The labour market impacts of COVID-19 in South Africa: An update with NIDS-CRAM Wave 3

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Abstract

We use Wave 3 of NIDS-CRAM data to provide an update to previous estimates (Jain, Bassier, et al., 2020; Jain, Budlender, et al., 2020) of COVID-19-related employment impacts in South Africa. We find evidence of a substantial job market recovery in October. We previously found a 40% drop in April compared to February active employment, partially recovering to a 20% drop by June. We now find that by October the proportion of actively employed adults appears close to its February pre-pandemic level. The difference between February and October active employment (a 0.15% decline) is not statistically significant, but due to precision limitations the data still allow for a non-negligible drop in employment. However we can confidently rule out a February to October decline in active employment greater than 4.7%. We perform a number of robustness checks which affirm the plausibility of this surprisingly large recovery. We additionally present results on earnings changes and social protection coverage.

JEL: J21, J48, J63, J68, I32, I38, H84
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Executive summary

This paper serves as an update to Jain, Budlender, et al. (2020) and Jain, Bassier, et al. (2020), which analysed the employment and poverty impacts of COVID-19 between February, April, and June, 2020. We use Wave 3 of the NIDS-CRAM panel to extend the period of analysis to October. These four periods correspond to four distinct phases in the South African experience of COVID-19: February can be considered the “pre-COVID” period, April was the most stringent phase of the South African lockdown (Level 5), June represents substantial easing of lockdown restrictions (Level 3), and October (Level 1) represents an almost complete lifting of restrictions.

In this update, we investigate the extent and the magnitude of the economic and labour market recovery between June and October, and the role of South Africa’s social protection systems in aiding this recovery. Due to the removal of the household income question from the Wave 3 questionnaire, we do not present a poverty analysis. The bulk of our analysis concerns the apparent employment recovery we see in NIDS-CRAM, and this executive summary is divided into analysis of the recovery and then other results:

A close to full recovery in active employment

Using the same employment typology as in Jain, Budlender, et al. (2020) and Jain, Bassier, et al. (2020), the NIDS-CRAM data suggests that October active employment as a proportion of the adult population has recovered close to February pre-pandemic levels. While the October active employment point estimate is very slightly lower (by 0.08 percentage points, or 0.15%) than the February estimate, the difference is not statistically significant. Using 95% confidence intervals, we can rule out a February to October decline in active employment greater than 2.3 percentage points (4.7%). This is a startling result, given the scale of the employment loss in April. We interrogate the robustness of the result as follows:

1. Close to full employment recovery in October is consistent with the partial recovery we saw in NIDS-CRAM from April to June. However the nature of the recovery seems to have changed. Between April and June the active employment recovery was mainly due to decreases in temporary unemployment categories (paid leave and temporary layoffs). The June to October recovery is substantially driven by decreases in non-employment.

2. The substantial employment recovery is not yet apparent from the 2020 Quarterly Labour Force Surveys (QLFS), which cover January to September. The QLFS results for quarter 4 will be an important check on the main recovery result, given that it is possible that the NIDS-CRAM sample has experienced a faster recovery than the South African population at large. However, even if the employment recovery observed in NIDS-CRAM is more representative of the NIDS 2008 sampling frame than the 2020 population, this is still a recovery amongst a substantial part of the national population.

3. The employment recovery does seem consistent with monthly production data released by Statistics South Africa. This data suggests that important sectors of the South African economy were making October 2020 sales at or above their February 2020 levels. These sectors were however typically below their equivalent positions in October 2019, raising the possibility that while employment has recovered close to February 2020 levels, October 2020 employment would have been higher in the absence of a pandemic.

4. The recovery does not seem to be driven by an increase in part-time rather than full-time work.

5. The recovery does not seem to be peculiar to our “active employment” definition. If we use a

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1 As in the earlier papers, we do not attempt to separate the economic impact of the pandemic from that of lockdown.
2 On the other hand, employment definitions and reporting periods in the QLFS do not exactly match NIDS-CRAM, making comparison somewhat approximate. Additionally, Statistics South Africa has not released sufficient detail on its sampling approach and attrition adjustments for us to be confident about the national representativeness of their 2020 sample.
more standard employment definition by collapsing our “active employment”, “paid leave” and “temporary layoff” categories into a “broad employment” category, our point estimate of the proportion of the adult population which is “broadly employed” is only 0.79 percentage points (1.4%) lower in October than February, and this difference is not statistically significant. At the 95% confidence level we can rule out a decline greater than 2.96 percentage points (5.28%). Similarly, estimates from a concurrent analysis (Casale and Shepherd, 2021) show a decline of just 0.7 percentage points, or 1.24%, of broadly defined employment for 18-64 year old adults between February and October, again not a statistically significant difference.

6. A survey of the existing literature shows that quick labour market recoveries are not unheard of. In other developing countries where labour market data is available for April and for subsequent months, evidence has pointed to a steady but incomplete recovery between April and June (ECLAC/ILO (2020) for Colombia, Mexico, Bolivia and Brazil) or August (Abraham et al. (2021) for India and Schotte et al. (2021) for Ghana). By June, Uruguay’s employment rate had returned to a level only 2 percentage points lower than that of June 2019 (ECLAC/ILO, 2020). Consistent with results from the first two waves of NIDS-CRAM (Jain, Bassier, et al., 2020), ECLAC/ILO (2020) find that the initial employment recovery in Latin America came primarily from temporarily non-employed workers rather than from those who reported having fallen into unemployment. These findings are consistent with both the nature and trajectory of the labour market recovery we observe in South Africa.

Our overall evaluation of the evidence is that the substantial labour market recovery evident in NIDS-CRAM Wave 3 does look real. It is of course possible (and is perhaps likely) that employment may have since declined again due to the Coronavirus resurgence and associated lockdown at the end of 2020 and beginning of 2021.

The NIDS-CRAM data also suggests that the October employment recovery was disproportionately driven by a dramatic increase in the number of service and sales jobs in October. At this stage we regard this as just a tentative finding, because we find only mixed confirmatory evidence from other sources. If the recovery has indeed been driven by an unusual increase in services and sales jobs, this may have long-run consequences for the structure of the South African economy.

Other results

1. The NIDS-CRAM data suggests that earnings may have slightly increased for those workers who were employed in both February and October. This is again a tentative result, however, due to noise in the earnings variables. We are reasonably confident that earnings did not decrease for those individuals who were employed in both February and October.

2. The Social Relief of Distress (SRD) grant had substantial coverage among those who were employed in February and non-employed in October. About 40% of these job-losers were part of a household which received at least one SRD grant. Indeed the SRD grant had wide coverage across all adults in October – about 35% of adults were in a household which received the SRD grant. The SRD grant has become a major new part of the South African social assistance environment.

This update is not intended as a stand-alone paper: For details on context, sampling, data, definitions and for an in-depth discussion on findings from previous waves of NIDS-CRAM data, readers are referred to the papers on which this update builds (Jain, Bassier, et al., 2020; Jain, Budlender, et al., 2020) and to the NIDS-CRAM User Manual (Ingle et al., 2020).

1. Employment

Our main finding in this paper is that active employment in October has recovered dramatically since its low-point in April 2020, with active employment in October being statistically indistinguishable from February pre-pandemic levels. This is a startling result, given the scale of the employment loss
in April. In this section we first present the result and then discuss a variety of robustness checks which lead us to be reasonably confident in the finding. We conclude with a discussion of the possible source of the employment recovery, though this last part of the analysis remains tentative.

Our analysis in this section uses the same employment typology as in Jain, Budlender, et al. (2020) and Jain, Bassier, et al. (2020), which divides the adult population into the “actively employed”, “paid leave”, “temporarily laid-off”, and “non-employed.” This typology, useful for analysis of pandemic conditions and necessary for comparisons to NIDS-CRAM February data, differs from standard employment definitions. In particular, our “non-employed” category includes both the unemployed and the not economically active in standard definitions, while the standard “employed” category will include the bulk of those we categorise as on “paid leave” or “temporarily laid-off”.

1.1. Employment recovery: main result

In Figure 1 Panel (a) we show the time series of different employment statuses as a percentage of working-age adults. Panel (b) presents the same information in bar chart forms, with the additional benefit of highlighting June to October and February to October changes. The results in Figure 1 are purely cross-sectional, depicting a snapshot of the population in each period.

Figure 1 shows a close to complete labour market recovery between February and October, with the proportion of adult “active employment”, “paid leave”, “temporary lay-off” and “non-employment” almost exactly the same in February as in October. Panel (b) indeed shows that differences between these periods are not statistically significant, with the point estimate being a decline of 0.08 percentage points (0.15%). It should be noted, however, that the confidence intervals on the active employment rate estimates for February and October cannot not rule out a February-October decline of up to 2.29 percentage points (4.73%) (or an increase of up to 2.14 percentage points (4.22%)) in the active employment rate over these periods.

However, a simple comparison between February and October would, of course, hide a very tumultuous year, with significant changes occurring between February, April, June and October.

Between February and April 2020 we observed a 21 percentage point net decline in active employment (green line in Figure 1). Almost half of this decline was accounted for by shifts into non-employment (dashed red line), while the remainder was accounted for by shifts into either “paid-leave” or “temporary layoffs” (yellow and orange lines respectively).

In June we observe that, compared to April, there was an 10 percentage point gain in net active employment. This partial recovery came almost entirely from a reduction in the percentage of adults in the “paid leave” and “temporary layoff” categories. There was little change in levels of non-employment between April and June. To the extent that there was a recovery by June, this appears to have benefited primarily those who maintained a live employment relationship. It is worth noting that this partial recovery in June is not evident using standard employment definitions, which collapse the bulk of the “paid leave” and “temporary lay-off” categories into the “employed.”

By October we observe a further increase in net active employment of 10 percentage points compared to June. Unlike the April-June recovery, the June-October increase in the proportion of adults in active employment appears to come primarily from a correspondingly large decrease in the proportion of adults reporting no employment relationship. While there is some small decrease in the number of adults reporting being on paid or unpaid leave, this decline contributes only slightly to the overall recovery.

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3 The definitions are as follows: 1. “Active employment”: Engages in economic activity for profit or pay (reports positive workdays). 2. “Paid leave”: Reports an active employment relationship and earns labour income, but works zero days. 3. “Temporary lay-off”: Reports an active employment relationship or job to return to, but works zero days and reports zero earnings. 4. “Not employed”: Not engaging in any economic activity for pay or profit, whether willing to accept work or not. See Jain, Budlender, et al. (2020) for details.

4 See Ranchhod and Daniels (2020a) and Jain, Bassier, et al. (2020) for discussion.
**Figure 1: Employment Status for Working-Age Adults (18-64 years) over four periods**

(a) Adult employment status proportions

(b) Adult employment status proportions and October changes

Notes: Both panels of the figure show the percentage of working-age adults in the following employment status categories: “Active employment”, “Paid leave”, “Temporary layoff” and “Not employed”. In Panel (b), the four groups of bars on the left indicate the proportion of adults by their employment status in four different periods: for February (before the lockdown), for April (during lockdown level 5), for June (following a relaxation of lockdown measures to level 3), and for October, (after a further relaxation of lockdown measures to level 1). The groups of bars on the right show corresponding net change (in percentage points) in working-age adults in each category (accounting for both inflows and outflows) for: June to October and February to October. Note that the “Not employed” category includes those not economically active. We use all valid observations in each NIDS-CRAM wave, including the top-up sample in Wave 3. Observations are not restricted to a balanced panel. Standard errors are clustered and stratified following the survey design. Estimates are weighted using the survey design weights which include adjustments for the Wave 3 top-up sample.
In sum, the labour market recovery observed between June and October seems to have brought employment levels approximately back to where they were in February, prior to the onset of the COVID-19 pandemic and the economic restrictions imposed at the end of March. The growth of the proportion of working age adults in “paid leave” and “temporary layoff” categories which was observed in April has disappeared. It is worth noting though, that since October, South Africa has experienced a second wave of infections and the re-imposition of some economic restrictions – what effect this second wave has had on the labour market will be investigated using further waves of NIDS-CRAM data.

1.2. Employment recovery: robustness

Because the full recovery is so startling, we carefully consider the credibility of the result.

1.2.1 Internal consistency

Firstly, we note that the pace of recovery between June and October is consistent with the pace of recovery we observe from April to June. Active employment recovered by 10 percentage points between April and June, or equivalently by 33% of April employment. The equivalent figures for June to October are 10 percentage points or 25% of June employment, and this over a notably longer time period. As noted above the nature of the recovery changed between April-June and June-October, but the scale of active employment recovery appears reasonable.

The recovery does not seem to be peculiar to our “active employment” definition. If we use a more standard employment definition by collapsing our “active employment”, “paid leave” and “temporary layoff” categories into a “broad employment” category, our point estimate of the proportion of the adult population which is “broadly employed” is only 0.79 percentage points (1.4%) lower in October than February, and this difference is not statistically significant. At the 95% confidence level we can rule out a decline greater than 2.96 percentage points (5.28%).

Similarly, estimates from a concurrent analysis (Casale and Shepherd, 2021) show a decline of just 0.7 percentage points, or 1.24%, of broadly defined employment for 1864 year old adults between February and October, again not a statistically significant difference.

We additionally check the robustness of the results using a number of different weighting schemes, restricting to a balanced panel, or plotting full-time equivalent work (based on days worked in the week) rather than the count of the employed. Our results are robust across these specifications. We now compare our results to what can be found using alternative data sources.

1.2.2 Comparison to the QLFS

A natural first point of comparison is Statistics South Africa’s Quarterly Labour Force Survey (QLFS). The substantial employment recovery we observe in NIDS-CRAM is not yet apparent from the 2020 QLFS, which at the time of writing has only been released for the first three quarters of the year, covering January to September (Appendix Figure A2). The QLFS results for quarter 4 will be an important check on the main recovery result. It is possible that the NIDS-CRAM sample has experienced a faster recovery than the South African population at large. The NIDS-CRAM sample is representative of the NIDS sampling frame, which itself is representative of the 2008 South African population, rather than the 2020 population. At first glance it therefore seems concerning that the April to June recovery we observe in NIDS-CRAM is not evident in the released QLFS Q3 data (Appendix Figure A2), despite NIDS-CRAM and the QLFS matching well when it comes to the February–April decline in employment (Jain, Bassier, et al., 2020). However we are not overly concerned about this apparent discrepancy. Recall that the bulk of the recovery in June was due to shifts out of temporary unemployment categories, which are not evident when using a standard employment definition like is used for the QLFS. A lack of clear recovery in the QLFS Q3 data therefore does not necessarily contradict the NIDS-CRAM time series, and we await the Q4 results. In any case, however, Statistics South Africa has not released sufficient detail on its sampling

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5 See Ranchhod and Daniels (2020b) for discussion of the comparability of these samples.
approach and attrition adjustments for us to be confident about the national representativeness of their 2020 sample – and even if the employment recovery observed in NIDS-CRAM is more representative of the NIDS 2008 sampling frame than the 2020 population, this is still a recovery amongst a substantial part of the national population.

1.2.3 Monthly production data

With few other publicly available sources of employment data, we now turn to relatively high frequency (monthly) production and sales data released by Statistics South Africa.

These data, available for selected industries, come from firm surveys and are used for Statistics South Africa’s GDP calculations. These data suggest that by October, important sectors of the South African economy – Mining, Manufacturing, Wholesale, and Retail – were making October 2020 sales at or above their February 2020 levels (Figure 2 Panel (a)). This suggests that certain sectors had substantially recovered by October, and is consistent with the employment recovery we see in Wave 3 of NIDS-CRAM. There is of course significant heterogeneity in sectoral recoveries, with the Tourism and Prepared Food and Beverages sectors still insufficiently recovered compared to February. Panel (b) shows, however, that even for relatively recovered sectors, most were still somewhat below their equivalent 2019 incomes. This raises the possibility that while employment has recovered to February 2020 levels, October 2020 employment would have been higher in the absence of a pandemic. This would be both for seasonal reasons – evident from comparing Panels (a) and (b) in Figure 2 – and also because in general one expects some growth in sales and employment over time. These factors are both evident in Appendix Figure A2, which shows that Q3 and Q4 employment is usually higher than Q1 employment for a given year.

1.2.4 International comparisons

A survey of the recent literature on the labour market impact of the pandemic shows that several other developing countries are experiencing labour market recoveries following the initial downturn in April. In countries where labour market data is available for April and for subsequent months, evidence has pointed to a steady but incomplete recovery between April and June (ECLAC/ILO (2020) for Colombia, Mexico, Bolivia and Brazil) or August (Abraham et al. (2021) for India and Schotte et al. (2021) for Ghana). By June, in Uruguay, which was one of the least affected countries in Latin America, the employment rate had returned to a level only 2 percentage points lower than that of June 2019 (ECLAC/ILO, 2020). Consistent with results from the first two waves of NIDS-CRAM (Jain, Bassier, et al., 2020), ECLAC/ILO (2020) find that the initial employment recovery in Latin America came primarily from temporarily non-employed workers returning to work rather than from those who reported having fallen into unemployment. These findings are consistent with both the nature and trajectory of the labour market recovery we observe in South Africa.
**Figure 2: Value of monthly sales, various industries**

*(a) Sales by month relative to February 2020*

![Graph showing monthly sales by industry, relative to February 2020.](image)

*(b) Sales by month relative to same month in 2019 (% year-on-year change)*

![Graph showing year-on-year percentage change by month, comparing 2020 to 2019.](image)

**Notes:** Figure shows the value of monthly sales by industry, using Statistics South Africa's P2041, P3041.2, P6141.2, P6242.1, P6343.2, P6410 and P6420 time series. Panel (a) shows sales for each industry relative to a February 2020 benchmark, while Panel (b) shows the year-on-year percentage change for each industry by month, comparing 2020 to 2019. The “Total” category is an aggregation of all the industries presented in the figure, and is not equivalent to total sales in the South African economy. The grey density shows daily reported COVID-19 cases, smoothed using a 7-day moving average, from covid19sa.org. Vertical lines indicate the reporting months of the various NIDS-CRAM waves. Sales are “current, actual” figures from the Statistics South Africa sources and are deflated using headline CPI.
It is worth noting that both ECLAC/ILO (2020) and Abraham et al. (2021) show that in Latin America and in India, the labour market recovery has been driven in large part by an increase in self-employment, with concerning implications for job quality. Abraham et al. (2021), for instance, provide evidence of high rates of transitions into self-employment among formerly salaried workers.

1.3. Nature of the recovery

Figure 3 illustrates the net percentage recovery in active employment between June and October, represented as a proportion of the February and June employment loss. The first vertical bar indicates that the net increase in actively employed adults between June and October was 99% of the net decrease in adult active employment between February and June – in other words, the net recovery in active employment between June and October was very near to complete.

Figure 3 also shows the extent to which this active employment recovery was driven by decreases in the “paid leave”, “temporary layoff” and “not employed” categories in June. The first column shows that 70 percentage points of the 99 percent recovery were due to the net decrease in the size of the non-employed category, while 14 and 15 percentage points were respectively due to the net decreases in temporary layoffs and the prevalence of adults reporting being in paid leave. It is worth noting that an equivalent figure in Jain, Bassier, et al. (2020) illustrated that very little of the recovery of active employment observed between April and June had come from shifts out of the non-employed category: an important and encouraging difference between the labour market recoveries experienced between April-June versus June-October is the decline in the proportion of adults in nonemployment in the latter period.

Figure 3: Composition of June to October Net Active Employment Recovery, by Worker Characteristics

Notes: The figure shows the net gain in active employment between June and October, as a percentage of the February to June loss in active employment. For each bar, the percentage point active employment gain due to net decreases in “Paid leave”, “Temporary layoff” or “Not employed” is shown. These sub-components sum to the total recovery for the demographic group. Estimates are weighted using the survey design weights which include adjustments for the Wave 3 top-up sample.

6 Employment loss is defined as a transition out of active employment into one of the following employment status categories: “paid leave”, “temporary layoff” and “not employed”.

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The pattern in worker heterogeneity consistently accord with what we have come to expect – the most vulnerable have smaller recoveries – though as Figure A3 shows, wide confidence intervals mean that we sometimes do not find statistically significant differences across worker heterogeneity groups. A notable exception is that the recovery seems to have been markedly quicker in rural areas, but we do not take a strong position on this due to concerns about the quality of the rural/urban variable in NIDS-CRAM. Formal versus informal heterogeneity is difficult to interpret because the variable comes from NIDS Wave 5 (2017), and many NIDS-CRAM respondents do not report formal/informal status in NIDS Wave 5 – and in fact the October recovery is lower than 100% for the subpopulation of NIDS-CRAM adults who do report formal/informal status in 2017, as is evident from Figure 3.

The most striking finding when it comes to recovery heterogeneity is that the recovery seems to have been substantially driven by a dramatic increase in the number of what Jain, Budlender, et al. (2020) and Jain, Bassier, et al. (2020) call “Service/Operators” jobs between February and October, while “Manual” and “Professional” occupations have not fully recovered to their February levels. Figure 4 shows the time-series of active employment by the 9 occupation categories available in NIDS-CRAM, with “Professional” jobs in blue, “Service/Operators” jobs in green, and “Manual” jobs in red. If this apparent change in occupational structure does reflect the underlying reality, it has the potential to have long-run consequences for the structure of the South African labour market. However, after interrogating the result more closely and for the reasons outlined in the following paragraphs, we are not confident that it reflects a true change in structure and present the result only tentatively.

We first check whether the occupation results are consistent with changes in industry structure in NIDS-CRAM. This is not a straightforward exercise because industry was not reported in the first wave of NIDS-CRAM. Wave 2 respondents who were not employed at the time of interview were however asked about their “usual” industry or the industry of their last employment, and we use this to impute industry status of the actively employed in Wave 1. This is however an imperfect solution, mainly because it seems that industry and occupation switching is an important dynamic which this approach misses. June to October industry changes should however be reliable. Appendix Figure A4 shows an equivalent version of Figure 4 but using industry rather than occupation classifications. It is difficult to reconcile the occupational recovery results with the industry results in Appendix Figure A4 – there does not seem to be a good correspondence between occupational recovery and the industries which make up a substantial part of those occupations.

Secondly, we similarly do not find strong confirmatory evidence for our occupation recovery results when using employment by occupation in the QLFS.

While both of these checks are imperfect, in different ways, the lack of corroborating evidence makes us hesitant to conclude too strongly about the startling occupational recovery result we see in NIDS-CRAM.

2. Earnings

Jain, Budlender, et al. (2020) presented evidence on earnings changes for individuals who had positive earnings in both February and April, both in aggregate and for heterogeneity categories. In general Jain, Budlender, et al. (2020) did not detect wage changes along this margin, and concluded that changes in employment seemed to be more important for understanding the impact of the pandemic on the labour market.
**Figure 4: Time series of active employment, by occupational category**

![Graph showing time series of active employment by occupational category](image)

**Notes:** The figure shows the time series of active employment by occupation in NIDS-CRAM, relative to February employment. For each wave, we use the occupation classification and weight released with that wave, and make no restrictions for a balanced panel. What we classify as “Manual”, “Services/Operators” and “Professional” occupations are shown in red, green and blue respectively.

Jain, Bassier, et al., 2020 did not present equivalent results for June, because while the median change in income was still very close to zero percent, and a majority of the sample had only small percent changes in earnings, a substantial proportion of individuals (over 10%) reported very large percent increases in earnings – which causes the mean earnings change to be skewed and unrepresentative. Jain, Bassier, et al., 2020 were unable to determine whether these large changes were legitimate or due to measurement error.

Using Wave 3, wage changes are more robust, and we are comfortable reporting these changes with the caveat that the data is still somewhat noisy. We repeat the analysis of Jain, Budlender, et al. (2020), but look at median rather than average changes. To be specific, **Figure 5** shows the median within-person change in earnings between February–October and June–October. Only those individuals earning an income in both periods form part of the data, and we present the median change in earnings, not the change in the median.

The results suggest that earnings may have slightly increased for those workers who were employed in both February and October, while there is no detectable change between June and October. The mean change between June and October is very similar to the median result we present, while the mean change between February and October diverges and does not look realistic. We therefore present these intensive-margin wage results tentatively, and conclude that we are reasonably confident that earnings did not decrease for those individuals who were employed in both February and October, but remain somewhat agnostic about the accuracy of a wage increase.
Figure 5: Intensive Margin Change in Earnings

(a) Median Change in Earnings for those paid in February and October

(b) Median Change in Earnings for those paid in June and October

Notes: The figure shows the median percentage change in earnings for those who earned incomes in both time periods shown. Note that this is not the change in median earnings, but the median change out of all individuals’ earnings changes over the periods under consideration. Panel (a) shows the median change between February and October (for those individuals with non-zero earnings in February and October), while Panel (b) shows the median change between June and October (for those individuals with non-zero earnings in June and October). In both panels, the first red point shows the median change for all workers with earnings in both periods, while subsequent rows show the earnings loss by worker characteristics. Lines correspond to the labels on the y-axis – that is green points correspond to the first category and blue points correspond to the second bracketed category. For the occupation disaggregation we only include workers who stay in the same broad occupation category in February and October. Only lines indicate 95% confidence intervals. Earnings are deflated using Statistics South Africa’s headline CPI rates. Estimates are weighted using the survey design weights which exclude the Wave 3 top-up sample. Standard errors are approximate and do not account for survey clustering and stratification.

3. Social protection

3.1. Social protection coverage in October

In Figure 6 Panel (a) we show the extent to which those who were employed in February and non-employed in October were covered by various forms of social protection. This group represents 10% of the adult population. The figure focuses on coverage through the Social Relief of Distress (SRD) grant, distinguishing this from coverage by any other social grant within the household. We find that, overall, around 20 percent of workers who were actively employed in February but not employed by October did not receive any grant in their household in October. However, 40 percent of these
individuals were part of a household which received at least one SRD grant, illustrating that the SRD grant had substantial coverage among job losers by October. Nevertheless, in terms of reach on the extensive margin, South Africa’s established pre-covid grant system remains crucial and accounts for the majority of those covered by social protection.

As in June, the SRD grant remained progressively targeted in October – almost 50% of job losers in the bottom two quartiles of the February earnings distribution were covered by household SRD grant receipt, compared to 28% in the third quartile and almost none in the top quartile.

In Figure 6 Panel (b) we extend the analysis of social protection coverage to include all adults and not merely job losers (as in Panel (a)). Social protection receipt is again defined at the household level, and categories of social protection coverage are as follows: no protection, SRD grant only, CSG only, both the SCG and SRD grant, CSG and/or SRD and another grant, and other grants only.

Figure 6 Panel (b) shows that the SRD grant had wide coverage across all adults in October – about 35% of adults were in a household which received the SRD grant. Alongside the CSG, the SRD grant provides very broad social protection coverage of the South African population – in October, 65% of South African adults are estimated to reside in a household which received a CSG or SRD grant, or both. Thanks to this broad coverage and the coverage complementary between the CSG and the SRD grant (Bassier et al., 2020), the SRD grant has become a major new part of the South African social assistance environment.

Overall, social protection coverage is progressively targeted, with much higher coverage in the bottom two quartiles of the February earnings distribution than in the third or (especially) the forth quartile. Overall coverage is also higher among rural populations, among women and among manual and informal workers, reflecting both demographic features of grant eligibility as well as the general progressiveness of the social assistance architecture.
**Figure 6: Social assistance coverage**

(a) Social assistance coverage for job losers

(b) Social assistance coverage for all adults

Notes: The figure shows the proportion of adults covered by various forms of social assistance in October. In both panels, receipt of social protection is defined at the household-level – that is, the percentage of adults who reside in a household which has a member receiving different forms of or combinations of social assistance, as indicated in the figure labels. Panel (a) shows social assistance received by individuals who were in active employment in February and were not employed in October. The figure distinguishes household coverage by the Social Relief of Distress (SRD) Grant and coverage by any other form of social protection. SRD coverage means at least one household member receives the SRD in June. “Other protection” means receipt of a non-SRD social grant within the household. For occupation we use the NIDS-CRAM Wave 1 variable. Panel (a) estimates are weighted using the survey design weights which exclude the wave 3 top-up sample. Panel (b) shows social assistance received in October by all adults, differentiated by various sup-populations and receipt definitions. The category “Other grants only” is applicable to individuals in households which receive at least one grant but no SRD or CSG grants. For occupation we use the NIDS-CRAM Wave 3 variable. We use all valid observations from NIDS-CRAM Wave 3, including the top-up sample. Panel (b) estimates are weighted using the survey design weights which include adjustments for the Wave 3 top-up sample.
REFERENCES


Appendices

A Additional figures

Figure A1: Individual Employment Transitions from June to October

Notes: The figure shows the job status transition patterns of individuals who in June were in one of the following employment status categories: “Active employment”, “Paid leave”, “Temporary layoff” and “Not employed” (left to right groups across the figure). For each group, employment status categories in October are represented by the colored bars. Within each group, the differently coloured bars sum to 100. While Figure 1 shows the net change in employment, this figure shows employment transitions for individuals. We use a balanced NIDS-CRAM Wave 2 and Wave 3 panel and estimates are weighted using the survey design weights which exclude the Wave 3 top-up sample. Standard errors are clustered and stratified following the survey design.
Figure A2: QLFS employment trends 2010-2020, relative to Q1 employment of each year

Notes: The figure shows the number of employed individuals in each quarter of the Quarterly Labour Force Surveys (QLFS), indexed relative to employment in Q1 of that year. The data depicted covers 2010Q1 to 2020Q3. The figure uses the sampling weights released with each wave’s data from Statistics South Africa.
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Figure A3: Heterogeneity in employment rates

(a) October vs June

(b) October vs February

Notes: The figure shows the net percentage change in employment between periods along various worker characteristics. Panel (a) shows this change between June and October (as a percentage of active employment in June) while Panel (b) shows this change between February and October (as a percentage of "active employment" in February). "Active employment" denotes positive days of work; Any income denotes any wage (either actively employed or on paid leave); and any job denotes any employment relationship ("actively employed", "paid leave" or "temporarily laid off"). We use a balanced NIDS-CRAM Wave 2 and Wave 3 panel and estimates are weighted using the survey design weights which exclude the Wave 3 top-up sample. Standard errors are clustered and stratified following the survey design.
**Figure A4: Time series of active employment, by industry category**

Notes: The figure shows the time series of active employment by industry in NIDS-CRAM, relative to February employment. For Wave 2 and 3, we use the occupation classification and weight released with that wave, and make no restrictions for a balanced panel. Industry was not reported in Wave 1, so for February and April we backwards-impute Wave 2 industry to Wave 1 (Wave 2 did ask for the usual employment of those currently unemployed). Due to attrition between Wave 1 and Wave 2, our Wave 1 figures are weighted using the Wave 2 weights, so that they sum up to equivalent population aggregates as in Wave 2 and Wave 3. We show changes from February to April and June with dashed lines to indicate the approximate nature of these shifts, caused by the necessity of backwards imputation.

**Figure A5: Receipt of Social Relief of Distress Grant in October 2020**

Notes: The figure shows receipt rates of the SRD grant across per capita household income deciles, for different sup-populations and receipt definitions. The dashed blue line shows household-level receipt rates for all adults – that is, the percentage of all adults in each income decile residing in a household which has a member receiving the SRD grant. The red line shows individual-level receipt rates for all adults – that is, the percentage of all adults in each income decile directly receiving the SRD grant. The dashed green line shows individual-level receipt rates for only those adults who are eligible for the SRD grant. We approximate eligibility as being non-employed or on unpaid leave for at least one period across the NIDS-CRAM panel, and no direct grant receipt in Wave 3. We use all valid observations NIDS-CRAM Wave 3, including the top-up sample. Estimates are weighted using the survey design weights which include adjustments for the Wave 3 top-up sample.
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