South African Reserve Bank

Working Paper Series

WP/24/18

The long-run effects of cash transfers on labour market outcomes

Neryvia Pillay, Chloe Allison and Kathryn Bankart

Authorised for publication by Konstantin Makrelov

11 November 2024

SOUTH AFRICAN RESERVE BANK

© South African Reserve Bank

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system or transmitted in any form or by any means without fully acknowledging the author(s) and this Working Paper as the source.

South African Reserve Bank Working Papers are written by staff members of the South African Reserve Bank and, on occasion, by consultants under the auspices of the South African Reserve Bank. The papers deal with topical issues and describe preliminary research findings and develop new analytical or empirical approaches in their analyses. They are solely intended to elicit comments and stimulate debate.

The views expressed in this Working Paper are those of the author(s) and do not necessarily represent those of the South African Reserve Bank or South African Reserve Bank policy. While every precaution is taken to ensure the accuracy of information, the South African Reserve Bank shall not be liable to any person for inaccurate information, omissions or opinions contained herein.

South African Reserve Bank Working Papers are externally refereed.

Information on South African Reserve Bank Working Papers can be found at
https://www.resbank.co.za/en/home/publications/Papers/working-papers.

Enquiries relating to the Working Paper Series can be addressed to:
Head: Economic Research Department
South African Reserve Bank
P O Box 427
Pretoria 0001

Tel. +27 12 313 3911

The long-run effects of cash transfers on labour market outcomes

Neryvia Pillay,* Chloe Allison† and Kathryn Bankart‡

Abstract

We study a South African social grant programme that provides unconditional cash transfers to children. Since its introduction in 1998, the age-eligibility threshold for the child support grant was progressively extended from children under 7 to children under 18. Making use of household survey data, we use a difference-in-difference identification strategy that exploits the variation in grant eligibility across age groups generated by these age-eligibility changes to study how cash transfers in childhood can affect long-run labour market outcomes. We find that childhood grant eligibility has no effect on labour market participation, employment and wages in young adulthood. We do find evidence of a negative effect on male labour market participation and wages.

JEL classification

H53, J22, O15

Keywords

Cash transfers, labour market, employment, wages

* Lead Economist, Economic Research Department, South African Reserve Bank (SARB), Pretoria, and Senior Lecturer in the School of Economics, University of Cape Town. Corresponding author. Email: Neryvia.Pillay@resbank.co.za.

† Associate Economist, Economic Research Department, SARB, Pretoria.

‡ Master's candidate in Public Administration and International Development, Havard Kennedy School, Harvard University, Cambridge, Massachussetts, United States.

1. Introduction

South Africa's labour market is characterised by very high unemployment rates, particularly among the youth. The official unemployment rate is 32%, and the unemployment rate among those aged 25–34 years is 38% (Statistics South Africa (Stats SA) 2023). It is thus vital to understand which policies can improve labour market outcomes. In this paper, we study whether grant eligibility in childhood leads to improved labour market outcomes for adults aged 24–26 years.

Many studies have investigated the contemporaneous effects of cash transfers on labour market outcomes, but relatively few have examined the long-run effects of childhood cash transfer receipt. Much of the evidence comes from Mexico's Progresa, a cash transfer programme conditional on school attendance, and demonstrates a positive effect of childhood cash transfers on long-run labour market outcomes. We contribute to this literature by studying the effect of South Africa's child support grant (CSG), which is an unconditional cash transfer, on labour market outcomes in young adulthood.

The CSG is available to age-eligible children whose caregivers pass the means test and represents a sizeable income transfer for recipient households. In 2010, the rand value of the CSG was 40% of median monthly per capita income (Woolard and Leibbrandt 2013). Among the poorest households, total CSG receipt accounts for an average of 40% of total household income (Delany et al. 2008). When the grant was initially rolled out, it was only available to children under the age of 7, but the age-eligibility threshold has been extended over the years such that all children under the age of 18 are currently eligible for the CSG.

Our identification strategy exploits these changes in the age-eligibility cutoffs for the CSG over the years, which generate exogenous variation in CSG eligibility across cohorts. We use this variation in CSG eligibility across age groups to identify the effects of childhood grant eligibility on long-run labour market participation, employment and wages using a difference-in-difference strategy, with the youngest age groups as the treated group and the oldest age groups as the control group.

We study three different measures of childhood grant eligibility. The first is an indicator variable that simply captures whether or not an individual was eligible for the CSG during their childhood. The other two variables are continuous measures that reflect varying treatment intensity: the total number of months of CSG eligibility during childhood and the total rand value of grant exposure during childhood (in log-constant 2021 rands). We find that none of the CSG measures has a significant effect on labour market outcomes in young adulthood, but we do find evidence of a negative effect on male labour market participation and wages.

The remainder of this paper is organised as follows. Section 2 reviews the existing literature. Section 3 describes the CSG in detail. Section 4 describes the data sources and samples used in the estimation and outlines the empirical strategy. The main results are presented in section 5, along with differential results by gender and geographic location. Section 6 examines the validity of the difference-in-difference estimation strategy, and section 7 concludes.

2. Literature review

Cash transfers in their many forms have attracted a great deal of attention in labour-related literature due to their presumed impacts on the incentives of working-age adults. In classical economic theory, the income effect suggests that willingness to work declines as income rises, but the leisure/income trade-off is just one of many levers cash transfers can pull (Baird, McKenzie and Özler 2018). Which levers are pulled depends on many factors, including whether cash transfers are unconditional or conditional on certain behaviours, targeted at specific groups, relatively large or small, or expected to continue reliably; the nature of the recipients; and the conditions in the economy. Based on this heterogeneity, it is not easy to generalise across assessments of different cash transfer programmes. Most of the existing literature investigates the simultaneous or short-run correlation between cash transfers and labour market participation. When it comes to their lasting or longer-run impacts, however, there is a dearth of literature.

The most convincing evidence for long-run effects among childhood cash transfer beneficiaries comes from Mexico's Progresa programme.[1] Introduced in 1996, Progresa was the first nationwide conditional cash transfer programme to be implemented in the world. Kugler and Rojas (2018) examined the long-run impacts of exposure to the Progresa programme on youth employment and earnings.[2] They focused on children aged between 7 and 16 years in 1997 whose income was below the poverty line, and they followed up 17 years later. Drawing on several household surveys between 2003 and 2015,[3] they found that greater exposure to cash transfers was associated with positive and significant effects on years of education, likelihood of employment and quality of employment. Specifically, the average youth exposed to seven years of Progresa had almost three additional years of education compared to someone with no exposure to Progresa. Similarly, the average person exposed to Progresa was almost 18% more likely to complete high school and 5% more likely go on to tertiary education relative to someone never exposed to the programme – this is indicative of the long-lasting effects. They also found long-run positive effects for the length of exposure to Progresa on employment, with the average person exposed to Progresa being more likely to be employed, to be paid more, to have a contract and to have to access to non-wage benefits.

Several other studies have come to similar conclusions. Parker and Vogl (2021) estimate the long-run impacts of Progresa using census data linked to the administrative data on programme enrolment. Similarly to Kugler and Rojas (2018), they examined the outcomes (education, labour market, household economic well-being and migration) of the beneficiaries who had reached adulthood at the time of their study. They found clear evidence that exposure to Progresa had lasting benefits for women but weaker and less conclusive evidence for men. They found that exposure to Progresa improved the likelihood of employment among women by 41% and had a large and significant positive impact on labour hours and earnings. Overall, they found

---

1 Also known as Oportunidades or Prospera.

2 We define exposure as the number of years the individual was eligible for the intervention.

3 Such as the Household Evaluation Survey (Encuestas de Evaluación de los Hogares) and the Re-evaluation, Recertification and Permanent Verification of Socioeconomic Conditions Survey (Verificación Permanente de Condiciones Socioeconómicas).

no evidence of an improvement in employment among men. However, when considering the differences by sector, they observed a positive correlation with working in higher-paying sectors and receiving health insurance benefits.

Rodríguez-Oreggia and Freije (2012) used a multi-treatment methodology to assess the effects of different degrees of exposure to the programme over time. They used data for 14–24-year-olds in beneficiary localities from the 2007 wave of the Rural Households Evaluation Survey. These beneficiaries were between 6 and 15 years of age in 1998, when Progresa started, and were aged between 15 and 24 in 2007. The authors calculated the impact of short (less than three years), medium (three to six years) and long (more than six years) exposure to the programme. While they found very little evidence of correlation between programme exposure and likelihood of employment, improved wages or intergenerational occupational mobility, they highlight that this was likely due to a lack of employment prospects in the locations of the cohorts targeted for the programme.

In South Africa, the relationship between grants and employment has been studied extensively, but the evidence is mixed. The results vary with the different datasets, methodologies and surveys used and with the type of grant researched. Miyajima (2024) examined the impact of South African grants on employment – all types of grants, to both direct and indirect recipients – using National Income Dynamics Study (NIDS) data from 2008 to 2017. This study found that among indirect recipients,[4] younger members typically have lower employment prospects than other indirect recipients. Various factors may explain this finding: for example, discouraged job seekers, greater constraints in the labour market and fewer job opportunities.

Muchiri and Garen (2017) studied the impact of the South African old age grant (OAG) on labour market participation,[5] exploiting the variability that arose from the 2008 reform that reduced men's minimum eligibility age from 65 to 60 years. Using General Household Survey data from 2006 to 2012, they found a negative impact for the OAG

---

4 These are people who live in the same household as direct recipients.

5 The OAG is a monthly cash transfer provided by the South African government to older individuals. The OAG is means tested and conditioned on age.

on labour market participation for retirement-age men. They estimate that pension-age eligibility reduces the probability of labour force participation by 9.9 percentage points for single males and by 15.5 percentage points for married males.

Ranchod (2007) used data from the South African Labour Force Survey[6] to estimate the effects of the pension using a discontinuity approach, concluding that the pension causes a reduction in labour supply of 8.4 percentage points for men and 12.6 percentage points for women. Additionally, he found that people are more likely to work in 'flexitime' positions on becoming eligible for a pension – reinforcing the finding that the pension reduces labour supply.

Other studies have arrived at different conclusions about the OAG impacts on prime-age adults.[7] Bertrand, Mullainathan and Miller (2003) used nationally representative cross-sectional data to study the impact of the OAG on the labour supply of prime-aged adults. They compared adults living in multi-generation households with pensioners to those living without pensioners and found that those living with pensioners have significantly lower rates of labour force participation. Using the same data, Posel, Fairburn and Lund (2006) argue that the labour supply effects are more nuanced: households with pensioners may observe lower labour force participation among prime-aged members, but members of these households are significantly more likely to have migrated to work or to seek work.[8]

Ardington, Case and Hosegood (2009) used data from northern KwaZulu-Natal from 2000 to 2004 and found that prime-aged adults are significantly more likely to be employed after the introduction of the state pension to a household. The authors attribute this observation to improved financial support during job search activity and greater childcare assistance from grandparents, whose labour can be reallocated from the labour market to the home.

---

6 Ranchod (2007) uses data from quarter two of the 2000 Labour Force Survey and from quarter one of the 2001 Labour Force Survey.

7 Prime-age adults are those who are of working age but live with an elderly person.

8 This effect could be brought about by the credit constraint that is lifted from having another income source or because pensioners stay at home to care for children when another income comes in.

Our paper considers the CSG specifically. Previous research has considered the effects of the CSG on mothers in the form of alleviated job search constraints, metrics concerning children such as health and education, and the lasting labour market effects of human capital impacts.

Using 2001 and 2011 South African census data and the 2007 Community Survey, Tondini (2022) studied how labour market outcomes are affected by the receipt of the CSG. Tondini considered eligibility across the birth cohort of children and found that mothers receiving the CSG are more likely to be active and look for a job – and that this effect is more pronounced for single mothers. Five years after the grant was received, the employment rate was found to be the same and the employment composition to be similar between treated and non-treated mothers. Tondini's findings suggest that the CSG does not do enough to overcome barriers to entry into South Africa's labour market.

Many studies document a positive correlation between cash transfers and health and welfare outcomes, which could lead to positive labour market effects in the long run. Using the NIDS dataset, Pillay Bell (2020) applied a difference-in-difference strategy to show that the expansion of the CSG to adolescents increased school enrolment and educational attainment, with the effects concentrated among females, rural individuals and those with the lowest numerical literacy. These improvements in education could lead to positive effects on labour market outcomes.

Employing the same dataset, Coetzee (2013) used the duration of receipt of the CSG to estimate its effects. Results suggest associated improvements in height-for-age and weight-for-age (nutritional) metrics, as well as a reduction in the likelihood of school year repetition. The effects appear to increase with duration of receipt.

In an impact assessment commissioned by the Department of Social Development, the South African Social Security Agency (SASSA) and the United Nations Children's Fund (UNICEF) South Africa, Heinrich et al. (2012) compared CSG recipient households to non-recipient households with similar characteristics and identified several effects. These include improved nutritional outcomes, particularly when the transfer is received in the first two years of life; higher educational attainment and improved scores on cognitive tests; reduced likelihood of illness; modest improvements in time spent studying for households without electricity; reduced adolescent school absences; reduced likelihood of adolescents working outside the home; and numerous improvements around risky adolescent sexual behaviour and substance use. Most of these positive impacts improve when children receive transfers early on in life and when mothers have attained higher levels of education.

Case, Hosegood and Lund (2005) focused only on school attendance in their finding that grant receipt improved school attendance relative to similarly impoverished households that did not receive the grant. This was despite grant-receiving households recording lower levels of school attendance than peers before grant receipt. A study by Liziwe and Kongolo (2011) collected qualitative data in Gugulethu, an informal township in the Western Cape. The study found that CSG recipients typically incorporate grants into a central pot of general household income, and that funds are spent largely on food and school fees.

A more comprehensive review of the grant's performance by Delaney et al. (2008) conducted in-depth focus groups with recipients and comparable non-recipients. They interviewed SASSA officials and stakeholders, surveyed the literature and surveyed low-income households likely eligible for the grant. Their findings confirmed the claims of the two preceding studies. They also found that grants are typically incorporated into the household pool of income and are largely spent on food. Other expenditure increases associated with grant receipt included school fees, uniforms and electricity.

Agüero, Carter and Woolard (2007) used continuous treatment methods based on slow rollout to investigate height-for-age improvements (nutritional indicators) associated with the CSG. The authors found that children receiving the grant for at least 67% of their 'window of nutritional vulnerability' (0–3 years of age) had height-for-age scores 0.25 higher than children covered for only 1% of the window. They then linked these data to estimates of wage elasticity with respect to adult height. Using this approach, even assuming a CSG recipient is unemployed for half of their adult life, the authors estimate an increase in wages (present value) attributable to CSG receipt of between 60% and 130%.

3. South Africa's child support grant

The CSG was introduced in 1998 as a means-tested grant with an age-eligibility threshold. The grant is available to any primary caregiver of an age-eligible child, not just to the biological mother. There are no additional eligibility conditions, such as immunisation or school attendance. The income-eligibility threshold was initially set at R800 per month for urban areas and R1 100 per month for rural areas. It remained unchanged until 2008, when it was changed such that the income threshold is now 10 times the value of the grant.

The grant was originally available to children up to the age of 7, but the threshold has been raised over the years, and the CSG is currently available to all children under the age of 18. The grant extensions were based on evidence that the CSG had significantly reduced child poverty. Table 1 shows the age-eligibility threshold over the years.

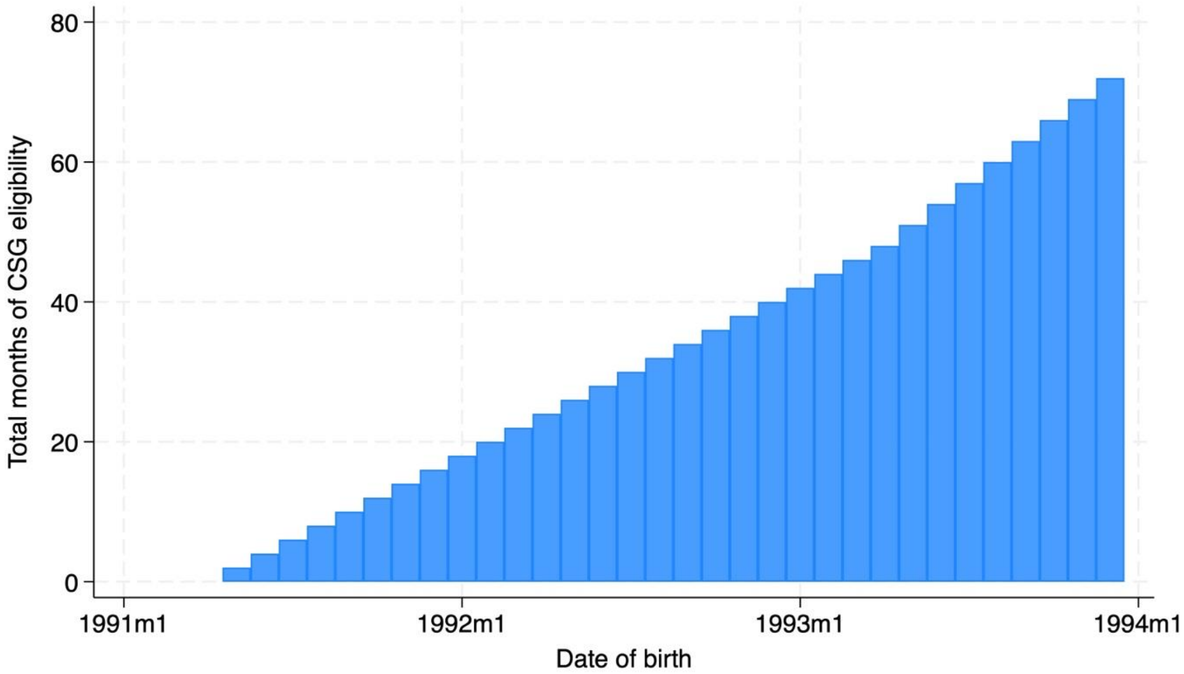
Table 1: Age-eligibility threshold, 1998–2012

Beginning date	Age limit
April 1998	7
April 2003	9
April 2004	11
April 2005	14
January 2009	15
January 2010	16
January 2011	17
January 2012	18

Source: National Treasury

The changes in the age threshold generate exogenous variation in CSG eligibility across cohorts. Figure 1 illustrates the differences in total months of CSG eligibility during childhood for the 1991–1993 cohorts. As can be seen in the graph, those born before May 1991 were not eligible for the CSG over their lifetimes. For those people who were eligible for the CSG, there is substantial variation in the length of eligibility. A person born in December 1991 experienced 16 months of total eligibility, someone born in December 1992 experienced 40 months of total eligibility, and someone born in December 1993 experienced 72 months of total eligibility. In this paper, we exploit this exogenous variation in CSG eligibility due to birth timing. As all individuals in our sample were born before the policy was initiated, differences in grant exposure are plausibly exogenous.

Figure 1: Total months of CSG eligibility by date of birth for 1991–1993 cohort



4. Data and empirical strategy

NIDS (Southern Africa Labour and Development Research Unit 2018) is a nationally representative longitudinal survey that tracks South African individuals over time. The first wave of the survey was conducted in 2008, the second in 2010/11, the third in 2012, the fourth in 2014/15 and the fifth in 2017. NIDS collects data on date of birth (month and year) and labour market outcomes, making it the ideal dataset for our analysis.

We combine all five NIDS waves and restrict our sample to those aged 24–29 years in any wave.[9] Over the period 2008–2014, none of the 24–29-year-olds was ever eligible

---

9 While we do not rely on the panel nature of NIDS in our estimates, we note that from Wave 1 to Wave 5, 73% of individuals were successfully interviewed over time (Brophy et al. 2018).

for the CSG over their lifetimes. In 2015, some 24-year-olds had experienced grant eligibility during their childhood, and by 2017 all 24-year-olds, most 25-year-olds and some 26-year-olds had experienced grant eligibility during their childhood. The 27–29-year-olds remain with zero grant eligibility during their childhood.

As we first observe individuals in their adulthood, it is difficult to determine whether they were income eligible for the grant during their childhood. We therefore further restrict the sample to African individuals only, as income eligibility is highest among this population group. Our estimates suggest that the large majority of African children who were age eligible for the CSG in 2018 in NIDS were also income eligible, and Stats SA (2021) finds that 73.4% of age-eligible African children received the grant in 2018.

4.1 Empirical strategy

Using a sample of 24–29-year-olds, we employ a difference-in-difference strategy to identify the effects of childhood grant eligibility on labour market outcomes in adulthood. We compare labour market outcomes for those eligible for the CSG during their lifetimes to those who were not. The younger age group (24–26-year-olds) form the treatment group, and the older age group (27–29-year-olds) form the control group. Specifically, we estimate the following difference-in-difference equation for individual *i* in year *t*:

$$Y_{it} = \alpha + \beta CSG_{it} + \delta_t + \lambda_a + X'\mu + \varepsilon_{it} \tag{1}$$

The coefficient of interest is β, which captures the effect of childhood grant eligibility (*CSG*) on labour market outcomes in adulthood. We use three different measures of childhood grant eligibility. The first is an indicator variable that simply captures whether or not an individual was eligible for the CSG during their childhood. The other two variables are continuous measures that reflect varying treatment intensity: the total number of months of CSG eligibility during childhood and the total rand value of grant exposure during childhood (in log-constant 2021 rands).

The first measure captures an average treatment effect for ages, while the latter two measures allow the treatment effect to vary by exposure and thereby capture treatment heterogeneity. We use two different measures of exposure: length of time and a monetary measure. The time measure allows us to investigate how length of exposure affects labour market outcomes, while the monetary measure captures the additional effect of the changing rand value of the grant over time.

One advantage of including the binary measure is to provide a robustness check on the continuous measure estimates. For continuous difference-in-difference to be valid, Callaway, Goodman-Bacon and Sant'Anna (2024) show that the 'strong parallel trends' assumption must be satisfied – that is, the effects for individuals receiving less CSG exposure reflect what would have happened to those with high exposure had they received less exposure. As treatment exposure here depends on birth month, we expect those who differ in age by a few months to represent valid comparison groups and the 'strong parallel trends' assumption to be satisfied. Nonetheless, including the binary measure provides additional support to the continuous measure estimates.

We study three different labour market outcomes: labour force participation, employment and wages. Given the high rates of unemployment in South Africa, we use the broad definition of labour force participation, which includes discouraged work seekers. The employment outcome is conditional on labour force participation, and wages are conditional on employment and in constant 2021 rands.

δ_t is a full set of year dummies to flexibly control for time trends. The indicator for whether an individual is in the treated group is absorbed into the age dummies (λ_a), which allow us to control for constant age-group characteristics that are correlated with our labour market outcomes of interest. We also control for individual-level characteristics in X: gender, urban/rural location, household size, number of CSG age-eligible children in the household, number of males and females (separately) eligible for the OAG in the household, and a full set of province dummies.

Variation in birth timing relative to the age-eligibility changes in the CSG identifies β. The key identification assumption for this research design is that the younger age groups experience similar trends to the older age groups in the absence of CSG eligibility. We evaluate the validity of this assumption in section 6. As we consider eligibility and not uptake of the grant here, we effectively estimate an intention-to-treat effect without relying on the potentially endogenous decision of whether to take up the grant. As not all eligible children receive the grant, these estimates represent a lower bound on the actual effect of the grant. All estimates take into account the NIDS survey design (see Branson and Wittenberg (2018) for details).

4.2 Data description

Table 2 presents descriptive statistics for the main sample of African individuals aged 24–29 years over the years 2008–2014 (i.e. the ‘pre’ period in which none of the individuals was eligible for the CSG). It is evident that individuals in the younger age group (the treatment group) are significantly less likely to be labour force participants or employed, but there is no significant difference in wages (conditional on employment) between the two groups.

The treatment group also live in significantly larger households and with more CSG-eligible children and OAG-eligible men. There are no significant differences in gender, urban/rural location or number of OAG-eligible females in the household between the treatment and control groups.

These level differences in some labour market outcomes and individual characteristics do not necessarily invalidate the difference-in-difference design, and we provide evidence in the next two sections to support the validity of the difference-in-difference strategy.

Table 2: Summary statistics for treatment and control groups, 2008–2014

	Treatment group (24–26-year-olds)			Control group (27–29-year-olds)			Tests of equality of means	
	Mean	SD	N	Mean	SD	N	Diff in means	SE of diff
Labour market outcomes								
Labour force participation (broad), indicator	0.680	0.447	4 457	0.706	0.429	3 655	-0.026**	0.012
Employed, indicator	0.550	0.466	3 046	0.630	0.444	2 586	-0.080***	0.018
Monthly wage income (2021 rands)	5 170.608	4 708.660	1 283	5 543.097	4 763.037	1 229	-372.489	343.031
Individual characteristics								
Female, indicator	0.521	0.479	4 457	0.507	0.471	3 655	0.013	0.014
Urban location, indicator	0.619	0.466	4 457	0.628	0.455	3 655	-0.009	0.013
Household (hh) size	5.463	3.786	4 457	4.932	3.510	3 655	0.522***	0.121
Number of CSG-eligible children in hh	1.763	1.876	4 457	1.637	1.781	3 655	0.121**	0.059
Number of OAG-eligible females in hh	0.158	0.356	4 457	0.146	0.344	3 655	0.011	0.009
Number of OAG-eligible males in hh	0.101	0.292	4 457	0.081	0.259	3 655	0.020***	0.007

Note: Sample includes all African individuals aged 24–29 years over 2008–2014. All statistics take the survey design into account. * denotes significance at the 10% level, ** at the 5% level and *** at the 1% level.

5. Results

Table 3 presents the results from estimating equation (1) with each of the CSG measures for the three labour market outcomes: labour force participation (broad) in columns (1)–(3), employment (conditional on labour force participation) in columns (4)–(6) and wages (conditional on employment) in columns (7)–(9). Columns (1), (4) and (7) do not contain any individual characteristics, while the other columns do. Furthermore, columns (3), (6) and (9) include a full set of age-year effects. The survey design is accounted for in all estimates.

There are no significant effects of CSG eligibility during childhood on any of the labour market outcomes. Moreover, the estimated coefficients are close to zero and very small relative to the means of the dependent variables. This indicates that CSG eligibility has no effect on labour market outcomes during adulthood.

The similarity of the estimates with and without individual controls supports the validity of the difference-in-difference empirical strategy. The age-year effects allow the treatment and control age groups to follow different trends, and the inclusion of these effects does not change the estimated effects. This lends further credence to the validity of the difference-in-difference strategy.

Unlike the findings for Mexico's Progresa, we find no effect of childhood grant eligibility on long-run labour market outcomes. This could be due to a variety of factors. For the treatment cohorts we studied, the period of childhood grant eligibility is relatively short (six years at most) and discontinuous. Moreover, the period of eligibility for these cohorts was mostly when grant uptake was relatively low but increasing. Later cohorts exposed to the CSG for longer continuous periods, when uptake was higher, may have a positive effect.

The lack of a significant effect on labour market outcomes could also reflect the nature of South Africa's labour market, which is characterised by exceptionally high youth unemployment. Childhood grant exposure may have positive effects in a more functional labour market.

Table 3: Effects of child support grant eligibility on labour market outcomes

	Labour force participation			Employment			Wage		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
CSG eligibility, indicator	-0.010	-0.014	-0.010	0.031	0.017	0.044	191.655	291.770	316.373
	(0.026)	(0.025)	(0.034)	(0.034)	(0.033)	(0.046)	(760.940)	(730.915)	(1 014.162)
Total months of CSG eligibility	-0.001	-0.001	-0.000	-0.000	-0.001	-0.000	-18.058	-13.435	-41.697
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.002)	(27.226)	(25.498)	(37.482)
Total rand value of CSG eligibility, log	-0.001	-0.002	-0.001	0.002	0.001	0.004	5.752	19.553	6.142
	(0.003)	(0.003)	(0.004)	(0.004)	(0.004)	(0.006)	(90.169)	(86.257)	(122.780)
Individual controls	N	Y	Y	N	Y	Y	N	Y	Y
Age-year effects	N	N	Y	N	N	Y	N	N	Y
Mean of dep. var.	0.711	0.711	0.711	0.625	0.625	0.625	5 748.086	5 748.086	5 748.086
Observations	13 764	13 764	13 764	9 657	9 657	9 657	4 579	4 579	4 579

Note: Sample includes all African individuals aged 24–29 years. The estimates for β from equation (1) are shown for each of the three measures of CSG eligibility. Individual controls are gender, urban/rural location, household size, the number of CSG age-eligible children in the household, the number of males and females (separately) eligible for the OAG in the household, and a full set of province dummies. All estimates take the survey design into account. * denotes significance at the 10% level, ** at the 5% level and *** at the 1% level.

Given the international and South African findings of differential effects by gender and geographical location, in Table 4 we investigate whether there are differential effects by these characteristics. These estimates are obtained by interacting every term in equation (1) with indicators for female (columns (1) and (2)) and urban (columns (3) and (4)).

Table 4: Effects of child support grant eligibility on labour market outcomes by gender and geographical location

	Females	Males	Urban	Rural
	(1)	(2)	(3)	(4)
Panel A: Labour force participation				
CSG eligibility, indicator	0.052	-0.087***	-0.007	-0.031
	(0.037)	(0.032)	(0.033)	(0.033)
Total months of CSG eligibility	0.001	-0.003**	-0.000	-0.001
	(0.001)	(0.001)	(0.001)	(0.001)
Total rand value of CSG eligibility, log	0.006	-0.010***	-0.001	-0.003
	(0.004)	(0.004)	(0.004)	(0.004)
Mean of dep. var.	0.663	0.761	0.742	0.661
Observations	7 559	6 204	6 752	7 011
Panel B: Employment				
CSG eligibility, indicator	0.028	0.008	0.018	0.007
	(0.047)	(0.042)	(0.043)	(0.052)
Total months of CSG eligibility	-0.001	-0.001	-0.001	0.000
	(0.002)	(0.001)	(0.002)	(0.001)
Total rand value of CSG eligibility, log	0.002	0.000	0.001	0.001
	(0.006)	(0.005)	(0.005)	(0.006)
Mean of dep. var.	0.546	0.694	0.664	0.551
Observations	4 780	4 876	5 166	4 490
Panel C: Wages				
CSG eligibility, indicator	916.699	-288.247	-187.696	2 070.066
	(1 495.056)	(718.730)	(649.073)	(1 943.686)
Total months of CSG eligibility	16.709	-38.486*	-25.150	27.661
	(51.201)	(20.072)	(28.076)	(47.067)
Total rand value of CSG eligibility, log	101.204	-53.537	-39.879	228.229
	(177.351)	(80.014)	(76.221)	(223.574)
Mean of dep. var.	5 397.874	5 989.716	6 163.181	4 738.095
Observations	2 017	2 561	2 759	1 819

Note: Sample includes all African individuals aged 24–29 years. All regressions include individual controls for gender, urban/rural location, household size, the number of CSG age-eligible children in the household, the number of males and females (separately) eligible for the OAG in the household, and a full set of province dummies. All estimates take the survey design into account. * denotes significance at the 10% level, ** at the 5% level and *** at the 1% level.

Table 4 shows significant negative effects of CSG eligibility on labour force participation and wages for males. Panel A shows that eligibility for the grant during childhood reduces male labour force participation during adulthood by 8.7 percentage points. Looking at the two measures of varying treatment intensity, we see that an extra year of CSG eligibility reduces long-run labour force participation by 3.6 percentage points, while a 10% increase in the rand value of grant eligibility reduces labour force participation by 0.1 percentage points for males. Relative to average labour force participation, CSG eligibility reduces male labour force participation by 11.4%, an extra year of eligibility reduces labour force participation by 4.7% and an extra 10% of grant money eligibility reduces labour force participation by 0.1%. Looking at panel C, an extra year of CSG eligibility reduces monthly wages for males by R462, or 7.7% relative to the average wage.

None of the other estimated effects in Table 4 is statistically significant. It is not obvious why CSG eligibility should have a negative effect on labour force participation and wages for males. While the evidence suggests that grants in South Africa tend to have larger positive impacts on females, prior studies have found that effects for males are insignificant or weaker but still positive (see for example Duflo (2003) for health outcomes and Pillay Bell (2020) for education outcomes).

6. Robustness checks

We test the parallel trends assumption required for a valid difference-in-difference empirical strategy, and we present placebo regressions that demonstrate no significant effects for cohorts unaffected by the CSG.

6.1 Testing the parallel trends assumption

The validity of the difference-in-difference estimation strategy rests on the assumption that the difference between the treatment and control groups in the absence of any intervention is constant over time. We test this parallel trends assumption using NIDS data from 2008 to 2014 – the ‘pre’ period when both groups were unaffected by CSG eligibility – to estimate the following equation:

$$Y_{it} = \alpha + \sum_{y=2010}^{2014} \beta_y \, (Treat_i \times Year_y) + \delta_t + X'\mu + \varepsilon_{it} \quad (2)$$

where the treatment indicator *Treat* is interacted with indicators for each of the pre-period years 2010–2014 (2008 is the omitted year). If the parallel trends assumption holds, then all β_y should be zero. As in equation (1), δ_t is a full set of year dummies and the vector X contains the same controls as in equation (1).

Table 4 gives the β_y from estimating equation (2) for the main sample over the period 2008–2014. There is only one significant coefficient for the employed outcome, while all other coefficients are statistically insignificant. These results provide validation of the difference-in-difference strategy for the labour force participation and wage outcomes but suggest that the employed outcome may not follow the parallel trends assumption.

Table 5: Test of the parallel trends assumption

	Labour force participation	Employment	Wage
	(1)	(2)	(3)
Treat X 2010	0.0328	-0.0752	1 009
	(0.0436)	(0.0472)	(861.8)
Treat X 2011	0.0210	-0.0398	-901.8
	(0.0666)	(0.0764)	(980.9)
Treat X 2012	0.0151	-0.121***	312.2
	(0.0368)	(0.0461)	(831.2)
Treat X 2014	0.0186	-0.0232	926.8
Observations	8 112	5 632	2 512

Note: Sample includes all African individuals aged 24–29 years over 2008–2014. All regressions include individual controls for gender, urban/rural location, household size, the number of CSG age-eligible children in the household, the number of males and females (separately) eligible for the OAG in the household, and a full set of province dummies. All estimates take the survey design into account. * denotes significance at the 10% level, ** at the 5% level and *** at the 1% level.

6.2 Placebo regressions

In Table 5 we present results for placebo regressions for 27–32-year-olds, assuming that the 27–29-year-olds experienced the CSG eligibility actually experienced by the 24–26-year-olds. The placebo regressions effectively assume that the CSG introduction and age-eligibility changes happened earlier than they actually did, treating the 27–29-year-olds as a treatment group and the 30–32-year-olds as a control group. As there is no actual difference in CSG eligibility between these two groups, the estimated effects should be zero if the identification strategy is valid.

Table 6: Placebo regressions

	Labour force participation	**Employment**	**Wage**
	(1)	**(2)**	**(3)**
CSG eligibility, indicator	-0.010	-0.024	524.426
	(0.022)	(0.027)	(579.045)
Total months of CSG eligibility	0.001	0.000	16.068
	(0.001)	(0.001)	(19.865)
Total rand value of CSG eligibility, log	-0.000	-0.002	51.935
	(0.002)	(0.003)	(64.367)
Mean of dep. var.	0.729	0.681	6 307.895
Observations	11 858	8 595	4 399

Note: Sample includes all African individuals aged 27–32 years. All regressions include individual controls for gender, urban/rural location, household size, the number of CSG age-eligible children in the household, the number of males and females (separately) eligible for the OAG in the household, and a full set of province dummies. All estimates take the survey design into account. * denotes significance at the 10% level, ** at the 5% level and *** at the 1% level.

The results in Table 5 provide further support for the empirical strategy used in this paper, as none of the estimated coefficients is statistically significant. These results suggest that the CSG-eligibility variables are not picking up on any other changes over this period.

7. Conclusion

We found that CSG eligibility does not have an effect on labour market outcomes in young adulthood. Grant eligibility, months of eligibility and the value of the grant had no significant impact on labour market participation, employment or wages for 24–26-year-olds. We did find evidence of a negative effect on male labour market participation and wages.

Several factors could explain the lack of an effect. For the treatment cohorts we studied, the period of childhood grant eligibility was relatively short (six years at most) and discontinuous. Moreover, the period of eligibility for these cohorts was mostly when grant uptake was relatively low and increasing. There might be a positive effect for later cohorts who were exposed to the CSG for longer continuous periods when uptake was higher.

The lack of a significant effect on labour market outcomes could also reflect the nature of South Africa’s labour market, which is characterised by exceptionally high youth unemployment. Our findings suggest that grants may be insufficient to improve South Africa’s high unemployment rates and that the policy focus should instead be on improving the labour market itself.

References

Agüero, J M, Carter, M R and Woolard, I. 2007. 'The impact of unconditional cash transfers on nutrition: the South African child support grant'. International Poverty Centre Working Paper 39.

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.

Baird, S, McKenzie, D and Özler, B. 2018. 'The effects of cash transfers on adult labor market outcomes'. *IZA Journal of Development and Migration* 8(1).

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.

Branson, N and Wittenberg, M. 2018. 'Longitudinal and cross-sectional weights in the NIDS data 1–5'. NIDS Technical Paper 8. Cape Town: SALDRU.

Brophy, T, Branson, N, Daniels, R C, Leibbrandt, M, Mlatsheni, C and Woolard, I. 2018. 'National income dynamics study panel user manual'. *Technical Note Release*: 1–83.

Callaway, B, Goodman-Bacon, A and Sant'Anna, P H C. 2024. 'Differences-in-differences with a continuous treatment'. National Bureau of Economic Research (NBER) Working Paper 32117.

Case, A, Hosegood, V and Lund, F. 2005. 'The reach and impact of child support grants: evidence from KwaZulu-Natal'*. Development Southern Africa* 22(4): 467–482.

Coetzee, M. 2013. 'Finding the benefits: estimating the impact of the South African child support grant'. *South African Journal of Economics* 81(3): 427–450.

Delany, A, Ismail, Z, Graham, L and Ramkissoon, Y. 2008. *Review of the child support grant: uses, implementation and obstacles*. Johannesburg: Community Agency for Social Enquiry.

Duflo, E. 2003. 'Grandmothers and granddaughters: old-age pensions and intrahousehold allocation in South Africa'. *The World Bank Economic Review* 17(1): 1–25.

Heinrich, C, Hoddinott, J, Samson, M, Mac Quene, K, van Niekerk, I and Renaud, B. 2012. *The South African child support grant impact assessment: evidence from a survey of children, adolescents and their households*. Impact study partnership between the Economic Policy Research Institute (EPRI) and the International Food Policy Research Institute (IFPRI), commissioned by the South African Department of Social Development, SASSA and UNICEF. Pretoria: UNICEF South Africa.

Kugler, A D and Rojas, I. 2018. 'Do CCTs improve employment and earnings in the very long-term? Evidence from Mexico'. NBER Working Paper 24248.

Liziwe, J and Kongolo, M. 2011. 'The impact and effectiveness of the child support grant in Gugulethu, South Africa'. *Eastern Africa Social Science Research Review* 27(1).

Miyajima, K. 2024. 'The link between social grants and employment in South Africa'. *International Review of Applied Economics* 38(6): 706–717.

Muchiri, S M and Garen, J. 2017. 'Social transfer benefits and retirement decisions: evidence from South Africa'. *South African Journal of Economics* 86(1): 23–52.

Parker, S and Vogl, T. 2021. 'Do conditional cash transfers improve economic outcomes in the next generation? Evidence from Mexico'. NBER Working Paper 24303.

Pillay Bell, N. 2020. ‘The impacts of unconditional cash transfers on schooling in adolescence and young adulthood: evidence from South Africa’. *South African Reserve Bank Working Paper Series,* WP20/05.

Posel, D, Fairburn, J A and Lund, F. 2006. ‘Labour migration and households: a reconsideration of the effects of the social pension on labour supply in South Africa’. *Economic Modelling* 23(5): 836–853.

Ranchod, V. 2007. ‘The effect of the South African old age pension on labour supply of the elderly’. *South African Journal of Economics* 74(4): 725–744.

Rodríguez-Oreggia, E and Freije, S. 2012. ‘Long-term impact of a cash-transfers program on labor outcomes of the rural youth’. CID Working Paper No. 230.

Southern Africa Labour and Development Research Unit. 2018. *National income dynamics study, waves 1–5*. Pretoria: Department of Planning, Monitoring and Evaluation; Cape Town: DataFirst.

Statistics South Africa (Stats SA). 2021. C*hildren’s education and well-being in South Africa, 2018*. Education series, volume VII. Pretoria: Stats SA.

Stats SA. 2023. *Quarterly labour force survey, quarter 3*: *2023*. Statistical release P0211. Pretoria: Stats SA.

Tondini, A. 2022. ‘The lasting labor-market effects of cash transfers: evidence from South Africa’s child support grant’*. The World Bank Economic Review* 36(4): 934–954.

Woolard, I and Leibbrandt, M. 2013. ‘The evolution and impact of unconditional cash transfers in South Africa’. In *Annual World Bank conference on development economics – global, 2011: development challenges in a postcrisis world*, edited by C Sepúlveda, A Harrison and J Yifu Lin. Washington, DC: World Bank. 363–384.