimates for a given point in time cannot be summed across surveys due to potential double-counting, the consequence of this is that we are unable to obtain an aggregate estimate of the number of social insurance beneficiaries in the country. Unfortunately, while data on retirement fund contribution regardless of employment status is collected in the GHS, it is only available for three years (2016 to 2018). As such, because this data is not available then for 10 out of 13 years in our study period, we do not report coverage for this component among the non-employed.¹³ Finally, neither survey collects data on claims for the RAF or Compensation Fund, so we cannot report coverage for these policies.

Table 1: Dataset by social security component and employment status

Social security component	Employment status	Dataset
Social assistance		
(i) Social grants	Employed, non-employed	GHS
(ii) Public works	Employed, non-employed	GHS
(iii) School feeding scheme	Employed, non-employed	GHS
Social insurance (mandatory and voluntary funds)		
(i) Unemployment insurance	Employed	QLFS
	Non-employed	QLFS; UIF database
(ii) Retirement fund contribution	Employed	QLFS
	Non-employed	Not available
(iii) Health insurance	Employed	QLFS
	Non-employed	GHS
(iv) Road Accident Fund	Employed, non-employed	Not available
(v) Compensation Fund	Employed, non-employed	Not available

Authors' own illustration.

Notes: GHS = General Household Surveys; QLFS = Quarterly Labour Force Surveys; UIF = Unemployment Insurance Fund.

11 Periodically, the QLFS includes a module on public works programme participation, however this data is not available in the public domain.

12 For instance, the GHS does not collect data on employment industry, occupation, working hours, employment type (for example, wage work or self-employment, or public versus private sector), contract type, or union membership to name a few.

13 The exclusion of retirement fund contribution among the non-employed, however, does not significantly affect our estimates of overall social insurance coverage given the relative very low coverage of this component among this group. In the latest year that data is available (2018), an estimated 627 000 of the nearly 20 million (or just 3 percent of the) non-employed reported either individually or jointly owning a pension or provident fund.

3.2. The Quarterly Labour Force Surveys

The QLFS is a nationally representative, cross-sectional (with a rotating panel component) household-based sample survey conducted every quarter since 2008. It contains detailed information on a wide array of demographic and socioeconomic characteristics and labour market activities for individuals aged 15 years and older who live in South Africa. The primary objective of the survey is to collect regular information on about individuals in the labour market. The survey follows a stratified two-stage sampling design, with probability proportional to size sampling of primary sampling units (PSU) in the first stage and sampling of dwelling units with systematic sampling in the second stage (Statistics South Africa, 2008). The sampling unit is the dwelling and the unit of observation is the household. The sample includes the non-institutionalised population, except for workers' hostels,¹⁴ and is designed to be representative at the national level, provincial level, metro/non-metro level within provinces, and at the geography-type level within metro areas (for example, in urban areas). The sampling weights for the data collected account for original selection probabilities and non-response and are benchmarked to known population estimates of the entire civilian population of South Africa. To be consistent with the annual frequency of the GHS, we reweight these weights to obtain year-specific (as opposed to quarter-specific) population estimates. In our analysis here, the sample is restricted to the working-age population. In a given wave, the sample comprises up to 55 000 individuals, resulting in a sample of over 2.3 million observations in total from the first quarter of 2010 to the last quarter of 2022.

3.3. The General Household Surveys

The GHS is a nationally representative, cross-sectional, household-based sample survey conducted every year since 2002. The primary aim of the survey is to measure the progress of development in the country. In addition to individual-level demographics and household-level outcomes, data is collected on the performance of programmes and the service delivery quality in six broad areas: education, health and social development, housing, household access to services and facilities, food security, and agriculture. Like the QLFS, the survey follows a stratified two-stage design with probability proportional to size (PPS) sampling of PSUs in the first stage and sampling of dwelling units (DUs) with systematic sampling in the second stage. Similarly, because the survey used the same master sample frames as the QLFS over the period, the target population consists of all private households and residents in workers' hostels across all nine provinces of South Africa. Again, the sampling weights account for original selection probabilities and non-response and are benchmarked to known population estimates of the entire civilian population of South Africa. The sample is restricted to the working-age population, and in a given year, the sample comprises up to 60 000 individuals, resulting in a sample of nearly 610 000 observations in total from 2010 to 2022.

¹⁴ However, individuals living in private dwelling units within institutions are included, such as teachers' accommodation within school compounds (Statistics South Africa, 2008).

3.4. Administrative data on Unemployment Insurance Fund claims

As mentioned above, we additionally make use of individual-level administrative data on UIF claims provided by the Department of Employment and Labour. This data includes the universe of anonymised UIF claims in the country from 2018 to 2022 inclusive, at the monthly frequency, and provides useful information on the profile of the unemployed (conditional on prior formal employment), shifts in labour demand, and the performance of labour centres. It includes limited but useful data on the demographic characteristics of claimants such as age, sex, and highest education level, labour market data such as previous industry of employment, job termination, and job termination reason, and other information relevant to claims including benefit type, application date, turnaround time, claim status, and geographical data on the location of the relevant labour centre (excluding online applications). Unfortunately, data on applications for and receipt of the COVID-19 Temporary Employer-Employee Relief Scheme (TERS) – a wage subsidy introduced in 2020 to support firms and workers in response to the pandemic – is not included in the dataset.¹⁵ In total, the dataset comprises nearly 5.3 million observations. After omitting individuals who are outside the working-age population (1.3 percent of observations), it includes nearly 5.2 million observations.

3.5. Econometric model specification

After estimating and analysing the social security coverage trends described above, we aim to gain an understanding of the demographic and socioeconomic determinants of social security coverage. In other words, which individuals are more likely to be covered by any type of social security, and how does this vary across different types of social security policies? To do so, we pool all periods of the data and make use of multivariate linear regression modelling to estimate the following specification using Ordinary Least Squares (OLS):

$$social\ security_{iht} = \beta_0 + \gamma \mathbf{Demographic}_{it} + \delta SES_{ht} + \tau_t + \varepsilon_{it} \quad (1)$$

where i , h , and t index individuals, households, and time periods, respectively, $social\ security_{it}$ is a given binary measure of social security coverage, $\mathbf{Demographic}_{it}$ is a vector of a range of demographic characteristics including age, race, gender, highest level of education, province of residence, and employment status. We additionally include year fixed effects, τ_t , to control for any factors which may vary across individuals but are constant over time. We estimate multiple models by varying the definition of the $social\ security_{it}$ term. First, it serves as an indicator of coverage of any type of social assistance; second, several individual indicators of coverage of specific social assistance policies (that is, social grant receipt, public works programme participation, and receipt of meals in public school feeding schemes); third, an indicator of coverage of any type of social insurance; and fourth, several individual indicators of coverage of specific social assistance policies (UIF registration or receipt, retirement fund contribution, and private health insurance membership).

We construct and include in the models a household-level index of socioeconomic status, SES_{ht} , measured on a logarithmic scale for ease of interpretation. To construct this index, we follow

¹⁵ See Köhler and Hill (2022) and Köhler et al. (2023) for an overview of the TERS policy and micro-econometric analysis of its effects on job retention.

Wittenberg and Leibbrandt (2017) and use uncentered principle component analysis (UCPCA).¹⁶ In brief, the index is constructed through a linear combination of the indicators of interest (here, ownership of household assets and access to basic services) and assigns weights to each indicator which are obtained from the first “principal component” which is a linear combination that accounts for the highest variance in a given indicator’s distribution. The result is a single composite index with higher values indicative of higher socioeconomic status. The index is then adjusted to avoid negative weights which could result in incoherent index values. The household-level indicators of interest we include are as follows: electricity access, piped water access, number of rooms in the household, and ownership of a television, landline or cell phone, refrigerator, motor vehicle, computer (desktop or laptop), and washing machine. All indicators are binary apart from the number of rooms.¹⁷ An examination of mean index values across various subgroups suggests that it is a reasonable household-level measure of socioeconomic status.¹⁸ Importantly, this index can only be included in the models of social assistance coverage given that data on these indicators were only collected in the GHS. All model estimates are weighted using the sampling weights and the standard errors are adjusted for the complex survey design.

Overall, the results from these models will shed light of the factors which most strongly predict access to social assistance and insurance, broadly as well as the individual policies within each. This, in combination with the descriptive analysis, will allow for a better understanding of which working-aged individuals are best covered by social security, which can inform how policy might intervene to better target social security for those groups who are least covered.

4. Results

4.1. Labour market overview

Table 2 presents a broad overview of the South African labour market between of 2010 and 2022. The employed population increased from 13.8 million in 2010 to 15.5 million in 2022, which amounts to an average annual increase of 1.0 percent. Concurrently, the working-age population grew by 1.7 percent annually or 7.3 million people over the period while the labour force increased by about 2 percent annually or 5 to 6.5 million people depending on the definition. As such, **the rate of jobs growth in South Africa has not kept up with the growth of the working-age population and labour force**. As a consequence, the employment-to-population ratio decreased from 0.42 in 2010 to 0.39 in 2022, representing a 7.14 percent decrease. In other words, a smaller share of the working-age population was employed in 2022 compared to 2010. Additionally, the inability of the labour market

16 We are grateful to Martin Wittenberg (University of Cape Town) for making the code to implement this approach publicly available in Shifa and Ranchhod (2019)’s handbook here:

https://aceir.uct.ac.za/sites/default/files/content_migration/aceir_uct_ac_za/1639/files/ACEIR%2520handbook_updated_120223_%2528version-2%2529.pdf.

17 Ownership of livestock and radios are often included as additional indicators in the construction of these indices; however, such data was not collected in most years in the study period and hence we omit both from our index. For a few of the included indicators, data was not collected for a few years, namely motor vehicle and computer ownership (2010 and 2011) and washing machine ownership (2010, 2011, 2020, and 2021). Consequently, we are only able to generate index values for 2012 to 2019 and 2022.

18 For instance, higher index values are observed on average for individuals with higher levels of education, residing in urban relative to rural areas, social grant non-recipients, and self-reported White relative to all other population groups (the latter being of course an enduring legacy of South Africa’s past).

to absorb the entire growing labour force into employment has pushed the number of unemployed individuals from 4.6 million to 7.8 million under the narrow (searching) definition, equivalent to an average annual rate of increase of 4.6 percent. Consequently, the narrow unemployment rate has grown from 24.9 to 33.5 percent, or 2.5 percent in the average year. Growth in unemployment has thus been higher than the increase in employment in both relative terms and absolute terms. Further, much of the working-age population would like to work but are neither actively seeking work nor actively trying to start a business. These individuals are referred to as the ‘non-searching unemployed’ and, between 2010 and 2022, their numbers grew by an average of 4.8 percent per annum, from 2 to 3.5 million.

Table 2: An overview of the South African labour market, 2010 - 2022

	2010	2022	Change	
			Absolute	AAGR (%)
Labour Market Aggregates (000's)				
<i>Working-age population</i>	32 958	40 248	7 291	1.68
<i>Employment</i>	13 788	15 544	1 756	1.00
<i>Narrow unemployment</i>	4 564	7 834	3 269	4.60
<i>Narrow labour force</i>	18 352	23 378	5 025	2.04
<i>Expanded unemployment</i>	6 590	11 383	4 793	4.66
<i>Expanded labour force</i>	20 378	26 927	6 549	2.35
<i>Discouraged unemployed</i>	2 026	3 549	1 523	4.78
<i>Not economically active</i>	12 579	13 321	742	0.48
Employment-to-population ratio				
<i>Employment-to-population ratio</i>	0.42	0.39	-0.03	-0.66
Labour Force Participation (%)				
<i>Narrow LFPR</i>	55.68	58.08	2.40	0.35
<i>Expanded LFPR</i>	61.83	66.90	5.07	0.66
Unemployment Rate (%)				
<i>Narrow unemployment rate</i>	24.87	33.51	8.64	2.52
<i>Expanded unemployment rate</i>	32.34	42.27	9.93	2.26

Authors' own calculations. Source: QLFS 2010Q1 - 2010Q4, 2022Q1 - 2022Q4.

Notes: Sample restricted to the working-aged (15 - 64 years). All estimates weighted using sampling weights and account for the complex survey design. AAGR = average annual growth rate.

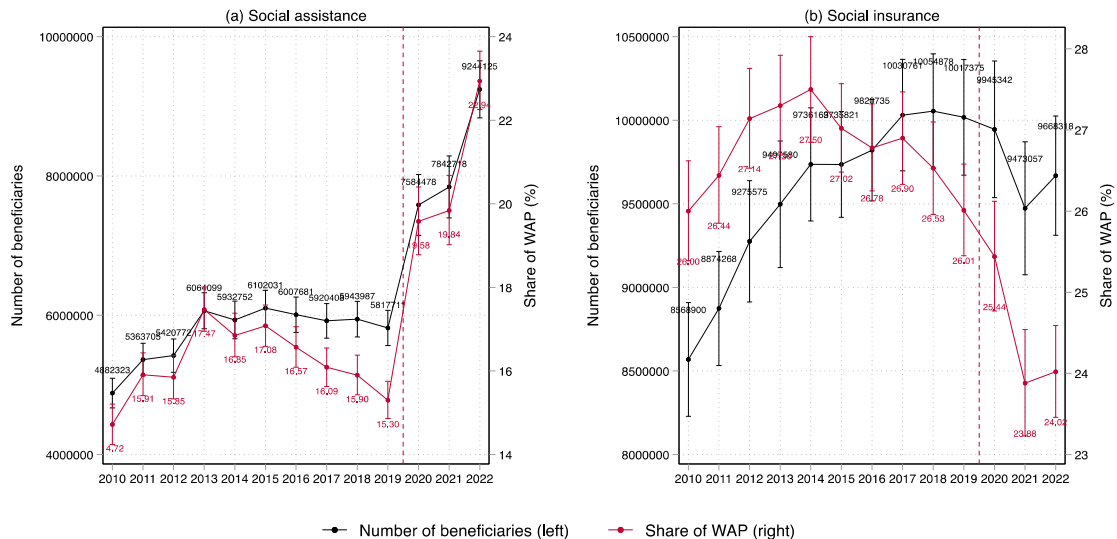
4.2. Social security coverage among the working-age population

In this section we present the results pertaining to overall social security coverage among the working-age population, regardless of employment status. It is clear that **coverage rates of both social insurance and assistance among the working-age are low, and while social insurance coverage is higher, it has fallen over time while social assistance coverage has improved.** Figure 2 presents estimates of the level and share of the working-age population covered by social assistance and social insurance, respectively.¹⁹ As shown in panel (a), prior to the pandemic social assistance coverage was relatively low among the working-age population. Just 6 million individuals were covered each year between 2013 and 2019, and because this level has been relatively constant but the working-age

¹⁹ Recall that because several components have to be sourced from different datasets, the estimates cannot be combined to obtain an overall social security coverage estimate.

population has grown during this period, the share of the working-age population covered reduced from 17.5 percent in 2013 to just 15.3 percent in 2019. In other words, just prior to the pandemic, six in every seven individuals of working-age were not covered by social assistance. Thereafter, after the onset of the pandemic, social assistance coverage improved markedly to 19.6 percent in 2020 and 23 percent in 2022, with 9.2 million individuals of working-age now being covered by some form of assistance. This improvement of nearly 8 percentage point (equivalent to 50 percent) was entirely driven by the roll-out of the new SRD grant, as shown in Figure 3.²⁰ Despite this growth, coverage remains low with 77 percent of individuals not being reached.²¹ Regarding social insurance, prior to the pandemic coverage among the working-aged was also low but notably higher than social assistance at 27.5 percent (or 9.7 million individuals) at its peak in 2014. The number of individuals covered has continuously risen throughout the pre-pandemic period, however, this growth did not keep up with the growth of the working-age population. As a consequence, the social insurance coverage rate fell continuously to 26 percent in 2019, and after the pandemic, 24 percent in 2022.

Figure 3: Trends in social security coverage among the working-age population, 2010 – 2022



Authors’ own calculations. Source: GHS 2010 – 2022; QLFS 2010Q1 – 2022Q4.

Notes: Sample restricted to the working-aged (15 - 64 years). All estimates weighted using sampling weights and account for the complex survey designs. WAP = working-age population. Capped spikes represent 95 percent confidence intervals. Vertical line represents the onset of the COVID-19 pandemic in South Africa.

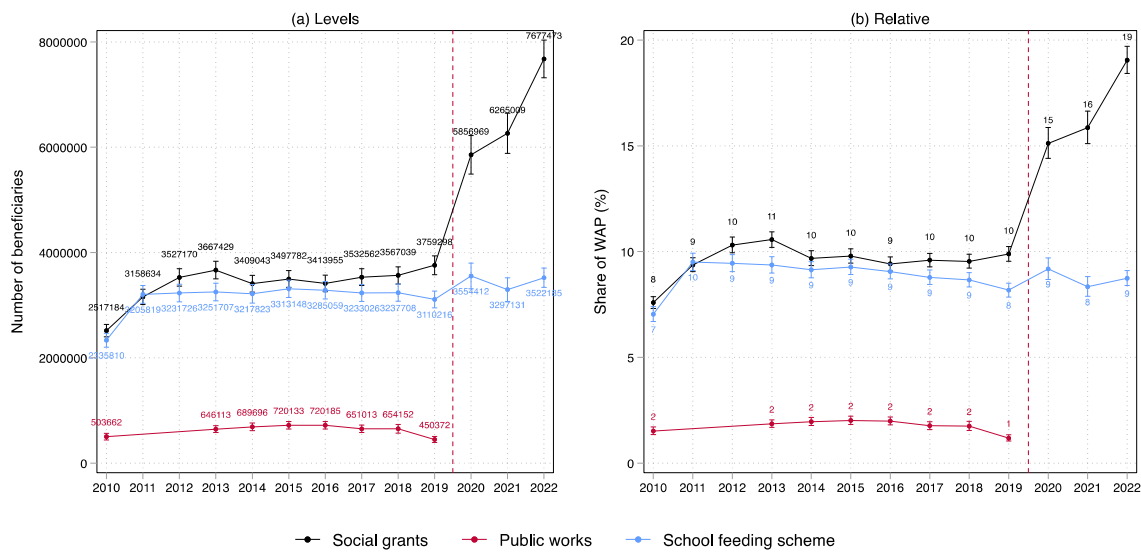
As mentioned above, the growth in social assistance among the working-age population after the onset of the pandemic is due to an expansion of social grants, specifically the introduction of the SRD grant. As shown in Figure 3, prior to the pandemic between 2012 and 2019 social grants reached between 9 and 11 percent of working-aged people, or approximately 3.5 million people – representing a minority (18 percent) of the total social grant recipient population of 19 million. This share quickly grew by 50 percent to reach 15 percent in 2020 and further to 19 percent in 2022. In other words, in

20 Social assistance coverage rates for the post-2019 period are underestimated to a certain extent due to the absence of data on public works programme participation. Given that the Presidential Employment Stimulus was introduced during this period, coverage is likely higher.

21 We later show that, although some of the individuals not covered by social assistance may not be in need of assistance due to access to income through the labour market, most of the individuals here are non-employed.

the span of just three years the number (share) of working-aged people receiving social grants more than (nearly) doubled. As shown in Figure 4, which presents estimates of the number of working-aged social grant recipients disaggregated by grant type, the role of the introduction of the SRD in 2020 in explaining the increase in the reach of grants in the post-pandemic period is clear. In most of the pre-pandemic period, the number of recipients of each grant type was relatively constant, and in the post-pandemic period, the number of recipients for every grant other than the SRD either remained constant or increased only marginally.

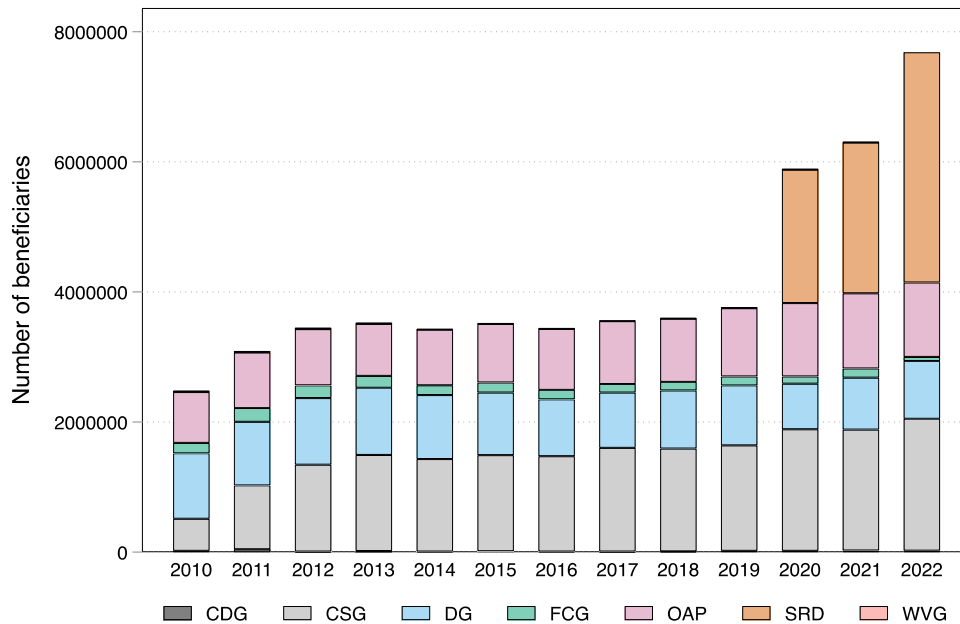
Figure 4: Trends in social assistance coverage among the working-age population, by component, 2010 – 2022



Authors' own calculations. Source: GHS 2010 – 2022.

Notes: Sample restricted to the working-aged (15 – 64 years). All estimates weighted using sampling weights and account for the complex survey design. WAP = working-age population. Capped spikes represent 95 percent confidence intervals. Vertical line represents the onset of the COVID-19 pandemic in South Africa.

Figure 5: Trends in social grant coverage among the working-age population, by grant type, 2010 – 2022



Authors’ own calculations. Source: GHS 2010 – 2022.

Notes: Sample restricted to the working-aged (15 - 64 years). All estimates weighted using sampling weights and account for the complex survey design. CDG = Care Dependency Grant; CSG = Child Support Grant; DG = Disability Grant; FCG = Foster Care Grant; OAP = Old Age Pension (also known as the Old Age Grant or Older Person’s Grant); SRD = Social Relief of Distress; WVG = War Veterans’ Grant.

Other components of social assistance were also relative constant over the full period. Prior to and after the pandemic the estimated amount of working-age individuals directly benefiting from the NSNP varied marginally between 8 and 10 percent (or 3.1 and 3.5 million individuals). These presumably comprise higher secondary public school learners given the lower-bound on the working-age population definition.²² It is plausible that the uptick of the number of beneficiaries in 2020 may be attributable to the pandemic’s effects on food insecurity, however a more thorough empirical analysis is required to arrive at such a conclusion confidently. Participation in public works programmes reduced marginally during the pre-pandemic period, estimated at 720 000 individuals or 2 percent of the working-aged in 2015 down to 450 000 or 1 percent of the working-aged in 2019. While such data in the GHS is not available during the post-pandemic period, the government reported that nearly 940 000 EPWP work opportunities – up to 100 days of work – were created during the 2020/21 financial year (Department of Public Works and Infrastructure, 2021). This is equivalent to approximately 258 000 full-time equivalent (FTE) jobs.²³ This would imply that public works participation has decreased since the pre-pandemic period, and only marginally increase our 2020 overall social assistance coverage rate from 19.58 percent to 20.25 percent.²⁴

22 While it is difficult to obtain any administrative data on the NSNP within the last decade, in the 2013/14 financial year the programme fed 9.1 million learners of all ages every school day (Department of Basic Education, 2014).

23 Assuming each work opportunity is equivalent to 27.4 percent (100/365) of a full-time equivalent job.

24 These estimates for public works participation in the post pandemic period do not consider participation in the PES, which to date have provided over one million work opportunities.

Social assistance coverage among the working-aged is typically higher among poor and middle-income households. Figure 5 presents estimates of social assistance coverage, overall and by component, for each decile of the constructed household-level socioeconomic status index in 2022.²⁵ Panel (a) considers coverage for any type of social assistance. On average, approximately 30 percent of working-aged individuals living within the poorest 60 percent of households are covered. Coverage rates are relatively constant within this part of the distribution, with the exception of the poorest decile whose coverage rate is marginally lower at 23 percent. Among wealthier households, coverage rates decline significantly by more than 83 percent to just 5 percent for those living in the richest 10 percent of households. This highlights that social assistance reaches many both poor and middle-income households, assuming a strong, positive correlation between household income and our socioeconomic measurement of socioeconomic status. Despite this reach these coverage rates are still relatively low, however they have markedly increased over time. Compared to Figure A1 in the appendix which presents the equivalent estimates for approximately 10 years earlier,²⁶ coverage rates for any type of social assistance have increased by 2 – 13 percentage points (or 14 – 108 percent) over the period.²⁷

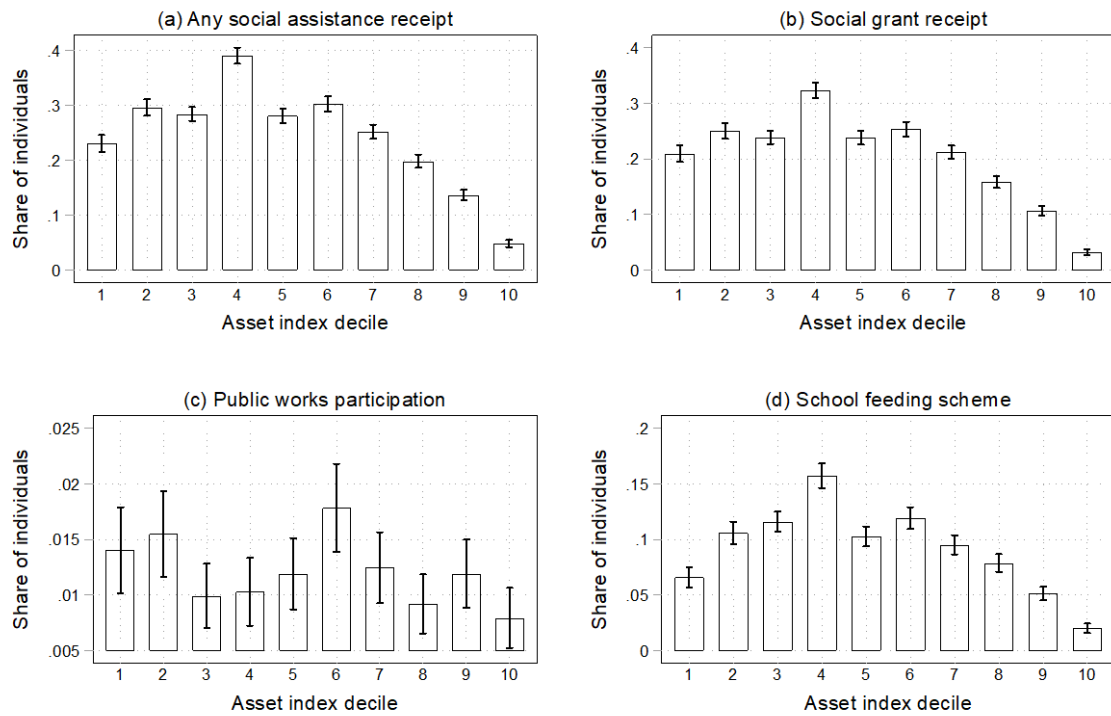
Examining changes in coverage rates across the household socioeconomic status distribution for specific social assistance components, as shown in panels (b) to (d), it is clear that **coverage of social grants and school feeding schemes are typically higher among poor and middle-income households, while public works participation is very low across the distribution.** As shown in panel (b), in 2022, 21 – 32 percent of working-aged individuals in the poorest 70 percent of households received social grants, which steadily reduces to just 3 percent of working-aged individuals in the richest decile of the distribution. Comparing these estimates to those in Figure A1 suggests that, although the progressivity of social grant coverage has declined, social grant coverage rates have increased over time across the whole distribution. Figure A2 in the appendix presents the equivalent estimates for panel (b) in Figure 5 but for each grant type, and indicates that **the increase in social grant coverage rates and reduction in progressivity of their distribution appears primarily explained by the introduction of the SRD grant**, which covered a large number of previously-unreached working-aged individuals in both low- and middle-income households. This is not unexpected considering many of the non-employed reside in middle-income households in South Africa (in 2022, nearly half of the non-employed population lived in households in the middle 50 percent (deciles 4 to 7, inclusive) of the socioeconomic status distribution).

25 Deciles are constructed by first sorting households in the data in order of SES index values and thereafter dividing the data in 10 equally-sized groups.

26 These estimates in Figure A1 use data for 2012 for every indicator with the exception of public works participation which uses data from 2013 due to data availability.

27 The largest relative increases were among wealthier households, however these changes are from relatively low bases.

Figure 6: Social assistance coverage across the household socioeconomic status distribution, 2022



Authors' own calculations. Source: GHS 2019, 2022.

Notes: Sample restricted to the working-aged (15 - 64 years). All estimates weighted using sampling weights and account for the complex survey design. All estimates are for 2022 with the exception of public works which uses 2019 data due to data availability. Household socioeconomic status measured using an asset index generated using uncentered principle component analysis on the following variables: electricity access, piped water in house, television ownership, landline or cell phone ownership, refrigerator ownership, vehicle ownership, computer, laptop, or desktop ownership, washing machine ownership, and number of rooms. Capped spikes represent 95 percent confidence intervals.

Coverage of school feeding schemes among the working-aged, as shown in panel (d), also largely benefitted middle-income households. However, coverage rates in general are about half the magnitudes of those for social grants. This is not unexpected given that only a small share (about 12 percent) of the working-age population are eligible for this scheme. Finally, public works programme participation is particularly low, regardless of household socioeconomic status. These rates have also declined over the period, by about 8 – 50 percent, with the largest declines towards the bottom of the distribution, as shown in panel (c) in Figure A1. Consequently, the progressivity of coverage of these programmes have declined.

We now profile the composition of the social protection within both social assistance and social insurance systems across various individual characteristics between 2010 and 2022. Table 3 presents the coverage of social assistance and social insurance programmes disaggregated by various demographic characteristic. We also include the ratio of beneficiaries within a specific system relative to the total working age population for each demographic characteristic. The ratio provides insight into the distribution of coverage for a given sub-group of the working age population across the two social protection systems, thereby highlighting the gap in coverage across and within these groups.

In terms of social assistance, coverage has increased from 4.9 million in 2010 to 9.2 million in 2022, almost doubling over 12 years ago (Table 3). On average, social assistance increased annually by 5.5 percent between 2010 and 2022. We observe that coverage for men and women was evenly distributed in 2022, with men accounting for 49.4 percent and women for 50.6 percent of beneficiaries, respectively. The corresponding ratio for men was 0.230, this means that about a quarter of the working age population amongst men benefited from social assistance in 2022. Similarly for women, the ratio stood at 0.229 during the same period.

As described in Section 2, government spending on social grants in South Africa is well-targeted, providing adequate support to the poorest, and preventing and addressing vulnerability and inequality (World Bank, 2020). When we disaggregate coverage by racial composition, we observe significant disparities in social assistance. Africans constitute the vast majority of social assistance coverage, accounting for 91.5 percent, followed by Coloured (6.6 percent), and Indians (0.8 percent). The reasons for the large share of Africans receiving social assistance is that most Africans are poorer and thus have higher rates of eligibility (Woolard et al, 2011). Despite Africans dominating social assistance coverage, they only account for 25.7 percent amongst the African working age population receiving social assistance.

In terms of age, the youngest age cohort accounts for the highest social assistance coverage (49.4 percent), followed by the oldest cohort (16.0 percent). This can be explained by the fact that the youngest age cohort comprises children and young adults, who are the primary beneficiaries of the CSG grant. Conversely, the oldest age group comprises pensioners who predominantly benefit from the OAP grant. Prior the pandemic, social assistance coverage was limited for those between the ages of 25 and 54, because this group was only eligible for the DG, and participating in the public works programme. Hence, we see the sharp increase in coverage for those aged 25-55 years old after the pandemic period. Specifically, social assistance coverage increased by 12.1 percent, 8.8 percent and 5.0 percent for those aged 25-34, 35-45 and 45-55 years, respectively. As discussed above, this increase can be attributed to the introduction of the SRD grant.

More than eight in ten individuals covered by social assistance had a less than incomplete secondary education (81.5 percent). In 2022, nearly three-fifths of social assistance recipients had incomplete secondary education (61.8 percent), while one-fifth had primary or less education (19.7). In stark contrast, together, those with diploma or degree constituted less than 2 percent of social assistance recipients. This indicate that individuals with lower levels of education are more likely to be recipients of social assistance. The corresponding ratio shows that the share of the working age population covered increased from 26 percent in 2010 to 41 percent in 2022 for those with primary or less education. The equivalent share of those with an incomplete secondary education increased from 18.5 percent in 2010 to 35.1 percent in 2022.

In terms of provinces, KwaZulu-Natal and Gauteng stand out as exhibiting relatively high social assistance receipt. In 2022, the share of the working-age population covered in KwaZulu-Natal and Gauteng were the highest, accounting for 20.8 and 19.1 percent, respectively. The high coverage rate in both Gauteng and KwaZulu-Natal can be attributed to the high population size in these provinces. In 2022, Gauteng and KwaZulu-Natal accounted for 26.6 percent and 19.0 percent of total population, respectively (Statistics South Africa, 2022b). In contrast, the lowest shares of social assistance coverage

were for the Northern Cape (2.1 percent), the Free State (6.2 percent) and North West (8.3 percent). Notably, the Northern Cape and Free State have the lowest population sizes among the provinces, accounting for 2.2 percent and 2.9 percent of total population, respectively (Statistics South Africa, 2022b). However, social assistance coverage in the North West, Gauteng and Mpumalanga increased rapidly at an annual average of 8.0, 8.2 and 8.0 percent, respectively.

Table 3: Social assistance and insurance coverage, by demographic characteristics, 2010–2022

	Social Assistance					Social Insurance				
	Share (%)		Share of WAP		AAGR (%)	Share (%)		Share of WAP		AAGR (%)
	2010	2022	2010	2022		2010	2022	2010	2022	
Total (000s)	4 882	9 244	0.15	0.23	5.5	8 569	9 668	0.26	0.24	1.0
Gender										
Male	47.1	49.4	0.14	0.23	5.9	58.0	54.8	0.31	0.27	0.5
Female	52.9	50.6	0.15	0.23	5.1	42.0	45.2	0.21	0.22	1.6
Race										
African/Black	88.3	91.5	0.17	0.26	5.8	64.0	70.5	0.21	0.21	1.8
Coloured	8.0	6.6	0.13	0.18	3.8	13.8	13.1	0.38	0.36	0.6
Indian/Asian	1.4	0.8	0.08	0.06	0.1	4.4	3.8	0.41	0.36	-0.1
White	2.3	1.2	0.04	0.04	-0.2	17.9	12.6	0.48	0.43	-1.9
Age (years)										
15-24	55.9	49.4	0.26	0.46	4.4	7.9	5.6	0.07	0.05	-1.9
25-34	7.3	15.1	0.04	0.13	12.1	32.7	28.1	0.32	0.26	-0.3
35-44	7.8	11.3	0.06	0.11	8.8	31.2	32.2	0.40	0.35	1.3
45-54	8.7	8.2	0.09	0.13	5.0	20.4	24.7	0.37	0.37	2.7
55-64	20.3	16.0	0.33	0.37	3.4	7.8	9.4	0.23	0.21	2.6
Education										
Primary or less	37.1	19.7	0.26	0.41	0.0	11.0	5.2	0.19	0.11	-5.1
Incomplete secondary	54.1	61.8	0.19	0.35	6.6	28.5	24.5	0.21	0.14	-0.2
Complete secondary	4.9	14.9	0.03	0.10	15.6	34.8	40.4	0.24	0.30	2.3
Diploma	1.0	1.6	0.03	0.05	9.2	15.1	12.5	0.49	0.50	-0.6
At least degree	0.8	0.2	0.03	0.01	-5.3	9.5	16.6	0.68	0.60	5.8
Province										
Western Cape	8.3	7.1	0.10	0.13	4.1	17.2	18.7	0.39	0.37	1.7
Eastern Cape	15.3	12.9	0.19	0.31	4.0	8.0	8.1	0.17	0.18	1.1
Northern Cape	3.2	2.1	0.22	0.23	1.6	2.1	2.4	0.25	0.28	2.2
Free State	6.0	6.2	0.16	0.30	5.7	5.4	4.6	0.26	0.23	-0.2
KwaZulu-Natal	22.7	20.8	0.17	0.26	4.7	16.2	15.4	0.22	0.20	0.5
North West	6.2	8.3	0.14	0.28	8.0	5.9	5.4	0.23	0.19	0.3
Gauteng	14.0	19.1	0.08	0.15	8.2	33.7	31.5	0.34	0.28	0.4
Mpumalanga	7.8	10.4	0.15	0.31	8.0	6.8	6.8	0.23	0.21	1.0
Limpopo	16.5	13.1	0.25	0.33	3.5	4.8	7.2	0.13	0.18	4.5

Authors' own calculations. Source: GHS (2010, 2022); QLFS (2010Q1-4, 2022Q1-4)

Notes: Sample restricted to the working-aged (15 - 64 years). All estimates weighted using sampling weights and account for the complex survey designs. WAP = working-age population. AAGR = average annual growth rate.

We now turn to examining the composition of social insurance by demographic characteristics. On average, social insurance coverage grew from 8.6 to 9.7 million, representing a 1.0 annual percent increase over the period. We observe that coverage for men and women was unevenly distributed: 54.8 for men and 45.2 percent for women, respectively. More than a quarter of the working-age male population had access to social insurance in 2022, relative to 21.5 percent of working-age women. With respect to population group, African individuals dominate coverage in absolute terms, however White, Indian/Asian, and Coloured individuals are disproportionately represented. Social insurance coverage was highest for White individuals in 2022, with nearly 43 percent of working-age individuals

within the group covered. This was followed by that of Coloured (36 percent), Indian/Asians (36 percent), and African (21 percent) individuals.

We observe notable heterogeneity in the distribution of coverage by age. The youngest age cohort was less likely to be covered for social insurance than their counterparts. Just over 5 percent of the population aged 15-24 years were covered by social insurance. This low rate of coverage reflects both the strong linkages between (formal sector) employment and social insurance coverage in South Africa coupled with the disproportionate burden of unemployment among the youth. Consequently, their access to social insurance coverage remains significantly limited.

In terms of education, more than two-thirds of those with complete secondary and more level of education had access to social insurance (70 percent). High levels of education is associated with high social insurance coverage. In 2022, just under 11 percent of individuals with a primary level education or less were covered, in contrast to 14 percent of those with an incomplete secondary, 30 percent of those with a complete secondary, 50 percent of those with post-secondary diplomas, and 60 percent for those with at least bachelor degrees. We also observe a sharp increase in the social insurance coverage for those with at least a degree and complete secondary education. Social insurance coverage increased rapidly by 5.8 percent and 2.3 percent for those with at least a degree and complete secondary, respectively. In contrast, social insurance coverage decreased rapidly by 5.1 percent for those with less than primary education.

With respect to province, Gauteng and the Western Cape stand out as the provinces with relatively high social insurance coverage. Again, this reflects the link between employment and social insurance in the country, considering these three provinces account for a large share of workers in the country. In 2022, 37 percent of working-age individuals in the Western Cape had social insurance, followed by Gauteng as well as the Northern Cape each at 28 percent. In contrast, just 18 percent of working-age individuals in Limpopo and the Eastern Cape were covered. Despite the lowest coverage in Limpopo, we observe a rapid increase in social insurance recipients in Limpopo, at an annual average of 4.5 percent.

Table 4 provides an overview of the key programmes within the broader social assistance for the working age population in 2010 and 2022. It is immediately clear that the SRD grant, school feeding schemes, CSG, OAP and DG are by far the largest facet of the social assistance coverage for the working age population. In 2022, recipients of the SRD grant was the highest, covering 3.54 million beneficiaries (8.8 percent of the total working age population), followed by school feeding scheme covering 3.52 million beneficiaries (8.7 percent of working age population), 2.03 million beneficiaries for child support grant (5.0 percent of working age population) and 1.14 million beneficiaries for OAG (2.8 percent of total working age population). This picture is different from 12 years earlier. The recipients of the school feeding scheme was the highest 2.3 million, followed by the DG (1.0 million) and OAP (784 000).

We observe that, on average, coverage for men and women was evenly distributed across all social assistance components except for the WVG and public works programme participation. Women account for the largest share of coverage for war veterans grant (76.9 percent) and public works programmes (60.8 percent). In terms of population group, coverage for Africans dominate on all social

assistance components, except for the WVG where Coloured individuals account for the largest share. As expected, coverage is exclusively for the youngest cohorts for the CDG, CSG, FCG and school feeding schemes because these grants target young individuals. Conversely, the OAG covers only the oldest cohort. The share has remained relatively constant over the whole 12-year period across these groups, except for the WVG.

As mentioned before, individuals with lower levels of education are more likely to be recipients of social assistance. Interestingly, at least 7 in 10 beneficiaries have primary or less education or incomplete secondary education for all social assistance components except for the SRD grant and public works programmes. This group collectively accounts for 77.5 percent, 99.4 percent, 76.7 percent, 93.7 percent, 82.1 percent, 100 percent and 100 percent of beneficiaries for the CDG, CSG, DG, FCG, OAP, and WVG, respectively. Meanwhile, this group accounts for 63.9 percent of recipients of the SRD grant and 61.2 percent of participants in public works programmes. At the provincial level, the distribution of beneficiaries varies significantly. KwaZulu-Natal account for most of beneficiaries of the CDG, CSG, DG, and the NSNP. On the other hand, Gauteng has the highest number of beneficiaries of the OAP, SRD, WVG and public works programmes. Meanwhile, the Eastern Cape stands out as having the highest number of DG recipients. The share has remained relatively constant over the whole 12-year period across these groups, except for the WVG.

Table 4: Social assistance coverage among the working-age population by component & demographic characteristics, 2010-2022

	Working-age population		Social grant type														School feeding schemes		Public works program	
			Care Dependency Grant		Child Support Grant		Disability Grant		Foster Care Grant		Old Age Pension grant		SRD grant		War Veteran's Grant					
	2010	2022	2010	2022	2010	2022	2010	2022	2010	2022	2010	2022	2010	2022	2010	2022	2010	2022	2010	2022
Total (000's)	32958	40 292	22	23	492	2 029	1 006	889	159	62	784	1 144	8	3 539	5	3	2 336	3522	504	450
Gender																				
Male	48.8	49.4	43.5	57.7	51.6	49.2	48.7	57.7	47.2	49.7	31.5	40.5	41.7	47.9	89.9	23.1	52.4	51.9	44.9	39.2
Female	51.2	50.6	56.5	42.3	48.4	50.8	51.3	42.3	52.8	50.3	68.5	59.5	58.3	52.1	10.1	76.9	47.6	48.1	55.1	60.8
Race																				
African	78.1	81.7	87.3	70.2	95.3	93.1	79.0	77.7	94.8	87.8	81.4	81.9	63.6	96.4	84.6	23.1	94.4	94.6	86.3	81.5
Coloured	9.4	8.6	12.7	29.8	3.7	6.2	14.6	17.9	5.2	10.2	11.0	11.7	26.0	3.1	10.1	76.9	4.5	4.2	7.5	9.7
Indian/Asian	2.8	2.7	0.0	0	0.4	0.3	2.6	2	0.0	0	3.8	2.7	6.1	0.3	0.0	0	0.3	0.3	0.9	1.7
White	9.8	7	0.0	0	0.6	0.5	3.7	2.4	0.0	2	3.8	3.7	4.4	0.2	5.3	0	0.8	0.9	5.3	7
Age (years)																				
15-24	30.2	24.6	58.6	100	100.0	100	9.7	7.8	97.8	100	0.6	0	27.6	23.8	55.2	0	99.1	99.2	17.8	10.7
25-34	26.5	27.3	16.2	0	0.0	0	15.5	18.5	1.3	0	0.8	0	27.3	34.2	10.4	23.1	0.8	0.8	31.7	34
35-44	20.2	23.4	2.4	0	0.0	0	24.2	25.9	0.6	0	1.1	0	28.7	23	0.0	0	0.1	0.1	25.1	26.7
45-54	14.2	14.7	15.5	0	0.0	0	29.8	28.2	0.2	0	3.0	0	7.5	14.4	18.2	0	0.0	0	18.0	19.9
55-64	9.0	10	7.3	0	0.0	0	20.9	19.7	0.2	0	94.6	100	9.0	4.5	16.2	76.9	0.0	0	7.5	8.8
Education																				
Primary or less	14.8	10.9	33.0	50.8	42.9	18.9	58.1	38.5	24.7	21.4	67.4	49.3	7.5	12	25.6	0	23.1	11.6	18.4	14.7
Incomplete sec	36.2	40.5	47.3	26.7	55.2	80.5	31.3	38.2	72.9	72.3	26.1	33.1	60.4	51.9	63.2	100	74.8	88.4	40.2	46.5
Complete sec	37.3	32.9	12.9	0	0.0	0.2	5.7	13.5	1.6	2	3.5	12.6	32.2	31.3	11.2	0	0.1	0	28.5	27
Diploma	8.1	8	4.0	0	0.0	0	0.7	1.4	0.0	0	1.0	1.4	0.0	3.3	0.0	0	0.0	0	7.0	7.7
Degree	3.6	6	0.0	0	0.0	0	0.5	0.5	0.0	0	0.8	0.2	0.0	0.4	0.0	0	0.0	0	5.6	3.1
Province																				
Western Cape	11.6	12.4	11.7	29.2	3.4	7.8	14.5	15.1	4.6	10.2	9.7	11.1	26.0	2.5	20.5	0	5.8	6.7	5.8	13
Eastern Cape	11.9	9.7	11.1	12.2	17.3	13.4	12.9	15.1	27.4	24.5	17.3	13.2	8.1	12	11.2	23.1	15.5	13.3	14.9	11.5
Northern Cape	2.2	2.1	1.4	3.4	2.1	2.3	4.6	5.1	4.2	2.7	2.9	2.3	0.0	1.2	0.0	0	3.1	2.1	2.9	2.8
Free State	5.5	4.8	5.2	5	6.1	5.2	7.9	7	10.8	4.4	5.2	5.7	0.0	7.4	10.3	0	5.3	5.2	6.1	9
KwaZulu-Natal	18.9	18.7	36.0	29.8	25.3	23.4	25.1	19.8	24.7	10.8	24.0	18.8	19.3	19.1	28.4	0	20.1	23.4	23.1	17.4
Northwest	6.7	6.8	7.3	8.1	6.0	8	7.9	8.4	6.0	4.3	7.8	9.3	0.0	8.6	7.7	0	5.2	7.6	4.8	7.1
Gauteng	25.8	28.6	11.5	6	12.4	17.1	11.6	11.9	11.1	24	16.3	22.7	38.0	20.9	17.9	76.9	10.2	17.3	31.8	22.5
Mpumalanga	7.6	7.8	9.5	2.1	10.9	9.8	7.5	8.7	3.4	7.4	5.1	7.4	8.6	12.8	4.0	0	10.0	10	4.2	9
Limpopo	9.8	9.2	6.2	4.3	16.4	13	8.1	8.8	7.6	11.8	11.8	9.6	0.0	15.5	0.0	0	24.9	14.4	6.3	7.7

Authors' own calculations. Source: GHS 2010 – 2022. Sample restricted to the working-aged (15 – 64 years). All estimates weighted using sampling weights and account for the complex survey design.

We now turn to examining key components of social insurance for the working age population in 2010 and 2022, as shown in Table 5. We observe that men are more likely than women to benefit from all social insurance components, except for the case health insurance coverage for the unemployed working age population. Men account for the highest share of coverage for UIF (56.8 percent) and pension fund (55.2 percent). In terms of population group, coverage for Africans dominate on all social insurance components. However, Whites and Indians disproportionately benefit from all social insurance components – UIF, pension and health insurance – while Africans and Coloureds receive hardly any benefits.

The cohort aged between 25 and 54 years is widely recognized as the prime working-age population, and this group predominantly accounts for the highest share across all social insurance components, with one exception: the youngest non-employed cohort. The reason for the youngest cohort's substantial health insurance coverage is primarily due to their dependency status, often being covered by their guardians or providers. Interestingly, more than half of the prime working-age population has access to all social insurance components, except for the youngest unemployed group. As a result, this prime working-age population collectively represents a significant portion, accounting for 55.7 percent, 61.5 percent, and 62.6 percent of beneficiaries for UIF, pension funds, and health insurance (employed group), respectively.

Education attainment shows a clear positive association with social insurance coverage. Across all social insurance components, the ratio of individuals covered relative to the working-age population consistently increases with higher education levels, with one exception noted for health insurance among the unemployed. Specifically, the coverage ratio for individuals with primary education or less stands at 0.101, further increasing to 0.134 for those with incomplete secondary education, 0.262 for those who have completed secondary education, 0.357 for individuals holding diplomas, and further increasing to 0.398 for those with degrees. This pattern is also observed consistently for the coverage of pension funds and health insurance within the employed population. At the provincial level, the distribution of beneficiaries varies significantly. Gauteng accounts for the highest share of all social insurance components. On the other hand, the Northern Cape accounts for the lowest share. This pattern is observed across all groups in 2010, indicating a consistent trend among various demographic characteristics.

Table 5: Social insurance coverage among the working-age population by component and demographic characteristics, 2010-2022

Demographic Characteristics	UIF (%)		Ratio: UIF/WAP		Pension Fund (%)		Ratio: Pension Fund/WAP		Health Insurance LMDS (%)		Ratio: Health Insurance/WAP		Health Insurance (%) GHS		Ratio: Health Insurance/WAP	
	2010	2022	2010	2022	2010	2022	2010	2022	2010	2022	2010	2022	2010	2022	2010	2022
Total (000s)	6 666	8 193	0.202	0.204	5 365	5 991	0.163	0.149	3 715	3 893	0.113	0.097	1 852	1 797	0.056	0.045
Gender																
Male	60.2	56.8	0.250	0.233	58.9	55.2	0.197	0.166	57.1	53.0	0.132	0.103	38.6	38.5	0.044	0.035
Female	39.8	43.2	0.157	0.174	41.1	44.8	0.131	0.132	42.9	47.0	0.094	0.090	61.4	61.5	0.067	0.054
Race																
African	62.7	69.0	0.162	0.172	61.6	69.4	0.128	0.127	55.7	65.1	0.080	0.077	51.9	51.1	0.037	0.028
Coloured	14.6	14.3	0.314	0.330	13.1	11.6	0.227	0.196	12.4	12.3	0.149	0.134	10.7	9.8	0.064	0.049
Indian/Asian	4.6	3.6	0.336	0.288	5.0	4.7	0.293	0.268	5.3	4.9	0.217	0.185	6.9	8.8	0.141	0.153
White	18.1	13.0	0.375	0.375	20.4	14.3	0.339	0.302	26.6	17.7	0.307	0.243	30.5	30.3	0.175	0.191
Age																
15-24	9.3	6.2	0.063	0.050	5.1	3.2	0.028	0.019	4.6	2.6	0.017	0.010	55.7	51.7	0.104	0.091
25-34	35.3	29.9	0.269	0.234	29.8	24.2	0.182	0.139	28.0	22.1	0.119	0.082	12.3	11.9	0.026	0.020
35-45	30.1	32.7	0.302	0.304	33.0	33.6	0.266	0.229	33.0	33.0	0.185	0.146	8.1	10.3	0.023	0.021
45-55	18.2	23.0	0.260	0.289	23.3	27.9	0.267	0.256	24.5	29.6	0.195	0.177	1.0	8.5	0.004	0.024
55-65	7.1	8.3	0.159	0.160	8.9	11.1	0.161	0.156	9.8	12.7	0.123	0.117	14.0	17.6	0.087	0.075
Education																
Primary or less	8.5	5.8	0.116	0.101	4.9	3.4	0.054	0.044	3.4	1.9	0.026	0.016	8.3	3.2	0.031	0.012
Incomplete sec	25.4	27.5	0.142	0.134	17.3	17.9	0.078	0.064	11.6	11.3	0.036	0.026	45.6	37.1	0.071	0.040
Complete sec	47.2	42.2	0.256	0.262	42.4	39.6	0.185	0.180	38.9	35.1	0.117	0.103	34.3	38.6	0.052	0.052
Diploma	13.4	10.5	0.337	0.357	27.6	15.5	0.557	0.383	37.0	19.6	0.517	0.316	6.2	10.8	0.043	0.080
Degree	5.5	13.1	0.307	0.398	7.7	22.8	0.348	0.508	9.1	31.2	0.283	0.452	4.6	9.3	0.071	0.062
Province																
Western Cape	18.5	20.8	0.321	0.346	16.3	17.2	0.228	0.210	14.7	17.7	0.143	0.140	14.2	18.2	0.069	0.067
Eastern Cape	7.1	7.4	0.120	0.135	7.8	7.4	0.107	0.100	9.0	8.3	0.085	0.073	7.8	6.0	0.037	0.024
Northern Cape	1.7	2.2	0.162	0.216	1.9	2.1	0.140	0.152	2.2	2.3	0.112	0.108	1.8	1.9	0.047	0.042
Free State	5.0	4.1	0.185	0.172	5.0	4.3	0.150	0.133	5.2	5.1	0.107	0.104	6.0	4.4	0.062	0.041
KwaZulu-Natal	15.9	14.6	0.170	0.161	15.4	14.6	0.132	0.117	13.6	12.9	0.081	0.068	21.3	13.7	0.063	0.033
Northwest	5.7	5.3	0.171	0.158	6.6	5.8	0.159	0.127	6.8	6.5	0.115	0.093	5.3	5.7	0.044	0.038
Gauteng	35.5	32.3	0.278	0.242	35.6	34.6	0.225	0.190	36.6	33.4	0.160	0.119	29.7	39.5	0.065	0.065
Mpumalanga	6.7	6.7	0.179	0.177	6.3	6.6	0.135	0.129	6.7	6.8	0.100	0.086	7.0	4.7	0.052	0.027
Limpopo	4.0	6.8	0.082	0.141	5.2	7.4	0.086	0.112	5.2	6.9	0.060	0.068	6.7	5.7	0.038	0.026

Authors' own calculations. Source: QLFS 2022Q1-4; GHS 2022.

Notes: Sample restricted to the working-aged (15 – 64 years). All estimates weighted using sampling weights and account for the complex survey design.

4.3. Social security coverage among the employed working-age population

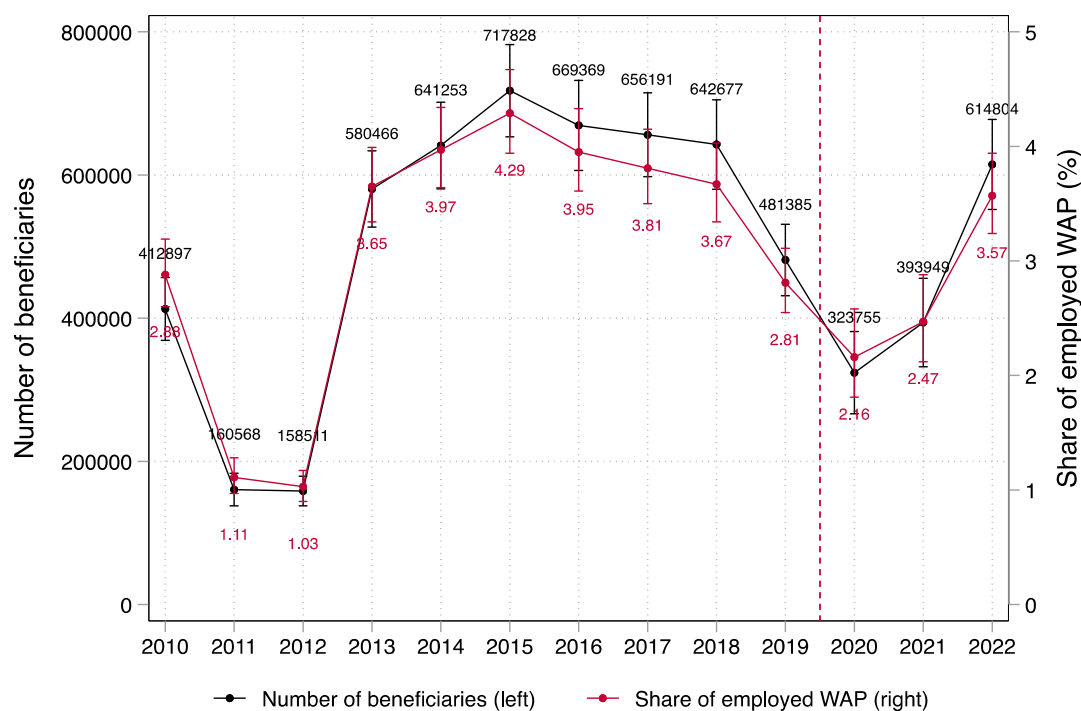
In this section we present the results pertaining to social security coverage among the working-age population, conditional on employment. Beginning with social assistance, Figure 6 presents estimates of the level and share of the working-age population covered by any type of social assistance. It is clear that **social assistance coverage among the employed remains low but has increased during the post-pandemic period**, whereas coverage was non-linear during the decade prior. In 2010, while only a very small share of workers were covered (413 000 or just under 3 percent), between 2010 and 2015 coverage increased significantly to 413 000 or 4.3 percent of working-aged employed individuals – representing a notable 74 percent growth in the number of individuals covered, or 48 percent growth in the coverage rate which accounts for population growth.²⁸

These gains, however, reversed entirely during the following five years. From 2015 to 2020, coverage declined to a level and rate lower than that of 2010 (324 000 workers, or 2.2 percent of all workers). The direction of the coverage rate again reversed following the onset of the pandemic and increased to reach 3.6 percent of working-aged workers as of 2022. Conversely, while the direction of coverage among this group has improved, the vast majority of workers (96.4 percent) are not covered. This is not necessarily unexpected given that many of those who have access to income via the labour market may not need assistance. The subgroup of interest may be those in working poverty²⁹; that is, despite having work, these workers earn an inadequate income to meet their needs. Feder and Yu (2019)'s study provides the latest estimate of working poverty in South Africa. Using StatsSA's upper-bound poverty line of R779 per capita in 2011 Rands (equivalent to about R1 430 in June 2023 Rands), they estimate that over a quarter (26 percent) of workers in 2014/15 lived in poverty. The authors show that, expectedly, these workers largely comprise low-wage workers; that is, those in the informal sector, in elementary occupations, and in private households.

28 The contraction in coverage during 2011 and 2013 is a consequence of a lack of data on public works participation in the GHS and does not necessarily reflect such a contraction in reality.

29 An individual is considered working poor if they are employed and reside in a household whose monthly per capita income falls below a given poverty threshold.

Figure 7: Trends in social assistance coverage among the employed working-age population, 2010 – 2022



Authors' own calculations. Source: GHS 2010 – 2022.

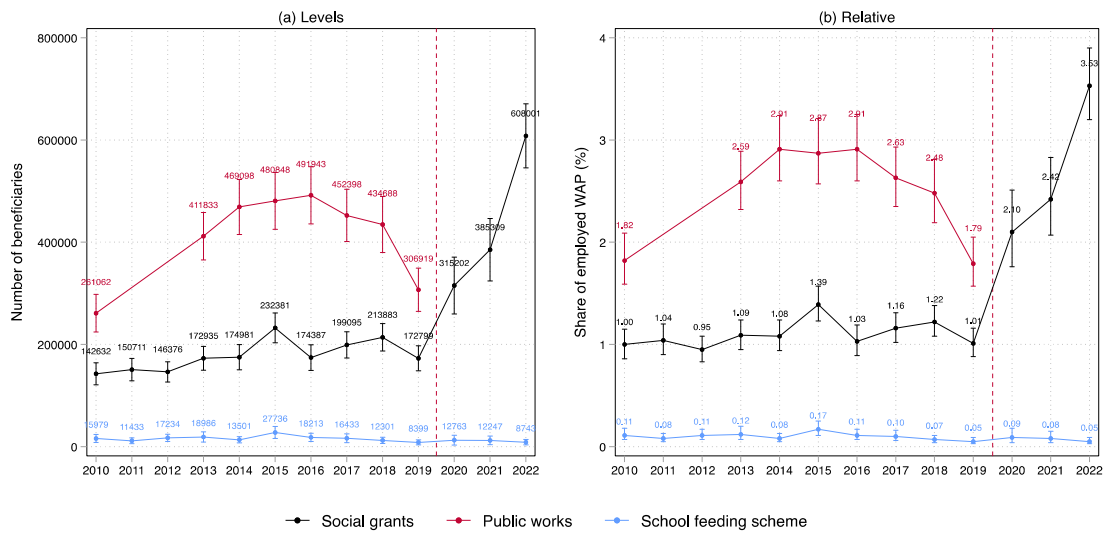
Notes: Sample restricted to the working-aged (15 - 64 years). All estimates weighted using sampling weights and account for the complex survey designs. WAP = working-age population. Capped spikes represent 95 percent confidence intervals. Vertical line represents the onset of the COVID-19 pandemic in South Africa.

Figure 7 presents estimates of the level and share of the employed working-age population covered by specific components of social assistance over the period. As in the case for the overall working-age population, **the expansion of social grants – specifically the introduction of the SRD – drove the increase in social assistance coverage among workers after the onset of the pandemic.** Prior to the pandemic, a very small minority (1 percent or 173 000) of workers were receiving social grants, which was relatively constant during the period. This makes it clear that grant receipt and employment are not mutually-exclusive outcomes, however only a small number of workers experience both simultaneously. After the pandemic's onset, social grant coverage among the employed more-than-tripled, albeit from a low base, to 3.5 percent (or 608 000 workers) as of 2022. On the other hand, coverage of the NSNP is almost zero among the employed. In 2022, an estimated 8 700 workers (or 0.05 percent of all workers) were receiving NSNP benefits, while nearly all (99.8 percent) beneficiaries of the program were not employed.³⁰ This is not surprising given that most workers are out of school.

Expectedly, public works participation, as measured here as having participated in such a programme in the six months preceding the survey, is higher among the employed, and higher than social grant coverage during the pre-pandemic period. However, in levels, it is still relatively low in levels and has contracted in recent years. In 2019, less than 2 percent of the employed had participated in a public works programme within 6 months of being surveyed, down from 3 percent during 2014 – 2016.

³⁰ This simply implies that a small amount of individuals are both employed and attend school.

Figure 8: Trends in social assistance coverage among the employed working-age population, by component, 2010 – 2022



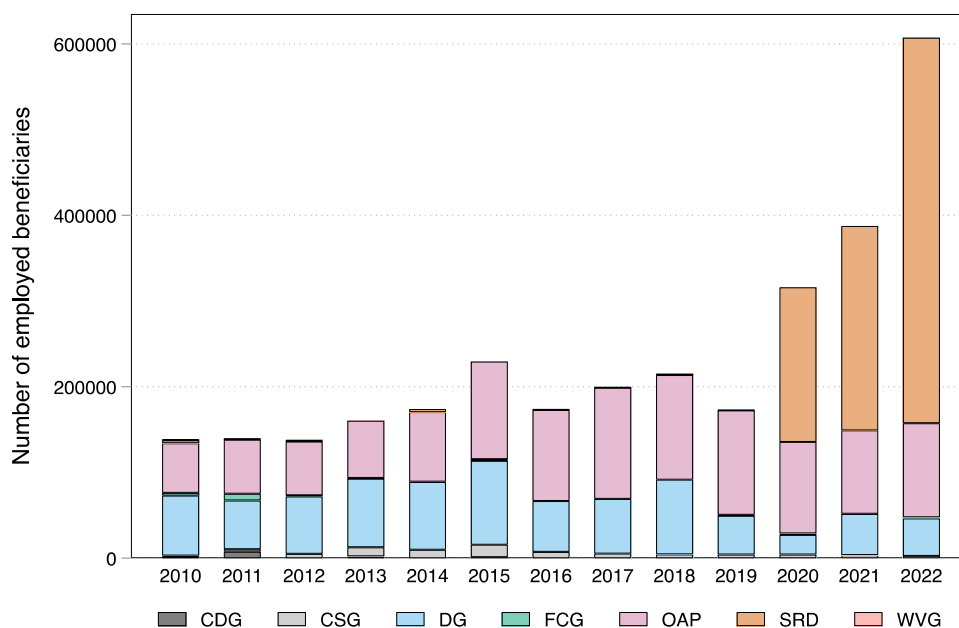
Authors’ own calculations. Source: GHS 2010 – 2022.

Notes: Sample restricted to the employed working-aged (15 - 64 years). All estimates weighted using sampling weights and account for the complex survey design. WAP = working-age population. Capped spikes represent 95 percent confidence intervals. Vertical line represents the onset of the COVID-19 pandemic in South Africa.

The estimates in Figure 8 show that, given receipt of all grants available in the pre-pandemic period remained relatively constant during the pandemic period, the previously observed increase in grant coverage among the employed is entirely attributable to the introduction of the SRD grant in 2020. As of 2022, the data suggests that 450 000 of the employed received the SRD grant, accounting for just 2.6 percent of the employed population. Most of the employed who receive grants receive the SRD as opposed to other grants (74 percent). Recall that although the SRD is targeted to the unemployed, it is well-documented that many informal sector workers can receive the grant considering, by definition, their informality makes it challenging to distinguish them from the unemployed within verification processes (Köhler and Bhorat, 2020; Bhorat et al., 2023).³¹ Indeed, in the GHS data here, over 80 percent of employed SRD recipients were informal sector workers.

31 The SRD was actually initially conceptualised to target informally employed adults not receiving any social grants, which was not followed through due to concerns surrounding inclusion errors (Bassier et al., 2021).

Figure 9: Trends in social grant coverage among the employed working-age population, by grant type, 2010 – 2022



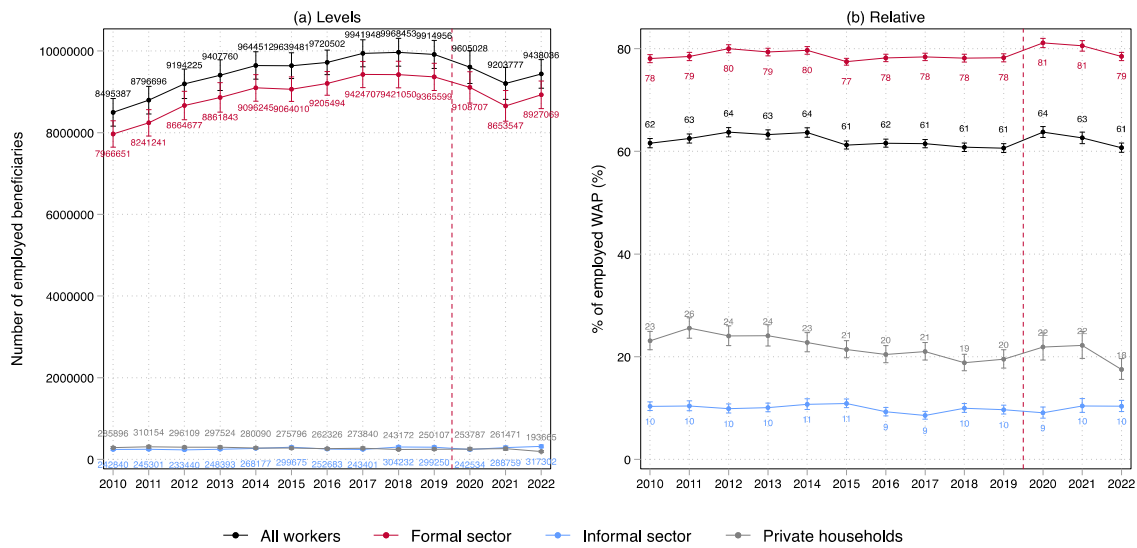
Authors' own calculations. Source: GHS 2010 – 2022.

Notes: Sample restricted to the working-aged (15 - 64 years). All estimates weighted using sampling weights and account for the complex survey design. CDG = Care Dependency Grant; CSG = Child Support Grant; DG = Disability Grant; FCG = Foster Care Grant; OAP = Old Age Pension (also known as the Old Age Grant or Older Person's Grant); SRD = Social Relief of Distress; WVG = War Veterans' Grant.

Concerning social insurance, Figure 9 presents estimates of the level and share of the employed working-age population covered by social insurance over the period, for all workers and disaggregated by sectoral formality. **Social insurance coverage among the employed is relatively high, with most workers being covered by some form of social insurance.** In 2022, 60.7 percent of workers (or 9.4 million) were covered, marginally lower than the rate in 2010 (61.1 percent or 8.5 million workers). This relatively constant and high coverage rate over time reflects two characteristics. First, growth in social insurance coverage has kept up with growth in the employed population over the period. Second, the high rate reflects South Africa's concentration of labour in the formal sector, as discussed in Section 2. **Nearly all workers covered by social insurance are working in the formal sector, while coverage in the informal sector and private households is low.** In 2022, the formal sector accounted for most workers (73 percent) in the labour market, and nearly all (95 percent) of workers covered by social insurance were working within the formal sector. Just 10 percent of informal sector workers and 18 percent of private household workers had some type of social insurance. Notably, while these social insurance coverage rates for formal and informal sector workers have remained relatively unchanged over the period, those for private household workers have contracted by nearly 6 percentage points (or 24 percent) from 23 percent of workers in 2010 to 17.5 percent in 2022.³²

³² This contraction is not necessarily due to private household worker job losses caused by the pandemic. About 64 percent of this contraction took place prior to the pandemic from 2010 to 2019.

Figure 10: Trends in social insurance coverage among the employed working-age population, overall and by sectoral formality, 2010 – 2022



Authors’ own calculations. Source: QLFS 2010Q1 – 2022Q4.

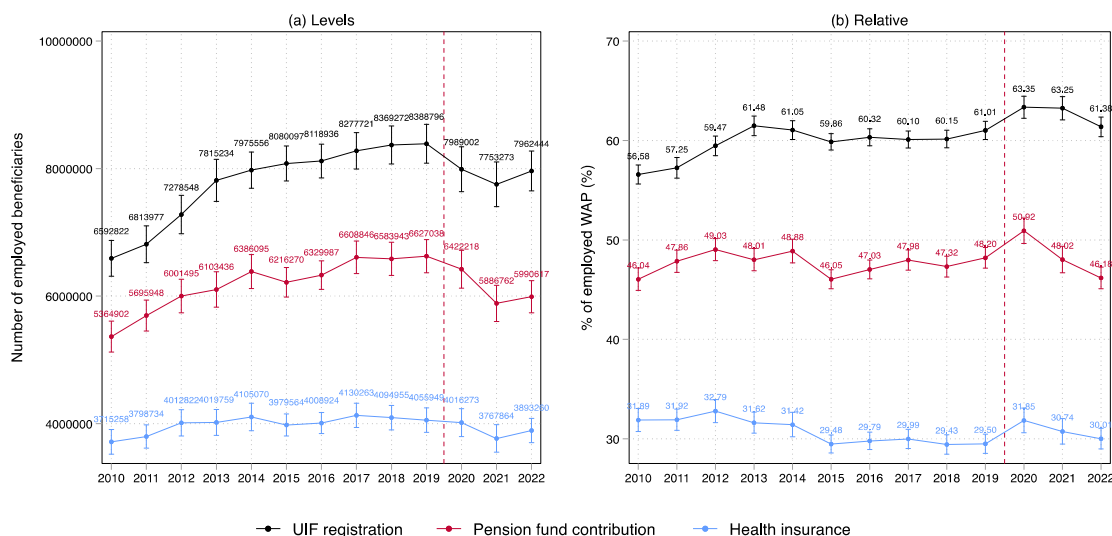
Notes: Sample restricted to the working-aged (15 - 64 years). All estimates weighted using sampling weights and account for the complex survey design. WAP = working-age population. Capped spikes represent 95 percent confidence intervals. Vertical line represents the onset of the COVID-19 pandemic in South Africa.

Figure 10 presents the equivalent estimates of those presented in Figure 9 but separately for each social insurance component. While the reach of each component has fluctuated marginally over the period, **coverage of social insurance components among workers vary but all have remained relatively unchanged throughout the period.** As shown in panel (a), in absolute terms the number of workers registered with the UIF has grown significantly by about 21 percent from an estimated 6.6 million in 2010 to 8 million in 2022. This latter level is still 5 percent lower than the pre-pandemic level of 8.4 million, which similar to the level at the pandemic’s onset in 2020. It should be noted that job loss at the pandemic’s onset was significantly more likely among non-registered workers, whose net employment level shrunk by 13 percent from 2019 to 2020 compared to the contraction of 5 percent experienced by registered workers.³³ This suggests, but does not necessarily confirm, that UIF registration provided workers with a source of protection against pandemic-induced job loss.³⁴ In relative terms, as shown in panel (b), the share of workers registered with the UIF rose from 56.6 percent in 2010 to 61.5 percent in 2013 but has remained relatively flat since, which suggests that growth in UIF coverage has only just kept up with employment growth. The coverage dynamics of other components exhibit a similar trend, however coverage rates are notably lower than UIF coverage. In 2022, less than half (46 percent) of workers were contributing to a retirement fund and less than a third (30 percent) had private health insurance, rates which are similar to the equivalent rates 13 years prior in 2010.

33 Both of these differences are statistically significant at the 1 percent level.

34 This is because UIF registered and non-registered workers differ in a multitude of characteristics apart from registration status, and these differences themselves may explain the difference in job loss rates. For example, registered workers are significantly more likely than non-registered workers to be male and be members of a trade union.

Figure 11: Trends in social insurance coverage among the employed working-age population, by component, 2010 – 2022



Authors’ own calculations. Source: QLFS 2010Q1 – 2022Q4.
 Notes: Sample restricted to the working-aged (15 - 64 years). All estimates weighted using sampling weights and account for the complex survey design. WAP = working-age population. Capped spikes represent 95 percent confidence intervals. Vertical line = onset of the COVID-19 pandemic.

We now profile the composition of the social security within both social assistance and social insurance systems across various individual characteristics, conditional on employment, between 2010 and 2022. Table 6 presents the coverage of social assistance and social insurance programmes among the employed, disaggregated by various demographic characteristics. In terms of social assistance, we observe that men accounts for the highest social assistance coverage compared to women. In 2022, three-fifths of men (60.4 percent) were covered for social assistance while two-fifth were women (39.6 percent). The corresponding ratio for men was 0.043, and women was 0.036 during the same period.

When we disaggregate coverage by race, we observe significant disparities in social assistance coverage for the employed working age population. Africans constitute the vast majority of social assistance coverage, accounting for 91.1 percent, followed by Coloured (6.2 percent), and Indians (0.8 percent). Despite Africans dominating social assistance coverage, they only account for 4.8 percent amongst the African working age population receiving social assistance. By age, the cohort aged between 25 and 54 years collectively represents a significant portion for social assistance coverage of the employed (67.1 percent), while the youngest cohort account for the smallest (7.6 percent). Consequently, the oldest cohort (55-64 years) account for a quarter of social assistance coverage among the employed (25.4 percent).

More than eight in ten employed individuals covered for social assistance had less than incomplete secondary education (83.8 percent). In 2022, nearly half of employed social assistance recipients had incomplete secondary education (50.4 percent), while nearly a quarter had primary or less education (23.4 percent). In stark contrast, together, those with diploma or degree constituted 2.1 percent of social assistance recipients for the employed working age population. This indicates that higher educated individuals are less reliant on social assistance. The corresponding ratios point out a significant proportion of the employed working age population covered increased from 0.068 in 2010

to 0.109 in 2022 for those with primary or less education. In contrast, the equivalent ratios for those with diploma and degrees decreased over the period.

In terms of provinces, KwaZulu-Natal and Gauteng stand out as the provinces with relatively high social assistance coverage for the employed population. In 2022, coverage rates were highest in Gauteng and KwaZulu-Natal, with 18.5 percent and 17.7 percent, respectively. In contrast, social assistance coverage was lowest in the Northern Cape (2.3 percent), the Western Cape (6.0 percent) and Free State (6.5 percent). Social assistance coverage in the Mpumalanga, Limpopo and North West increased rapidly at an annual average of 11.9, 10.0 and 9.1 percent, respectively.

Table 6: Social assistance and insurance coverage among the employed working-age population, by demographic characteristic, 2010-2022

	Social assistance					Social insurance				
	Share (%)		Ratio: SA/WAP		AAGR (%)	Share (%)		Ratio: SI/WAP		AAGR (%)
	2010	2022	2010	2022		2010	2022	2010	2022	
Total (000s)	413	615	0.03	0.04	3.4	8 495	9 438	0.593	0.548	0.9
Gender										
Male	46.8	60.4	0.025	0.043	5.6	57.9	54.8	0.601	0.529	0.4
Female	53.2	39.6	0.037	0.036	0.8	42.1	45.2	0.583	0.573	1.5
Race										
African	79.6	91.1	0.034	0.048	4.5	64	70.1	0.546	0.511	1.7
Coloured	10	6.2	0.027	0.024	-0.6	13.7	13.2	0.753	0.762	0.5
Indian/Asian	1.2	0.8	0.01	0.009	-0.2	4.4	3.9	0.706	0.542	-0.1
White	9.2	1.9	0.018	0.007	-9.5	17.9	12.8	0.667	0.619	-1.9
Age (years)										
15-24	11.8	7.6	0.038	0.046	-0.4	7.9	5.5	0.397	0.475	-2.2
25-34	24.7	22.2	0.023	0.031	2.5	32.8	28.2	0.586	0.511	-0.4
35-44	23.6	24.2	0.024	0.03	3.6	31.2	32.3	0.668	0.539	1.2
45-54	21	20.7	0.031	0.034	3.2	20.3	24.8	0.637	0.633	2.6
55-64	18.8	25.4	0.069	0.107	6	7.7	9.3	0.554	0.556	2.4
Education										
Primary or less	26.1	23.4	0.068	0.109	2.4	10.9	5	0.415	0.363	-5.5
Incomplete secondary	37.4	50.4	0.042	0.066	6	28.4	24.1	0.517	0.461	-0.5
Complete secondary	22	21.8	0.016	0.023	3.3	34.9	40.5	0.639	0.599	2.1
Diploma	6.9	1.7	0.013	0.007	-8.1	15.2	12.6	0.842	0.536	-0.7
Degree	6.8	0.4	0.035	0.001	-18.4	9.5	16.9	0.71	0.798	5.8
Province										
Western Cape	9.8	6	0.02	0.015	-0.7	17.2	18.8	0.692	0.669	1.6
Eastern Cape	12.9	11.2	0.042	0.051	2.2	8	8.1	0.51	0.579	1
Northern Cape	2.4	2.3	0.035	0.043	3	2.1	2.4	0.629	0.619	2.1
Free State	6.2	6.5	0.033	0.05	3.8	5.4	4.7	0.626	0.587	-0.3
KwaZulu-Natal	21.3	17.7	0.038	0.044	1.8	16.3	15.4	0.604	0.51	0.4
Northwest	5.4	10.2	0.027	0.07	9.1	5.9	5.4	0.534	0.5	0.2
Gauteng	30.3	18.5	0.029	0.024	-0.8	33.7	31.4	0.61	0.527	0.3
Mpumalanga	5.2	13.4	0.022	0.071	11.9	6.8	6.7	0.546	0.508	0.8
Limpopo	6.7	14.2	0.029	0.066	10	4.8	7.1	0.451	0.487	4.2

Authors' own calculations. Source: GHS 2010 – 2022; QLFS 2010Q1 – 2022Q4.

Notes: Sample restricted to the working-aged (15 - 64 years). All estimates weighted using sampling weights and account for the complex survey designs. WAP = working-age population. AAGR = average annual growth rate.

We now turn to examining the composition of social insurance coverage among the employed working age population across various demographic characteristics. Considering sex, as shown in Table 7, we estimate notable disparities in coverage between men and women. Nearly three-fifths of employed

working-age women had access to social insurance in 2022, in comparison to 53 percent of men. By race, we find that Africans make up the majority of those covered by social insurance in absolute terms, however Whites, Indians, and Coloureds are disproportionately represented. The ratio of individuals covered by social insurance relative to the employed working-age population was highest among Coloureds at 0.762, followed by Whites at 0.619, Indians at 0.542, and lowest among Africans at 0.511 in 2022.

We observe heterogeneity in the distribution of coverage by age. The youngest age cohort was less likely to be covered for social insurance than their older counterparts, mirroring the employment prospects of the youth in the labour market. The share of individuals covered by social insurance relative to the employed working age population for those aged 15-24 years was lowest at 5.5 percent in 2022. Hence, their access to social insurance coverage remains significantly limited. Regarding education, access to social insurance increases with education attainment among the employed working age population. More than two-fifths of those with complete secondary and higher levels of education had access to social insurance (70 percent). In 2022, coverage was lower for those with primary education or less at 0.363, increasing to 0.461 for those with incomplete secondary education, 0.599 for those with complete secondary education, 0.536 for those with diplomas, and reaching its highest at 0.798 for those with at least bachelor degrees.

With respect to provinces, Gauteng, Western Cape, and KwaZulu-Natal stand out as having relatively high social insurance coverage among the employed working-age population in 2022. The Western Cape had the highest ratio at 0.669, followed by Northern Cape at 0.619 and 0.587 in the Northern Cape at 0.277. In contrast, the Eastern Cape had the lowest ratio at 0.487, indicating that less than half of the working-age population in this province had access to social insurance. In summary, young African men with incomplete secondary education living in Gauteng are more likely to be covered by social assistance within the employed working-age population. On the other hand, African men in their prime age with complete secondary education residing in Gauteng are more likely to have access to social insurance.

With respect to the individual social insurance components for the employed working age population in 2022, employed men are more likely than employed women to be covered by all components. Men represent the majority of those covered by the UIF (56.8 percent), pension funds (55.2 percent), and health insurance (53.0 percent). In terms of racial population groups, coverage for Africans dominates across all social insurance components. However, Whites and Indians disproportionately benefit from all social insurance components. The cohort aged between 25 and 54 years – the prime working age population – accounts for the highest share across all social insurance components among the employed working-age population. This group collectively represents 85.8 percent, 85.7 percent, and 84.7 percent of all individuals covered by the UIF, pension funds, and health insurance, respectively, among the employed working age population.

Education attainment shows a clear positive association with social insurance coverage. Across all components, the ratio of individuals covered relative to the employed working age population consistently increases with higher education levels. The UIF coverage ratio for individuals with primary education or less stands at 0.336, further increasing to 0.459 for those with incomplete secondary education, 0.591 for those who have completed secondary education, 0.537 for individuals holding

diplomas, and further increasing to 0.522 for those with at least bachelor's degrees. This pattern is similarly observed with respect to both pension fund and health insurance coverage. At the provincial level, the distribution of beneficiaries varies significantly. Gauteng exhibits the highest coverage rates regardless of social insurance component, while the Northern Cape exhibits the lowest.

Table 7: Social insurance component coverage among the employed working-age population, by demographic characteristic, 2022

	UIF registration		Retirement fund contribution		Health insurance	
	Share of beneficiaries (%)	Share of WAP	Share of beneficiaries (%)	Share of WAP	Share of beneficiaries (%)	Share of WAP
Total (000's)	7 962	0.512	5 991	0.385	3 893	0.25
Gender						
<i>Male</i>	56.8	0.519	55.2	0.38	53	0.237
<i>Female</i>	43.2	0.503	44.8	0.392	47	0.268
Race						
<i>African</i>	68.6	0.466	69.4	0.355	65.1	0.216
<i>Coloured</i>	14.5	0.728	11.6	0.441	12.3	0.303
<i>Indian/Asian</i>	3.7	0.555	4.7	0.523	4.9	0.359
<i>White</i>	13.2	0.613	14.3	0.499	17.7	0.401
Age (years)						
15-24	6.1	0.479	3.2	0.191	2.6	0.099
25-34	30	0.541	24.2	0.329	22.1	0.196
35-44	32.8	0.534	33.6	0.412	33	0.263
45-54	23	0.485	27.9	0.443	29.6	0.306
55-64	8.1	0.443	11.1	0.453	12.7	0.338
Education						
<i>Primary or less</i>	5.6	0.336	3.4	0.154	1.9	0.057
<i>Incomplete secondary</i>	27.1	0.459	17.9	0.228	11.3	0.094
<i>Complete secondary</i>	42.4	0.591	39.6	0.414	35.1	0.239
<i>Diploma</i>	10.6	0.537	15.5	0.588	19.6	0.485
<i>Degree</i>	13.3	0.522	22.8	0.671	31.2	0.598
Province						
<i>Western Cape</i>	20.9	0.69	17.2	0.427	17.7	0.285
<i>Eastern Cape</i>	7.3	0.433	7.4	0.331	8.3	0.24
<i>Northern Cape</i>	2.2	0.532	2.1	0.386	2.3	0.276
<i>Free State</i>	4.1	0.408	4.3	0.322	5.1	0.252
<i>KwaZulu-Natal</i>	14.7	0.471	14.6	0.352	12.9	0.202
<i>Northwest</i>	5.3	0.471	5.8	0.386	6.5	0.283
<i>Gauteng</i>	32.3	0.536	34.6	0.432	33.4	0.271
<i>Mpumalanga</i>	6.6	0.454	6.6	0.343	6.8	0.229
<i>Limpopo</i>	6.6	0.394	7.4	0.332	6.9	0.203

Authors' own calculations. Source: QLFS 2010Q1 – 2022Q4.

Notes: Sample restricted to the working-aged (15 - 64 years). All estimates weighted using sampling weights and account for the complex survey designs. WAP = working-age population.

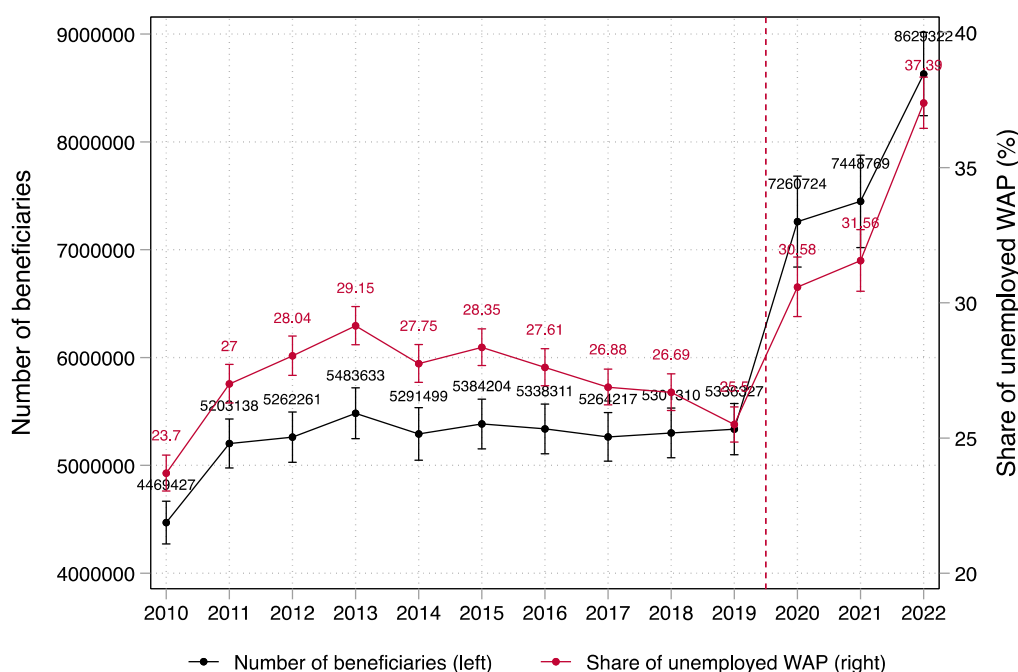
4.4. Social security coverage among the non-employed working-age population

In this section we present the results pertaining to social security coverage among the working-age population, conditional on non-employment.³⁵ Coverage within this subgroup is of particular interest

³⁵ As per Section 3, recall that non-employment here is intentionally broad to include all individuals who are not employed; that is, jobseekers, the discouraged unemployed, and the economically-inactive.

given that these individuals neither have access to income via the labour market nor support via social security components which are explicitly (formal sector) employment-linked. First considering social assistance, Figure 10 presents estimates of the level and share of the non-employed working-age population covered by any type of social assistance. **Social assistance coverage among the non-employed working-age population is low, but has improved in recent years.** Prior to the pandemic, the number of individuals covered remained relatively unchanged since 2011 at 5.3 million beneficiaries. Given the size of the non-employed population (approximately 21 million), this represents a small coverage rate of just under 26 percent in 2019. Given the stable number of beneficiaries coupled with population growth, this rate has contracted by about 10 percent relative to 2013. In other words, prior to the pandemic social assistance coverage among the non-employed was not keeping up with the growth of the non-employed population.

Figure 12: Trends in social assistance coverage among the non-employed working-age population, 2010 – 2022



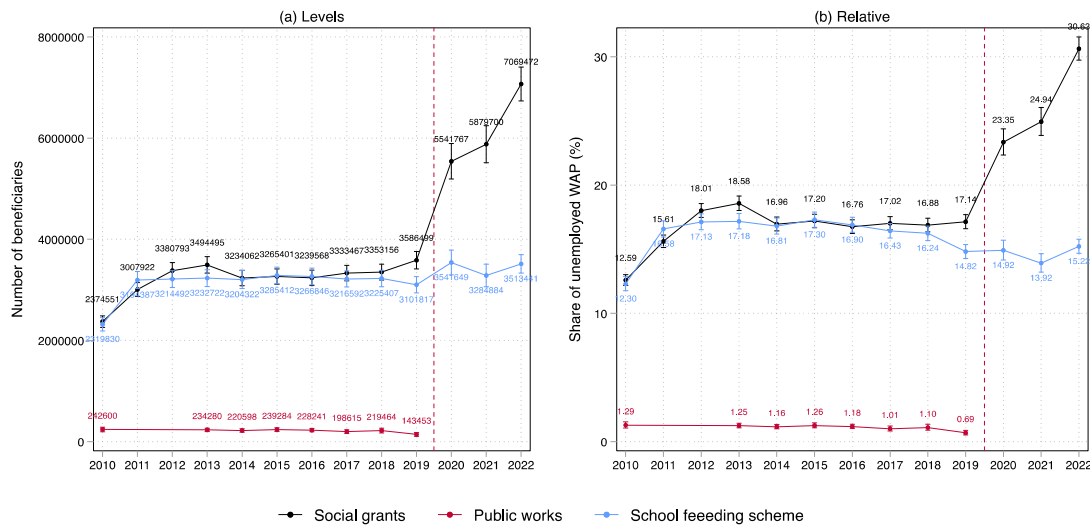
Authors’ own calculations. Source: GHS 2010 – 2022; QLFS 2010Q1 – 2022Q4.

Notes: Sample restricted to the non-employed working-aged (15 - 64 years). All estimates weighted using sampling weights and account for the complex survey designs. WAP = working-age population. Capped spikes represent 95 percent confidence intervals. Vertical line represents the onset of the COVID-19 pandemic in South Africa.

At the pandemic’s onset, however, social assistance coverage among this group increased significantly to reach 31 percent in 2020 and 37 percent in 2022, representing growth of about 47 percent in a three-year period. The component-specific trends in coverage presented in Figure 11 show that **the uptick in overall social assistance coverage among the non-employed is attributable to a wider reach of social grants, specifically the SRD grant.** In 2019 prior to the pandemic, 3.6 million non-employed individuals (or 17 percent of the non-employed population) received social grants, which quickly expanded by 82 percent to over 7 million (31 percent) in 2022. In other words, although most of the non-employed still do not receive grants, grant coverage among the group nearly doubled in just three

years. As shown in Figure 12, this uptick is primarily (but not completely³⁶) due to the introduction of the SRD grant which reached 3.1 million non-employed individuals, or 13.4 percent of the non-employed population. On the other hand, coverage rates of other sources of social assistance – the school feeding scheme and public works programmes – remained relatively constant throughout the period.

Figure 13: Trends in social assistance coverage among the non-employed working-age population, by component, 2010 – 2022

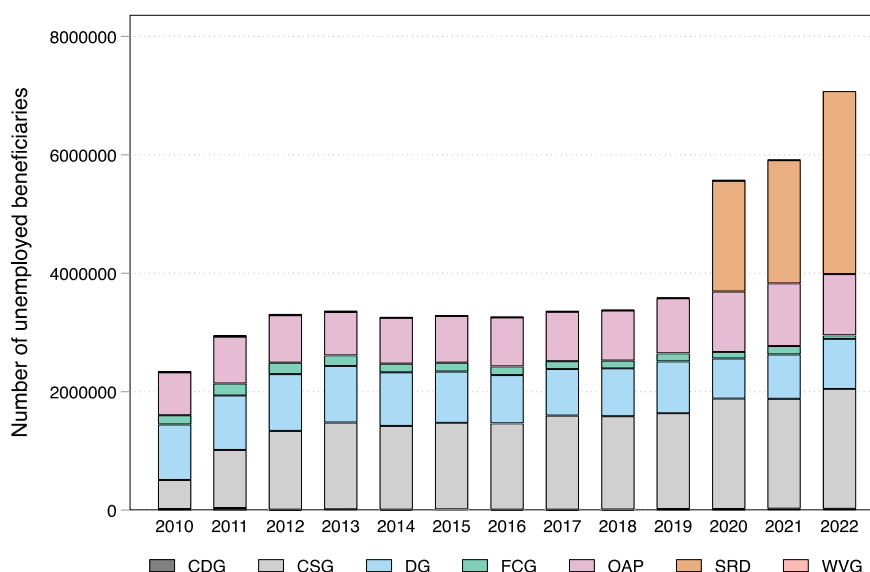


Authors' own calculations. Source: GHS 2010 – 2022.

Notes: Sample restricted to the non-employed working-aged (15 - 64 years). All estimates weighted using sampling weights and account for the complex survey design. WAP = working-age population. Capped spikes represent 95 percent confidence intervals. Vertical line represents the onset of the COVID-19 pandemic in South Africa.

36 The number of CSG recipients also rose but by a much lower but non-negligible rate (25 percent), from 1.6 million working-aged non-employed individuals in 2019 to 2 million in 2022.

Figure 14: Trends in social grant coverage among the non-employed working-age population, by grant type, 2010 – 2022



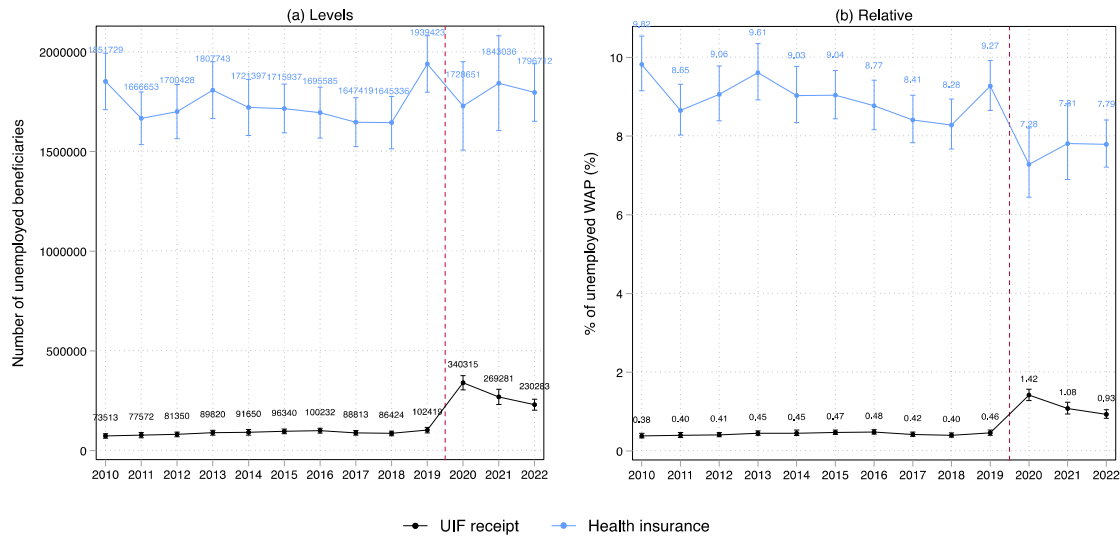
Authors' own calculations. Source: GHS 2010 – 2022.

Notes: Sample restricted to the non-employed working-aged (15 - 64 years). All estimates weighted using sampling weights and account for the complex survey design. CDG = Care Dependency Grant; CSG = Child Support Grant; DG = Disability Grant; FCG = Foster Care Grant; OAP = Old Age Pension (also known as the Old Age Grant or Older Person's Grant); SRD = Social Relief of Distress; WVG = War Veterans' Grant.

Finally, we consider trends in coverage of specific components of social insurance among the non-employed in Figure 13.³⁷ **Regardless of component, social insurance coverage among the non-employed has been persistently low.** This reflects the strong linkages between access to social insurance and (formal) sector employment as well as the long-term nature of most unemployment in South Africa, as described in Section 2.

³⁷ Recall that, as discussed in Section 3, we are unable to estimate estimates for overall social insurance within this subgroup because we cannot account for double-counting as the individual components have to be sourced from different datasets.

Figure 15: Trends in social insurance coverage among the non-employed working-age population, by component, 2010 – 2022



Authors’ own calculations. Source: GHS 2010 – 2022; QLFS 2010Q1 – 2022Q4.

Notes: Sample restricted to the non-employed working-aged (15 - 64 years). All estimates weighted using sampling weights and account for the complex survey design. WAP = working-age population. Capped spikes represent 95 percent confidence intervals. Vertical line represents the onset of the COVID-19 pandemic in South Africa.

Considering receipt of UIF benefits using the household survey data, prior to the pandemic we estimate a total of about 102 000 recipients in 2019, equivalent to less than 0.5 percent of the non-employed population.³⁸ Expectedly, most (79 percent) of these recipients have been unemployed on a short-term (less than one year) basis and have worked before (presumably in the formal sector³⁹) and hence are eligible for benefits. However, as described in Section 2, most of the unemployed in the country have been unemployed on a long-term basis, whether they have or have not previously worked before. The implication of this is straightforward: most of the unemployed in the country cannot access the UIF. At the pandemic’s onset, UIF benefit receipt tripled to over 340 000 individuals reflecting the significant amount of formal sector job loss at the time.⁴⁰ However, the coverage rate (1.4 percent of the non-employed population) still remained very low. Both in 2020 and throughout the period thereafter. Finally, the figure also reveals higher but still low coverage of the other (voluntary) social insurance component the data allows one to examine – health insurance. Prior to the pandemic, between 8 and 10 percent of the non-employed (or 1.6 to 1.9 million individuals) were covered. This coverage rate reduced further to below 8 percent throughout 2020 to 2022.

38 This is, however, considerably lower than the number of claims as per administrative data provided by the Department of Employment and Labour. This discrepancy is likely attributable to a combination of the QLFS sampling design as well as the fact that individuals may claim for multiple benefits at once, and as such the number of claims and individual recipients need not be equal.

39 The data does not permit us the ability to observe prior employment formality.

40 A large empirical literature now exists which documents the labour market effects of the pandemic in South Africa at its onset, as it progressed, and in its aftermath. The interested reader is referred to Köhler (2023) for an overview.

We now consider the distribution of UIF benefit receipt as per the UIF claims database which, as described in Section 3.4, provides useful information on the profile of the unemployed conditional on prior formal employment, shifts in labour demand, and the performance of labour centres. Figure 16 presents the evolution of monthly UIF claims by claim type from 2018 to 2022, similar to Figure 2 but for a shorter period and at a higher (monthly) frequency. We observe a large amount of variation in claims both within and across years. Between 700 000 and 1.3 million claims are made per year, or 47 000 to 132 000 per month. In the whole period, the majority (85 percent) of claims are for ordinary/unemployment benefits. As previously discussed, the number of claims is much lower than the number of unemployed in the population, likely due to the fact that most of the unemployed have either been so for at least one year and nearly half are first-time jobseekers, making most of them ineligible for unemployment insurance benefits.

Figure 16: Monthly Unemployment Insurance Fund claims, 2018 - 2022



Authors' own calculations. Source: UIF claims data provided by the Department of Employment and Labour. Notes: Claims restricted to the working-aged (15 - 64 years).

Notably at the COVID-19 pandemic's onset in April 2020, while the number of monthly claims decreased – which certainly does not reflect an improvement in the labour market⁴¹ – **the share of claims for reduced work time benefits increased substantially**, from 0.6 percent (456 claims) in March 2020 to 7.5 percent (over 4 500 claims) the next month. This relatively high share fluctuated but persisted as the pandemic progressed in the two years thereafter, likely in response to employers' downward adjustments to their employees' working hours (Ranchhod and Daniels, 2021; Köhler et al., 2022; Köhler, 2023). Concurrently, the share of claims for maternity benefits reduced considerably from 14 percent in 2018 to 9 percent in 2022.

Table 8 provides an overview of the profile of claimants according to the UIF database over time. Overall and as of 2022, **UIF claimants are more likely to be female, youth, and have at most a matric or lower qualification**. These characteristics largely reflect those of the broader unemployed population, despite only those previously employed in the formal sector being eligible to receive UIF

⁴¹ See footnote 43.

benefits. Considering gender, most claimants were male prior to the pandemic, but as of 2021 more women (664 000) than men (628 000) claimed benefits, which persisted into 2022. Claims by women grew by double the rate than their male counterparts, and consequently, accounted for 64 percent of the growth in total claims from 2018 to 2022. This shift in the claimant profile may be the consequence of the disproportionate effect of the pandemic on women’s labour market outcomes (Casale and Posel, 2021; Casale and Shepherd, 2022). By age, nearly half (49 percent) of all claimants are younger than 35 years. This share has remained relatively constant over the whole five-year period. Finally, considering education, over three in every four (76 percent) of claims were made by individuals with a matric qualification or less.

Table 8: Annual Unemployment Insurance Fund claimants, by demographic characteristic, 2018 – 2022

	2018		2020		2022		Change (%)	Share of change (%)
	Level	Share (%)	Level	Share (%)	Level	Share (%)		
Total	816 077	100.0	1 016 672	100.0	1 119 569	100.0	37.2	100.0
Gender								
Female	396 964	48.6	495 217	48.7	591 134	52.8	48.9	64.0
Male	419 112	51.4	521 453	51.3	528 435	47.2	26.1	36.0
Age (years)								
15-24	64 017	7.8	72 068	7.1	92 348	8.2	44.3	9.3
25-34	327 402	40.1	385 284	37.9	455 250	40.7	39.0	42.1
35-44	218 165	26.7	286 585	28.2	306 718	27.4	40.6	29.2
45-54	117 559	14.4	159 897	15.7	157 658	14.1	34.1	13.2
55+	88 934	10.9	112 838	11.1	107 595	9.6	21.0	6.1
Education								
Primary or less	57 118	7.0	62 978	6.2	59 503	5.3	4.2	0.8
Incomplete secondary	322 357	39.5	388 650	38.2	377 688	33.7	17.2	18.2
Matric	270 262	33.1	366 582	36.1	417 252	37.3	54.4	48.4
Tertiary	41 016	5.0	65 224	6.4	61 512	5.5	50.0	6.8
Special school certificate	119 711	14.7	128 214	12.6	117 626	10.5	-1.7	-0.7
Unspecified	5 613	0.7	5 024	0.5	85 988	7.7	1431.9	26.5

Authors’ own calculations. Source: UIF claims data provided by the Department of Employment and Labour.

Notes: Claims restricted to the working-aged (15 - 64 years).

Analysing variation in the amount of claims by claimants’ previous industries of employment provides insight into changes to the labour and skills demand in the country. As presented in Table 9, **most UIF claims stem from individuals previously working in personal services, trade, educational services, and agriculture**. Claims from these four industries represented over 61 percent of all claims in 2022, and accounted for 71 percent of the growth in all claims over the whole period. All of these industries have accounted for relatively large shares of claims in each year, apart from educational services. In 2018, just 2 percent of claimants previously worked in educational services, in contrast to 9 percent of claimants in 2022, alone accounting for 28 percent of the growth in all claims over the period. One possible explanation may be the introduction of the Presidential Employment Stimulus’s Basic

Education Employment Initiative – a core component of the government’s economic recovery policy which recruited thousands of young teaching assistants in public schools across the country. Unfortunately, the lack of occupational information in the data prohibits us from investigating this possibility further.

Table 9: Annual Unemployment Insurance Fund claimants, by previous industry, 2018 – 2022

	2018		2020		2022		Change (%)	Share of change (%)
	Level	Share (%)	Level	Share (%)	Level	Share (%)		
Total	816 077	100.0	1 016 672	100.0	1 119 569	100.0	37.2	100.0
<i>Primary</i>								
<i>Agriculture</i>	69 784	8.6	93 908	9.2	109 494	9.8	56.9	13.1
<i>Fishing</i>	1 271	0.2	1 763	0.2	1 337	0.1	5.2	0.0
<i>Wood Industry</i>	6 476	0.8	5 398	0.5	5 847	0.5	-9.7	-0.2
<i>Mining</i>	21 277	2.6	24 579	2.4	18 965	1.7	-10.9	-0.8
<i>Secondary</i>								
<i>Glass</i>	2 971	0.4	3 296	0.3	2 780	0.2	-6.4	-0.1
<i>Iron</i>	22 825	2.8	27 353	2.7	24 719	2.2	8.3	0.6
<i>Jewellers</i>	1 562	0.2	2 026	0.2	4 918	0.4	214.9	1.1
<i>Leather Industry</i>	1 072	0.1	1 446	0.1	1 018	0.1	-5.0	0.0
<i>Printing and paper</i>	4 518	0.6	6 398	0.6	4 397	0.4	-2.7	0.0
<i>Rubber</i>	6 712	0.8	7 414	0.7	6 924	0.6	3.2	0.1
<i>Textiles</i>	9 710	1.2	11 374	1.1	12 496	1.1	28.7	0.9
<i>Building</i>	68 524	8.4	68 800	6.8	61 080	5.5	-10.9	-2.5
<i>Tertiary</i>								
<i>Trade</i>	181 566	22.2	220 745	21.7	221 519	19.8	22.0	13.2
<i>Entertainment</i>	3 290	0.4	6 002	0.6	4 427	0.4	34.6	0.4
<i>Food</i>	31 672	3.9	41 157	4.0	50 147	4.5	58.3	6.1
<i>Professional Services</i>	39 231	4.8	47 484	4.7	62 824	5.6	60.1	7.8
<i>Personal Services</i>	204 123	25.0	255 525	25.1	256 011	22.9	25.4	17.1
<i>Educational Services</i>	15 928	2.0	31 502	3.1	99 868	8.9	527.0	27.7
<i>Air</i>	42 782	5.2	54 503	5.4	48 704	4.4	13.8	2.0
<i>Banking</i>	22 520	2.8	23 704	2.3	25 081	2.2	11.4	0.8
<i>Local Authorities</i>	24 501	3.0	31 365	3.1	48 244	4.3	96.9	7.8
<i>Medical Services</i>	12 094	1.5	13 467	1.3	15 571	1.4	28.7	1.1
<i>Charitable</i>	8 598	1.1	12 397	1.2	14 320	1.3	66.6	1.9
<i>Taxi Industry</i>	468	0.1	890	0.1	402	0.0	-14.1	0.0
<i>Private Household</i>	12 463	1.5	12 427	1.2	9 456	0.8	-24.1	-1.0
<i>Unspecified</i>	139	0.0	11 749	1.2	9 020	0.8	6389.2	2.9

Authors’ own calculations. Source: UIF claims data provided by the Department of Employment and Labour.

Notes: Claims restricted to the working-aged (15 - 64 years). Industry categories are per the UIF database.

As shown in Table 10, **most UIF claims are due to temporary contract expirations and dismissals.** These two termination reasons account for about three in every four claims per year, a share which has remained relatively constant and accounts for nearly 80 percent of the growth in total claims over the period. Other termination reasons including parental leave, illness, and retirement represent a relatively small share of claims. Notably, claims for reduced working time is again highlighted here, with zero such claims in 2018 but 24 000 in 2020 and nearly doubling to 42 000 in 2022, alone accounting for 14 percent in the growth in all claims over the period.

Table 10: Annual Unemployment Insurance Fund claimants, by termination reason and turnaround time, 2018 – 2022

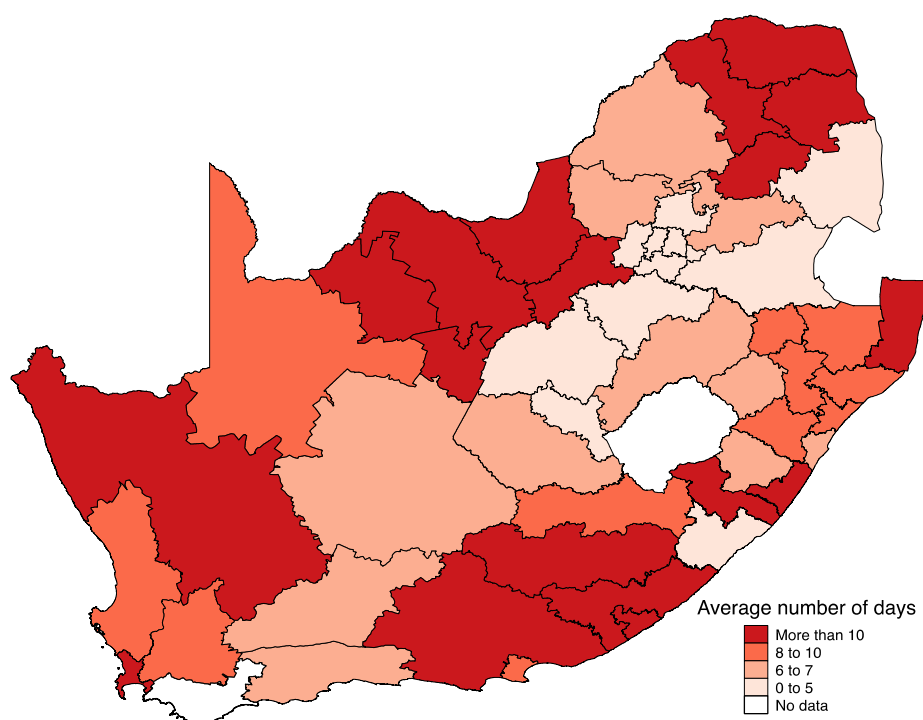
	2018		2020		2022		Change (%)	Share of change (%)
	Level	Share (%)	Level	Share (%)	Level	Share (%)		
Total	816 077	100.0	1 016 672	100.0	1 119 569	100.0	37.2	100.0
Termination reason								
<i>Contract expired</i>	332 610	40.8	418 815	41.2	572 680	51.2	72.2	79.1
<i>Dismissed</i>	277 503	34.0	340 450	33.5	277 062	24.7	-0.2	-0.1
<i>Parental leave</i>	117 871	14.4	95 637	9.4	104 682	9.4	-11.2	-4.3
<i>Illness/deceased</i>	32 061	3.9	26 069	2.6	28 830	2.6	-10.1	-1.1
<i>Resigned/retired</i>	35 221	4.3	64 153	6.3	59 100	5.3	67.8	7.9
<i>Reduced working time</i>	0	0.0	23 862	2.3	42 337	3.8	.	13.9
<i>Other</i>	20 811	2.6	47 686	4.7	34 878	3.1	67.6	4.6
Turnaround time								
<i>Same day</i>	241 289	29.6	397 524	39.1	394 506	35.2	63.5	50.5
<i>1-3 days</i>	352 928	43.2	292 451	28.8	261 361	23.3	-25.9	-30.2
<i>4-7 days</i>	101 358	12.4	108 723	10.7	172 118	15.4	69.8	23.3
<i>More than 7 days</i>	120 502	14.8	217 974	21.4	291 584	26.0	142.0	56.4

Authors' own calculations. Source: UIF claims data provided by the Department of Employment and Labour.

Notes: Claims restricted to the working-aged (15 - 64 years).

The amount of time it takes for claims to be processed serves as one indicator of labour centre efficiency. On average and over the whole period, it takes 7 days to process a UIF claim, and **most claims are processed within 3 days**, as shown in the bottom panel in Table 10. **This performance has, however, decreased in recent years**, from 5 days prior to the pandemic (when 73 percent of claims were processed within 3 days) to 9.5 days in 2020 and 8 days in 2022 (when 59 percent of claims were processed within 3 days). Moreover, **there is a substantial amount of variation in turnaround time across benefit types**. While ordinary unemployment, reduced time, maternity, and illness benefits take between 4 and 8 days to process on average, death/dependent benefits take 13 days and adoption benefits nearly 31 days – nearly double and over quadruple the average time. Another source of variation exists across labour centres. In Figure 17, we plot average claim turnaround times in 2022 by district municipality by cross-referencing each labour centre in the data to their respective municipality. At the provincial level, Limpopo, the Northern Cape, and the North West have the highest average turnaround times of 12.5, 11.4, and 10.8 days, respectively. The shortest average turnaround times, equivalent to about 1.5 days, are in Gauteng. The centres in the towns of King Williams Town, Polokwane, Butterworth, Jane Furse, Calvinia, and Fort Beaufort exhibit average turnaround times in excess of 20 days.

Figure 17: Unemployment Insurance Fund claims turnaround time, 2022, by district municipality



Authors' own calculations. Source: 2022 UIF claims data provided by the Department of Employment and Labour. Notes: Claims restricted to the working-aged (15 - 64 years). No claims were made in the Overberg district in the Western Cape in 2022.

We now continue to profile the composition of the social security within both social assistance and insurance across various individual characteristics, conditional on non-employment between 2010 and 2022, using the household survey data. It should be noted that the non-employed working age population make up 61.4 percent of the total working age population (24.7 million). As shown in Table 11, we find that social assistance coverage for men and women were relatively equal in 2022, with men accounting for 48.6 percent of beneficiaries while women accounted for 51.4 percent. When we disaggregate coverage by racial composition, we uncover significant disparities. In 2022, Africans comprised the overwhelming majority of social assistance recipients: 91.5 percent. Approximately four in ten Africans are covered for social assistance, that is, the corresponding ratio is 0.396. Conversely, one in ten Whites are covered for social assistance, with a ratio of 0.115.

In terms of age, the youngest age cohort accounts for the highest social assistance coverage (52.3 percent) among the non-employed working age population, followed by the oldest cohort (15.3 percent). This can be explained by the fact that the youngest age cohort comprises children and young adults, who are the primary beneficiaries of the CSG grant. Conversely, the oldest age group comprises pensioners who predominantly benefit from the OAP grant. Prior the pandemic, social assistance coverage was limited for those between the ages of 25 and 54. This group was only eligible for the DG and public works programme participation. We observe a sharp increase in coverage for those aged 25-55 years old after the onset of the pandemic with the introduction of the SRD grant. Specifically, social assistance coverage increased by 14.3 percent, 10.1 percent and 5.4 percent for those aged 25-34, 35-45 and 45-55 years, respectively.

More than eight in ten employed individuals covered for social assistance had less than a complete secondary education (82.1 percent). In 2022, more than three-fifths of the non-employed working age population receiving social assistance had an incomplete secondary education (62.7 percent), while nearly one-fifth had primary or less education (19.4 percent). In stark contrast, together, those with diploma or degree constituted less than 2 percent of social assistance recipients for the non-employed working age population. The corresponding ratio point out a significant proportion of the non-employed working age population covered increased from 0.361 in 2010 to 0.542 in 2022 for those with primary or less education. We also observe a sharp increase in the social assistance coverage for those with complete secondary education and diploma for the non-employed working age population. Social assistance coverage increased rapidly by 19.2 percent and 16.2 percent for those with complete secondary and diplomas, respectively.

In terms of provinces, KwaZulu-Natal and Gauteng stand out as the provinces with relatively high social assistance recipients for the non-employed working age population. In 2022, the share of social assistance coverage in KwaZulu-Natal and Gauteng were the highest, accounting for 21.1 percent and 19.1 percent, respectively. In contrast, the lowest share of social assistance coverage were the Northern Cape (2.1 percent), the Western Cape (7.1 percent) and North West (8.1 percent). Social assistance recipients in the Gauteng, North West and Mpumalanga increased rapidly at an annual average of 9.5, 7.9 and 7.7 percent, respectively.

Table 11: Social assistance and insurance coverage among the non-employed working-age population by demographic characteristic, 2010-2022

	Social Assistance					Social Insurance: Mandatory					Social Insurance: Voluntary				
	Share of beneficiaries (%)		Share of WAP (%)		AAGR (%)	Share of beneficiaries (%)		Share of WAP (%)		AAGR (%)	Share of beneficiaries (%)		Share of WAP (%)		AAGR (%)
	2010	2022	2010	2022		2010	2022	2010	2022		2010	2022	2010	2022	
Total (000s)	4 469	8 629	0.237	0.374	5.6	74	230	0.004	0.009	10	1 852	1 797	0.098	0.078	-0.3
Gender															
Male	47.2	48.6	0.263	0.414	5.9	71.7	57.3	0.006	0.012	7.9	38.6	38.5	0.089	0.068	-0.3
Female	52.8	51.4	0.218	0.342	5.4	28.3	42.7	0.002	0.007	13.8	61.4	61.5	0.105	0.085	-0.2
Race															
African	89.1	91.5	0.249	0.396	5.9	68.5	84.2	0.003	0.009	11.9	51.9	51.1	0.06	0.046	-0.4
Coloured	7.8	6.6	0.23	0.309	4.2	16.1	10.3	0.008	0.012	6	10.7	9.8	0.131	0.095	-1
Indian/Asian	1.4	0.8	0.161	0.159	0.1	1.7	1.3	0.003	0.006	7.4	6.9	8.8	0.321	0.388	1.8
White	1.7	1.2	0.082	0.115	2.3	13.7	4.2	0.009	0.009	-0.2	30.5	30.3	0.612	0.625	-0.3
Age (years)															
15-24	60	52.3	0.304	0.512	4.4	3.7	10.3	0	0.003	19.8	55.7	51.7	0.117	0.105	-0.9
25-34	5.7	14.6	0.062	0.218	14.3	22.8	26	0.004	0.01	11.2	12.3	11.9	0.056	0.037	-0.5
35-44	6.3	10.4	0.127	0.237	10.1	25.1	26.3	0.007	0.016	10.4	8.1	10.3	0.068	0.049	1.7
45-54	7.5	7.3	0.179	0.285	5.4	26.2	23	0.01	0.019	8.8	9.9	8.5	0.097	0.069	-1.5
55-64	20.5	15.3	0.502	0.538	3.1	22.2	14.3	0.009	0.012	6	14	17.6	0.142	0.129	1.7
Education															
Primary or less	38.1	19.4	0.361	0.542	-0.1	21.7	12.1	0.005	0.008	4.8	8.3	3.2	0.033	0.019	-7.9
Incomplete secondary	55.7	62.7	0.259	0.476	6.7	42.7	41.8	0.004	0.008	9.8	45.6	37.1	0.088	0.059	-1.9
Complete secondary	3.4	14.4	0.04	0.182	19.2	28.2	34.1	0.003	0.01	11.8	34.3	38.6	0.171	0.101	0.7
Diploma	0.5	1.6	0.052	0.132	16.2	5.4	7.7	0.008	0.021	13.4	6.2	10.8	0.266	0.189	4.5
Degree	0.2	0.2	0.071	0.043	4	1.7	3.7	0.003	0.013	17.3	4.6	9.3	0.548	0.405	5.8
Province															
Western Cape	8.1	7.1	0.207	0.265	4.5	12.1	14.2	0.005	0.013	11.5	14.2	18.2	0.15	0.141	1.8
Eastern Cape	15.6	13.1	0.272	0.434	4.1	2.9	9	0.001	0.007	20.9	7.8	6	0.056	0.042	-2.4
Northern Cape	3.3	2.1	0.338	0.377	1.5	0.7	2.7	0.001	0.012	23.1	1.8	1.9	0.077	0.074	0.2
Free State	6	6.1	0.254	0.447	5.9	3.2	3.2	0.002	0.007	10.1	6	4.4	0.107	0.067	-2.8
KwaZulu-Natal	22.8	21.1	0.245	0.388	4.9	5.1	12.7	0.001	0.006	18.7	21.3	13.7	0.095	0.053	-3.8
Northwest	6.3	8.1	0.219	0.414	7.9	1.9	4	0.001	0.005	17.1	5.3	5.7	0.077	0.06	0.3
Gauteng	12.5	19.1	0.145	0.28	9.5	23.8	31.6	0.004	0.012	12.6	29.7	39.5	0.143	0.12	2.2
Mpumalanga	8	10.2	0.247	0.469	7.7	3.9	8.4	0.002	0.01	17.4	7	4.7	0.09	0.045	-3.6
Limpopo	17.4	13	0.337	0.481	3.1	1	14.1	0	0.012	37.3	6.7	5.7	0.054	0.044	-1.5

Authors' own calculations. Source: GHS 2010 – 2022; QLFS 2010Q1 – 2022Q4.

Notes: Sample restricted to the non-employed working-aged (15 - 64 years). All estimates weighted using sampling weights and account for the complex survey design. WAP = working-age population. AAGR = average annual growth rate.

Table 12 examines coverage of the individual social assistance programmes among the non-employed working-age population in 2022. We observe that, on average, coverage for men and women was almost evenly distributed across all social assistance components except for the WVG, OAP grant, and public works programme participation. Women account for the largest share of beneficiaries for the WVG (76.9 percent), participants of public works programmes (64.0 percent), and OAP grant recipients (61.3 percent). With respect to population group, coverage for Africans dominate all components, except for the WVG where Coloured individuals account for the largest share.

As expected, coverage of components – the CDG, CSG, FCG, and school feeding schemes - targeted to children is high among younger cohorts. Conversely, the OAP grant covers only the oldest cohort. We also observe that coverage for the DG, SRD grant, and participation in public works programmes is disproportionately distributed, as these programmes cover a significant portion of the prime-aged non-employed population. As observed prior, individuals with lower levels of education are more likely to be recipients of social assistance. At least 7 in 10 beneficiaries have education levels of an incomplete secondary level or less for all components except for the SRD grant. Meanwhile, this group accounts for 62.7 percent of recipients of the SRD grant. This pattern again highlights the link between lower levels of educational attainment and reliance on social assistance programs.

At the provincial level, the distribution of beneficiaries again varies significantly. KwaZulu-Natal accounted for most beneficiaries of the CDG, CSG, DG, school feeding schemes, and public works program participation. On the other hand, Gauteng has the highest number of beneficiaries of the OAP, SRD grant, and WVG. Meanwhile, the Eastern Cape stands out as having the highest number of working-age non-employed beneficiaries for the FCG.

Finally, we turn to examining key components of social insurance among the non-employed working age population in 2022, as shown in Table 13. Coverage of health insurance is greater among this subgroup relative to UIF receipt. In 2022, there were eight times as many non-employed individuals with access to health insurance (1.8 million) compared to UIF recipients (230 000). Approximately three-fifths of men had access to UIF benefits, accounting for 57.3 percent of UIF recipients, while women predominantly had access to health insurance (61.5 percent). When we consider racial population groups, African non-employed individuals dominate in access to all social insurance components; however, White and Indian/Asian non-employed individuals disproportionately benefit from all social insurance components, including UIF benefits and health insurance.

By age, the prime age group (25-55 years) accounts for the highest share of UIF recipients (75.3 percent). Conversely, the youngest cohort accounts for the highest share of health insurance recipients (51.1 percent). Regarding education attainment, those with incomplete secondary education accounted for the highest share of UIF recipients (41.8 percent), followed by those with complete secondary education (34.1 percent). Conversely, those with complete secondary education accounted for the highest share of health insurance members (38.6 percent), followed by those with incomplete secondary education (37.1 percent). At the provincial level, Gauteng accounts for the highest share beneficiaries of all social insurance components, while the Northern Cape accounts for the lowest share.

Table 12: Social assistance coverage among the non-employed working-age population, by component and demographic characteristic, 2022

	Working-age population	Care Dependency Grant	Child Support Grant	Social grant type					SRD grant	War Veteran's Grant	School feeding scheme	Public works program
				Disability Grant	Foster Care Grant	Old Age Pension grant						
Total (000's)	23 077 005	22 662	2 026 091	844 809	60 897	1 034 031	3 089 450	2 501	3 513 441	143 453		
Gender												
Male	43.9	57.7	49.2	58.3	50.7	38.7	45.8	23.1	51.9	36		
Female	56.1	42.3	50.8	41.7	49.3	61.3	54.2	76.9	48.1	64		
Race												
African	86.5	70.2	93.1	77.9	89.6	82.2	96.5	23.1	94.6	94.2		
Coloured	8.0	29.8	6.2	17.8	10.4	11.4	3.1	76.9	4.3	2.9		
Indian/Asian	1.8	0	0.3	2	0	2.9	0.2	0	0.3	0.3		
White	3.8	0	0.5	2.3	0	3.5	0.2	0	0.9	2.6		
Age (years)												
15-24	38.2	100	100	8.1	100	0	26.1	0	99.2	20.4		
25-34	25.1	0	0	18.7	0	0	35	23.1	0.8	29.1		
35-44	16.4	0	0	26.3	0	0	21.9	0	0	29.7		
45-54	9.6	0	0	27.6	0	0	12.9	0	0	12.5		
55-64	10.7	0	0	19.3	0	100	4.1	76.9	0	8.3		
Education												
Primary or less	13.4	50.8	18.9	38.7	21.8	49.5	11.3	0	11.6	14.4		
Incomplete secondary	49.2	26.7	80.5	38	73.8	33.1	51.4	100	88.4	58.2		
Complete secondary	29.7	0	0.2	13	0	12.5	32.4	0	0	21.5		
Diploma	4.5	0	0	1.5	0	1.5	3.5	0	0	4.4		
Degree	1.8	0	0	0.5	0	0.1	0.4	0	0	0.5		
Province												
Western Cape	10.1	29.2	7.9	15	10.5	10.7	2.5	0	6.7	4.6		
Eastern Cape	11.3	12.2	13.4	15	24.9	14	12	23.1	13.3	13.2		
Northern Cape	2.0	3.4	2.3	4.6	2.7	2.1	1.3	0	2.1	1.5		
Free State	5.1	5	5.1	7.2	4.5	6	7.4	0	5.2	16.1		
KwaZulu-Natal	20.3	29.8	23.4	19.6	11	18.7	19.5	0	23.3	20.6		
Northwest	7.4	8.1	8	8.5	4.4	9	8.3	0	7.7	6.3		
Gauteng	25.6	6	17.1	12.2	22.5	22.7	21.2	76.9	17.3	20.6		
Mpumalanga	8.1	2.1	9.8	8.9	7.6	7.1	12.5	0	10	5.1		
Limpopo	10.1	4.3	13	8.9	12	9.7	15.3	0	14.4	12		

Authors' own calculations. Source: GHS 2022.

Notes: Sample restricted to the non-employed working-aged (15 - 64 years). All estimates weighted using sampling weights and account for the complex survey design.

Table 13: Social insurance coverage among the non-employed working-age population, by component and demographic characteristic, 2022

	UIF receipt		Health insurance	
	Level	Share of WAP	Level	Share of WAP
Gender				
<i>Male</i>	57.3	0.012	38.5	0.068
<i>Female</i>	42.7	0.007	61.5	0.085
Race				
<i>African</i>	84.2	0.009	51.1	0.046
<i>Coloured</i>	10.3	0.012	9.8	0.095
<i>Indian/Asian</i>	1.3	0.006	8.8	0.388
<i>White</i>	4.2	0.009	30.3	0.625
Age (years)				
15-24	10.3	0.003	51.7	0.105
25-34	26	0.010	11.9	0.037
35-44	26.3	0.016	10.3	0.049
45-54	23	0.019	8.5	0.069
55-64	14.3	0.012	17.6	0.129
Education				
<i>Primary or less</i>	12.1	0.008	3.2	0.019
<i>Incomplete secondary</i>	41.8	0.008	37.1	0.059
<i>Complete secondary</i>	34.1	0.010	38.6	0.101
<i>Diploma</i>	7.7	0.021	10.8	0.189
<i>Degree</i>	3.7	0.013	9.3	0.405
Province				
<i>Western Cape</i>	14.2	0.013	18.2	0.141
<i>Eastern Cape</i>	9	0.007	6	0.042
<i>Northern Cape</i>	2.7	0.012	1.9	0.074
<i>Free State</i>	3.2	0.007	4.4	0.067
<i>KwaZulu-Natal</i>	12.7	0.006	13.7	0.053
<i>Northwest</i>	4	0.005	5.7	0.06
<i>Gauteng</i>	31.6	0.012	39.5	0.12
<i>Mpumalanga</i>	8.4	0.010	4.7	0.045
<i>Limpopo</i>	14.1	0.012	5.7	0.044

Authors' own calculations. Source: GHS 2010 – 2022; QLFS 2010Q1 – 2022Q4.

Notes: Sample restricted to the non-employed working-aged (15 - 64 years). All estimates weighted using sampling weights and account for the complex survey design. WAP = working-age population.

4.5. Econometric model results

In this section we present the results from the multivariate linear regression models described in Section 3.4. Recall these estimates aim to provide an understanding of the demographic and socioeconomic determinants of social security coverage, or in other words, uncover which individuals are more likely to be covered by any type of social security and how these predictors vary across different types of social security policies.

Table 14 presents the estimates which specifically examine the predictors of social assistance coverage. Column (1) presents the estimates with respect to receipt of any component of social assistance, while columns (2) to (4) speak to those of specific components. The results reveal substantial heterogeneity in access to social assistance within the working-age population. Overall, **those who are least likely to be receiving social assistance include women, Western Cape and Gauteng residents, those with higher levels of education, the employed, and generally those in poorer households.** We do not find any meaningful relationship between age and social assistance receipt, apart from the NSNP where, as expected, younger individuals are more likely to benefit. Women are two percentage points less likely to receive any form of social assistance relative to their observably-comparable male counterparts on average. This holds for both social grant and NSNP receipt, but not however for public works programmes where women are 1 percentage point *more likely* than men to participate, all else equal. Regarding racial population group, African/Black individuals are most likely to report receipt relative to all other groups for all forms of social assistance, apart from social grants for which African/Black and Indian/Asian individuals are just as likely as one another to report receipt and Coloured individuals are most likely to report receipt. By province, with the exception of public works program participation, residents of the Western Cape and Gauteng are least likely to be receiving any form of social assistance, with coverage highest in Limpopo, Northern Cape, and Eastern Cape. On the other hand, residents of most provinces exhibit similar probabilities of participating in public works programmes, with the exception of the Northern Cape whose residents are marginally more likely.

Our findings with respect to **the relationship between socioeconomic status and social assistance coverage are mixed.** With respect to education, we estimate clear, negative gradients for most forms of social assistance. In other words, individuals with higher levels of education – particularly those with at least a matric qualification or equivalent – are less likely on average than their lower-educated counterparts to report receipt of either social grants or the NSNP. Public works program participation serves as the exception, where individuals of all education levels exhibit similar conditional probabilities of participation. Similarly, regarding employment status, the employed are less likely to report receipt of either social grants or the NSNP. This suggests that **the demand for social assistance may reduce once one is able to overcome the constraints to successfully gaining employment and income within the labour market.** We do not, however, find such a negative relationship between employment status and public works program participation. That is, those employed at the time of the survey interview were two percentage points more likely than the non-employed to have participated in a public works program in the past six months. This may reflect the involvement of these individuals at the time of the survey interview, or another form of employment following the public works program. If the latter holds, this may suggest that public works programmes do indeed improve future labour market prospects of participants, however a much more rigorous analysis is required to arrive at such a conclusion confidently. Finally, the coefficients on the household SES index covariate across

the models is indicative of regressivity: those in lower SES households are less likely to report social assistance receipt. This holds for both social grant and NSNP receipt, but again not for public works programme participation: On average, individuals in lower SES households are *more* likely to participate in for public works programmes.

Table 14: Model estimates of the predictors of social assistance receipt, by component

	(1) Any social assistance	(2) Social grant	(3) Public works programme	(4) School feeding scheme
Age (years)	-0.003*** (0.000)	0.001*** (0.000)	0.000*** (0.000)	-0.008*** (0.000)
Female	-0.019*** (0.001)	-0.014*** (0.001)	0.010*** (0.001)	-0.016*** (0.001)
Race (base = African/Black)				
Coloured	-0.007** (0.003)	0.014*** (0.003)	-0.001 (0.002)	-0.030*** (0.002)
Indian/Asian	-0.027*** (0.004)	-0.002 (0.004)	-0.010*** (0.002)	-0.023*** (0.003)
White	-0.011*** (0.003)	-0.005** (0.002)	-0.011*** (0.001)	0.016*** (0.002)
Province (base = Western Cape)				
Eastern Cape	0.056*** (0.004)	0.028*** (0.003)	0.012*** (0.002)	0.041*** (0.003)
Northern Cape	0.060*** (0.005)	0.033*** (0.004)	0.022*** (0.004)	0.027*** (0.003)
Free State	0.040*** (0.005)	0.025*** (0.004)	0.011*** (0.003)	0.019*** (0.003)
KwaZulu-Natal	0.040*** (0.004)	0.022*** (0.003)	0.006*** (0.002)	0.029*** (0.003)
North West	0.025*** (0.005)	0.015*** (0.003)	0.007*** (0.002)	0.015*** (0.003)
Gauteng	-0.009*** (0.003)	-0.010*** (0.002)	0.005*** (0.002)	-0.005** (0.002)
Mpumalanga	0.042*** (0.004)	0.018*** (0.003)	0.005*** (0.002)	0.037*** (0.003)
Limpopo	0.073*** (0.004)	0.023*** (0.003)	0.005*** (0.002)	0.073*** (0.003)
Education (base = Primary or less)				
Secondary incomplete	-0.079*** (0.003)	-0.119*** (0.003)	0.000 (0.001)	0.005*** (0.002)
Secondary complete	-0.250*** (0.003)	-0.199*** (0.003)	-0.002 (0.001)	-0.145*** (0.002)
Post-secondary	-0.208*** (0.003)	-0.179*** (0.003)	-0.003* (0.001)	-0.096*** (0.002)
Employed	-0.185*** (0.002)	-0.153*** (0.001)	0.019*** (0.001)	-0.076*** (0.001)
Household SES index (log scale)	0.020*** (0.002)	0.004*** (0.001)	-0.006*** (0.001)	0.027*** (0.001)
Year fixed effects	Y	Y	Y	Y
Constant	0.413*** (0.005)	0.245*** (0.004)	-0.004* (0.002)	0.410*** (0.004)
R ²	0.181	0.141	0.008	0.262
Observations	439 131	439 130	340 154	439 131

Authors' own calculations. Source: GHS 2012 – 2022.

Notes: Sample restricted to the working-aged (15 - 64 years). All estimates weighted using sampling weights and account for the complex survey design. Standard errors presented in parentheses. * $p < 0.10$, ** $p < 0.50$, *** $p < 0.01$.

Table 15 presents the estimates which specifically examine the predictors of social insurance coverage. Column (1) presents the estimates with respect to receipt of any component of social insurance, while columns (2) to (4) consider the specific components among the employed and columns (5) and (6) the specific components among the non-employed.⁴² The results again reveal substantial heterogeneity in access to social insurance within the working-age population, both overall and by employment status. Overall, **those who are least likely to be receiving social insurance include women, African/Black individuals, those with lower levels of education, and the non-employed.** Similar to the case for social assistance, we again do not find any meaningful relationship between age and social insurance coverage. On average, women are 1.2 percentage points less likely to be covered by any form of social insurance relative to their observably-comparable male counterparts. The strength of this association varies considerably across social insurance components, ranging from 8 percentage points for UIF registration and retirement fund contribution among the employed to 1 percentage point for UIF receipt among the non-employed. In contrast, despite not having direct access to labour market income, non-employed women are *more* likely to be covered by private health insurance relative to non-employed men on average. This may reflect the fact that, globally and in South Africa, men are more likely to engage in high-risk behaviours and have low utilization rates of health services (Pinkhasov et al., 2010).

Importantly, we find that **higher socioeconomic status is associated with social insurance coverage.** With respect to education, we estimate clear, negative gradients for all forms of social insurance. However, the slopes or ‘strengths’ of these gradients vary across social insurance components. For instance, conditional on employment, those with a post-secondary qualification are 59 percentage points more likely to be registered with the UIF relative to those with a primary education level or less. Conditional on non-employment, those with a post-secondary qualification are just 1 percentage point more likely to be receiving UIF benefits relative to those with a primary education level or less. African/Black individuals are, on average, less likely to be covered by social insurance for most components relative to other race groups. Finally and importantly, our estimates here again reflect **the strong linkages between employment and access to social insurance coverage within the working-age population** in South Africa. As shown in column (1), being employed is associated with a staggering 57 percentage point higher likelihood of social insurance coverage. This is consistent with our analysis in the preceding sections, but affirms that **differences in social insurance coverage between the employed and non-employed are not due to differences in composition such as age, sex, race, or levels of education, but instead is due to access to employment.**

⁴² Recall that, as discussed in Section 3, we can only produce estimate for specific social insurance components by employment status as the individual components have to be sourced from different datasets.

Table 15: Model estimates of the predictors of social insurance receipt, by component

	(1)	(2)	(3)		(4)	(5)		(6)
	Any social insurance	UIF registration	Retirement fund	Health insurance	Health insurance	UIF receipt	Health insurance	
Age (years)	0.001*** (0.000)	-0.000 (0.000)	0.010*** (0.000)	0.009*** (0.000)	0.009*** (0.000)	0.000*** (0.000)	-0.001*** (0.000)	
Female	-0.012*** (0.001)	-0.082*** (0.002)	-0.084*** (0.002)	-0.046*** (0.002)	-0.046*** (0.002)	-0.006*** (0.000)	0.014*** (0.001)	
Race (base = African/Black)								
Coloured	0.069*** (0.003)	0.118*** (0.006)	0.067*** (0.007)	0.108*** (0.006)	0.108*** (0.006)	0.000 (0.001)	0.022*** (0.005)	
Indian/Asian	0.025*** (0.005)	0.162*** (0.010)	0.086*** (0.012)	0.093*** (0.010)	0.093*** (0.010)	-0.003*** (0.001)	0.204*** (0.017)	
White	0.020*** (0.003)	0.180*** (0.005)	0.063*** (0.006)	0.118*** (0.006)	0.118*** (0.006)	-0.000 (0.001)	0.438*** (0.011)	
Province (base = Western Cape)								
Eastern Cape	-0.044*** (0.003)	-0.204*** (0.008)	-0.090*** (0.009)	0.041*** (0.007)	0.041*** (0.007)	-0.005*** (0.001)	0.023*** (0.005)	
Northern Cape	-0.019*** (0.004)	-0.150*** (0.012)	-0.072*** (0.012)	0.054*** (0.010)	0.054*** (0.010)	-0.002* (0.001)	0.008 (0.006)	
Free State	-0.038*** (0.004)	-0.180*** (0.009)	-0.048*** (0.011)	0.065*** (0.008)	0.065*** (0.008)	-0.003*** (0.001)	0.024*** (0.006)	
KwaZulu-Natal	-0.040*** (0.003)	-0.152*** (0.007)	-0.054*** (0.009)	0.014** (0.006)	0.014** (0.006)	-0.005*** (0.001)	0.019*** (0.005)	
North West	-0.019*** (0.004)	-0.115*** (0.010)	0.047*** (0.011)	0.154*** (0.009)	0.154*** (0.009)	-0.005*** (0.001)	0.019*** (0.006)	
Gauteng	-0.027*** (0.003)	-0.043*** (0.006)	-0.001 (0.008)	0.046*** (0.006)	0.046*** (0.006)	0.000 (0.001)	0.022*** (0.006)	
Mpumalanga	-0.042*** (0.004)	-0.115*** (0.009)	-0.037*** (0.010)	0.066*** (0.008)	0.066*** (0.008)	-0.003*** (0.001)	0.008 (0.006)	
Limpopo	-0.068*** (0.004)	-0.229*** (0.010)	-0.051*** (0.012)	0.044*** (0.009)	0.044*** (0.009)	-0.005*** (0.001)	0.014*** (0.005)	
Education (base = Primary or less)								
Secondary incomplete	0.053*** (0.001)	0.088*** (0.004)	0.191*** (0.004)	0.139*** (0.003)	0.139*** (0.003)	0.004*** (0.000)	-0.002 (0.002)	
Secondary complete	0.118*** (0.002)	0.186*** (0.005)	0.370*** (0.004)	0.281*** (0.003)	0.281*** (0.003)	0.006*** (0.000)	0.007*** (0.002)	
Post-secondary	0.209*** (0.003)	0.059*** (0.006)	0.585*** (0.005)	0.617*** (0.004)	0.617*** (0.004)	0.010*** (0.001)	0.089*** (0.005)	
Employed	0.574*** (0.002)							
Household SES index (log scale)							0.153*** (0.003)	
Year fixed effects	Y	Y	Y	Y	Y	Y	Y	Y
Constant	-0.050*** (0.004)	0.546*** (0.010)	-0.156*** (0.011)	-0.286*** (0.008)	-0.286*** (0.008)	-0.005*** (0.001)	-0.106*** (0.006)	
R2	0.500	0.085	0.176	0.229	0.229	0.008	0.276	
Observations	2 305 046	773 213	773 213	773 213	773 213	1 394 482	504 064	

Authors' own calculations. Source: QLFS 2010Q1 – 2022Q4; GHS 2012 – 2022.

Notes: Sample restricted to the working-aged (15 - 64 years). All estimates weighted using sampling weights and account for the complex survey design. Standard errors presented in parentheses. Sample in model (1) excludes health insurance receipt among the non-employed due to data availability. * $p < 0.10$, ** $p < 0.50$, *** $p < 0.01$.

5. Discussion and policy suggestions

By making use of nationally representative, sample-based household survey data as well as individual-level administrative data on UIF claims, this report has sought to provide a quantitative account of trends in social security coverage among the working-age population in South Africa between 2010

and 2022, both on aggregate and between several subgroups of individuals. With the primary aim of aiding our understanding of the existence and magnitudes of coverage gaps, with respect to both social assistance and social insurance broadly as well as the policies within each component, the analysis set out to inform how policy might intervene to better target social security to least covered groups. While several results stand out, in this section we discuss our primary findings and their policy implications.

First, **coverage of social assistance among the working-age population in South Africa has improved but remains low**. While the roll-out of the SRD grant improved coverage notably since the onset of the COVID-19 pandemic, with a coverage rate of 23 percent as of 2022, the majority of the working-age population are not covered. Social grants represent the dominant form of assistance. Women, those with higher education levels, the employed, and those in lower socioeconomic status households are least likely to be covered. Concerningly, even among the non-employed coverage is higher but remains low. Given the structural nature of unemployment in the country, **policymakers ought to consider measures which target cash or in-kind support to individuals of working-age who are unable to support themselves through the labour market, while simultaneously addressing factors which enable better labour market outcomes**. The robust, inverse relationship between social assistance receipt and employment observed suggests that the demand for social assistance reduces once these constraints are overcome. While a thorough analysis of policy options is out of this report's scope, such an analysis ought to explicitly consider design features such as coverage, targeting, program duration, and fiscal sustainability to name a few.

Second, while lower social assistance coverage rates among the employed suggest that many individuals who do access labour market income are not in need of assistance, the extent of **working poverty implies that a non-negligible share of the employed are also in need of social assistance**. Simply put, employment is not a panacea. Despite having access to work, many of the employed earn an inadequate income to meet their needs. This is reflected in high rates of working poverty defined as the share of workers who live in impoverished households, most recently estimated at over 25 percent. These individuals largely work in low-wage occupations and in the informal sector. As such, policymakers ought to consider optimal ways to effectively and efficiently target additional forms of support to low-wage workers in vulnerable occupations. Again, policy design features ought to be explicitly and carefully considered.

Third, **coverage of social insurance among the working-age population in South Africa is low and has fallen in recent years**. While coverage has grown in levels, it has not kept up with population growth and hence the coverage rate has fallen to just 24 percent as of 2022. Coverage is lowest among women and those with lower levels of education, but notably, coverage is very low among the non-employed but high among the employed with most but not all workers (61 percent) covered. Social insurance coverage indeed appears 'earned' through formal sector employment, with nearly *all* covered workers working in the formal sector, while conversely just 10 percent of informal sector workers are covered. Moreover, most of the unemployed cannot access social insurance given that (i) mandatory components require formal employment and voluntary components require adequate income, (ii) nearly half of the unemployed are first-time jobseekers and most have been unemployed for at least one year and hence cannot access UIF benefits. As such, **policymakers ought to consider ways to improve social insurance particularly among the working-aged who cannot access formal sector jobs** – namely; the unemployed and informal sector workers.

Fourth, while most are processed within a few days, **the performance of labour centres in the processing of UIF claims has reduced in recent years.** The anonymised, individual-level UIF data highlights that it took 5 days to process the average claim prior to the pandemic, which nearly doubled to 9.5 days during 2020 and 8 days during 2022. There is a substantial amount of geographic variation, but notably, labour centres in the towns of King Williams Town, Polokwane, Butterworth, Jane Furse, Calvinia, and Fort Beaufort exhibit the longest average processing times all in excess of 20 days. Additionally, compared to other benefits, processing times are significantly longer for adoption and death/dependent benefits. To ensure the newly unemployed and their dependents are quickly provided with income support, **policymakers are encouraged to investigate the underlying reasons behind the long processing times in select labour centres in the country.**

Fifth, the analysis here has had to rely primarily on two separate nationally representative, sample-based household surveys to track social security coverage over time. As discussed in Section 3, this is due to the fact that in South Africa, there is no single nationally representative survey which regularly contains items on all components of both social assistance and insurance. The consequence is that the evolution of social security coverage cannot be easily analysed and analyses pertaining to specific components are limited. As such, **the survey instrument of an existing household survey should be adapted to include a regular, comprehensive social security module.** Such a revision is not required to be extensive nor be included in every round of the survey. Two options are as follows. First, adjust the QLFS, which already includes several social security items, by simply not restricting items by employment status, making items pertaining to public works participation regularly included and publicly available, and including three additional items regarding claims from the Compensation Fund, claims from the RAF, and school feeding schemes. Alternatively, and perhaps more simply, adjust the GHS which already includes items pertaining to all forms of social assistance to include additional items regarding forms of social insurance. Such simple adjustments will go a long way in ensuring that interested parties can keep stock of the level and nature of social security coverage over time.

Sixth and lastly, the availability of the individual-level, administrative UIF data provided valuable insights into shifts in labour demand and the performance of labour centres across the country, both of which cannot be similarly analysed in alternative datasets. While certain changes can be made to make the dataset more user-friendly to researchers, such as making industry codes consistent with the Standard Industrial Classification (SIC) system and making occupation data available, it holds significant potential to provide many more insights on labour market dynamics not covered in this report. **Policymakers are thus encouraged to improve the accessibility of individual-level administrative data to aid future research and evidence-based policymaking.**

6. Conclusion

Comprehensive and well-designed social security systems are integral to ensuring that populations are adequately covered against various sources of adverse risk and volatility. This is particularly relevant in the context of South Africa, a country characterised by widespread poverty, unemployment, and extreme inequalities. While the country's contemporary social security system is relatively comprehensive and serves one of the most important policy successes in the post-apartheid period, social security remains inaccessible for a large share of the working-age population. By making use of descriptive and micro-econometric modelling techniques on individual-level, nationally

representative, sample-based household survey data as well as anonymized, administrative unemployment insurance data, the analysis in this report provides a quantitative analysis of coverage within the working-age population from 2010 to 2022 to examine trends in coverage both on aggregate and between various demographic and socioeconomic groups. Ultimately, this report sought to provide a comprehensive understanding of the existence and magnitudes of coverage gaps in social assistance and insurance among this group in South Africa, and ultimately inform how policy might intervene to better target those least covered and effectively track coverage over time.

References

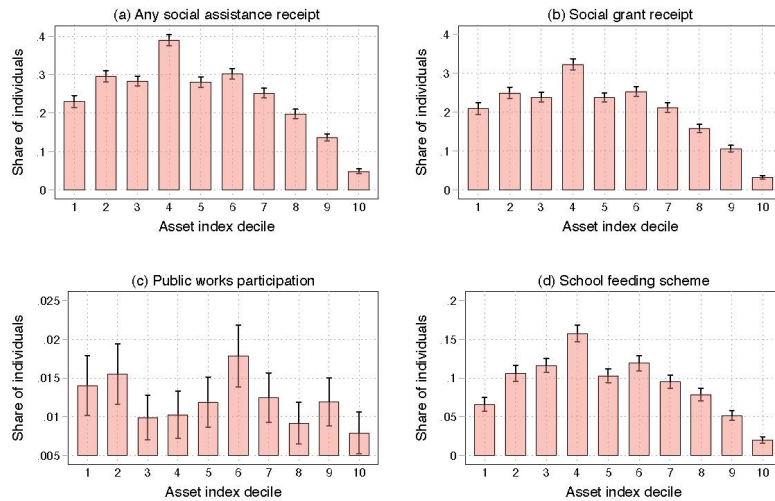
- Abel, M. (2019). Unintended labor supply effects of cash transfer programs: New evidence from South Africa's pension. *Journal of African Economies*, 28(5): 558-581.
- Alloush, M. and Wu, S. (2023). Income Improves Subjective Well-Being: Evidence from South Africa. *Economic Development and Cultural Change*, 71(2): 485-517.
- Ardington, C., Case, A. and Hosegood, V. (2009). Labor supply responses to large social transfers: Longitudinal evidence from South Africa. *American economic journal: Applied economics*, 1(1): 22-48.
- Bassier, I., Budlender, J., Zizzamia, R., Leibbrandt, M. and Ranchhod, V. (2021). Locked down and locked out: Repurposing social assistance as emergency relief to informal workers. *World Development*, 139: 105271.
- Bertrand, M., Mullainathan, S. and Miller, D. (2003). Public policy and extended families: Evidence from pensions in South Africa. *The World Bank Economic Review*, 17(1): 27-50.
- Bhorat, H., Köhler, T. and de Villiers, D. (2023). Can Cash Transfers to the Unemployed Support Economic Activity? Evidence from South Africa. Development Policy Research Unit Working Paper 202301. DPRU, University of Cape Town.
- Casale, D. and Posel, D. (2021). Gender inequality and the COVID-19 crisis: Evidence from a large national survey during South Africa's lockdown. *Res Soc Stratif Mobil*, 71: 100569.
- Casale, D. and Shepherd, D. (2022). The gendered effects of the Covid-19 crisis in South Africa: Evidence from NIDS-CRAM waves 1–5. *Development Southern Africa*, 39(5): 644-663.
- d'Agostino, G., Scarlato, M. and Napolitano, S. (2018). Do Cash Transfers Promote Food Security? The Case of the South African Child Support Grant. *Journal of African Economies*, 27(4): 430–456.
- Department of Basic Education (2014). National School Nutrition Programme (NSNP): 2013/14 Annual Report. Available here: <https://www.education.gov.za/Portals/0/Documents/Reports/NSNP%20ANNUAL%20REPORT%202014%20website%20upload.pdf?ver=2015-07-06-153339-633>.
- Department of Public Works and Infrastructure (2021). Media Statement - Government has created close to 1 million EPWP work opportunities during 2020/21 financial year. Available here: http://www.epwp.gov.za/news_room/Press%20Release/Government_created_close_to_1million_EPWP_work_opportunities.pdf.
- Eyal, K. and Burns, J. (2019). The parent trap: Cash transfers and the intergenerational transmission of depressive symptoms in South Africa. *World Development*, 117: 211-229.
- Eyal, K. and Woolard, I. (2011), March. Female labour force participation and South Africa's child support grant. In *CSAE 25th Anniversary Conference*. Centre for the Study of African Economies Oxford.
- Feder, F. and Yu, D. (2020) Employed yet poor: low-wage employment and working poverty in South Africa. *Development Southern Africa*, 37(3): 363-381.

- Ferguson, J. (2015). *Give a man a fish: Reflections on the new politics of distribution*. Duke University Press.
- Global Child Nutrition Foundation (2019). School Meal Programs Around the World. Report based on the Global Survey of School Meal Programs. Available here: https://gcnf.org/wp-content/uploads/2021/03/GCNF_School-Meal-Programs-Around-the-World_Report_2021_Final.pdf.
- Gronbach, L., Seekings, J. and Megannon, V. (2022). Social protection in the COVID-19 pandemic: lessons from South Africa. *Center for Global Development Policy Paper*, 252.
- Köhler, T. and Bhorat, H. (2020). Social assistance during South Africa's national lockdown: Examining the COVID-19 grant, changes to the Child Support Grant, and post-October policy options. National Income Dynamics Study: Coronavirus Rapid Mobile Survey Wave 2 Policy Paper No. 9.
- Köhler, T. and Hill, R. (2022). Wage subsidies and COVID-19: The distribution and dynamics of South Africa's TERS policy. *Development Southern Africa*, 39(5): 689-721.
- Köhler, T. (2023). What we know about COVID-19 and the South African labour market. Research on Socio-Economic Policy (RESEP) Covid Generation Research Note. RESEP, Stellenbosch University.
- Köhler, T., Bhorat, H., Hill R. and Stanwix, B. (2022). 'The Short-Term Labor Market Effects of South Africa's National COVID-19 Lockdown' In: Qobo, M., Soko, M., Xenia Ngwenya, N. (eds) *The Future of the South African Political Economy Post-COVID 19*. International Political Economy Series. Palgrave Macmillan, Cham.
- Köhler, T., Bhorat, H., and Hill, R. (2023). The effect of wage subsidies on job retention in a developing country: Evidence from South Africa. WIDER Working Paper 2023/114. Helsinki: UNU-WIDER.
- Moore, E. and Seekings, J. (2019). Consequences of social protection on intergenerational relationships in South Africa: Introduction. *Critical Social Policy*, 39(4): 513-524.
- Mutasa, G. (2012). Disability grant and individual labour supply: Evidence from South Africa. *Part of PhD thesis entitled "Disability Grant and labour supply in South Africa". School of Economics, University of Cape Town.*
- Ohrnberger, J., Anselmi, L., Fichera, E. and Sutton, M. (2020). The effect of cash transfers on mental health: Opening the black box – A study from South Africa. *Social Science & Medicine*, 260: 113181.
- Ohrnberger, J., Fichera, E., Sutton, M. and Anselmi, L. (2020). The effect of cash transfers on mental health – new evidence from South Africa. *BMC Public Health*, 20(436).
- Pinkhasov, R.M., Wong, J., Kashanian, J., Lee, M., Samadi, D.B., Pinkhasov, M.M. and Shabsigh, R. (2010). Are men shortchanged on health? Perspective on health care utilization and health risk behavior in men and women in the United States. *International Journal of Clinical Practice*, 64: 475-487.

- Ranchhod, V. and Daniels, R.C., 2021. Labour market dynamics in South Africa at the onset of the COVID-19 pandemic. *South African Journal of Economics*, 89(1): 44-62.
- Samson, M., Lee, U., Ndlebe, A., Mac Quene, K., van Niekerk, I., Gandhi, V., Harigaya, T. and Abrahams, C. (2004). The social and economic impact of South Africa's social security system. EPRI Research Paper No. 37.
- Scarlato, M. and d'Agostino, G. (2019). Cash transfers, labor supply, and gender inequality: Evidence from South Africa. *Feminist Economics*, 25(4): 159-184.
- Seekings, J. and Matisonn, H. (2012). South Africa: The continuing politics of basic income. *Basic income worldwide: Horizons of reform*. 128-150.
- Shifa, M. and Ranchhod, V. (2019). Handbook on Inequality Measurement for Country Studies. Available here: https://aceir.uct.ac.za/sites/default/files/content_migration/aceir_uct_ac_za/1639/files/ACEI_R%2520handbook_300519_single-page.pdf.
- South African Social Security Agency (SASSA), 2023. July 2023 Statistical Report. Available here: <https://www.sassa.gov.za/statistical-reports/Documents/July%202023%20social%20assistance%20%20report.pdf>.
- Statistics South Africa, 2008. Guide to the Quarterly Labour Force Survey. Statistics South Africa: Pretoria.
- Statistics South Africa, 2022a. General Household Survey 2022. Statistics South Africa: Pretoria. Available here : <https://www.statssa.gov.za/publications/P0318/P03182022.pdf>.
- Statistics South Africa, 2022b. Mid-year population estimates. Statistics South Africa: Pretoria. Available here: <https://www.statssa.gov.za/publications/P0302/P03022022.pdf>.
- Tondini, A., Ardington, C. and Woolard, I. (2017). Public pensions and elderly informal employment: Evidence from a change in retirement age in South Africa. Cape Town: SALDRU, UCT. (SALDRU Working Paper Number 206).
- Van der Berg, S. (2014). The transition from apartheid: Social spending shifts preceded political reform. *Economic History of Developing Regions*, 29(2): 234-244.
- Wittenberg, M. and Leibbrandt, M. (2017). Measuring inequality by asset indices: A general approach with application to South Africa. *Review of Income and Wealth*, 63(4) : 706-730.
- Woolard, I., Harttgen, K. and Klasen, S. (2011). The history and impact of social security in South Africa: experiences and lessons. *Canadian Journal of Development Studies/Revue canadienne d'études du développement*, 32(4): 357-380.
- World Bank (2021). South Africa: Social Assistance Programs and Systems Review. Washington: World Bank. Available here: <https://documents1.worldbank.org/curated/en/238611633430611402/pdf/South-Africa-Social-Assistance-Programs-and-Systems-Review.pdf>.

Appendix

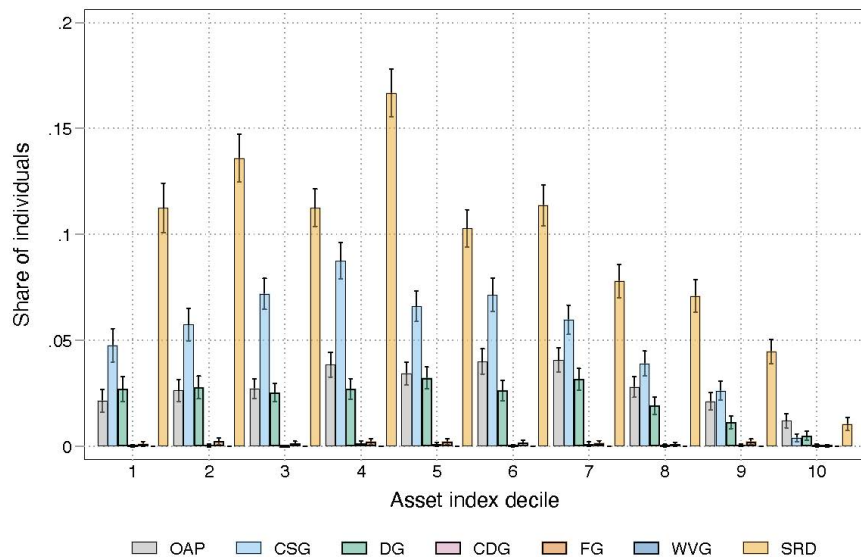
Figure A1: Social assistance coverage among the working-age population across the household socioeconomic status distribution, 2012



Authors' own calculations. Source: GHS 2012, 2013.

Notes: Sample restricted to the working-aged (15 - 64 years). All estimates weighted using sampling weights and account for the complex survey design. All estimates are for 2012 with the exception of public works which uses 2013 data due to data availability. Capped spikes represent 95 percent confidence intervals.

Figure A2: Social grant coverage among the working-age population across the household socioeconomic status distribution, 2022



Authors' own calculations. Source: GHS 2012, 2013.

Notes: Sample restricted to the working-aged (15 - 64 years). All estimates weighted using sampling weights and account for the complex survey design. All estimates are for 2012 with the exception of public works which uses 2013 data due to data availability. Capped spikes represent 95 percent confidence intervals.



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