



# Employment uncertainty in the era of COVID-19: Evidence from NIDS-CRAM and the QLFS

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# Employment uncertainty in the era of COVID-19: Evidence from NIDS-CRAM and the QLFS

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## Abstract

This paper conducts an analysis of employment uncertainty and trends in South Africa during the first year of the COVID-19 pandemic, using NIDS-CRAM and five waves of Statistics SA's Quarterly Labour Force Survey (QLFS: 2020-Q1 to 2021-Q1). We find that much of the differences in estimates of labour force states including employment, unemployment and not economically active, are due to different initial conditions and different reference periods between the two surveys, as well as the way that uncertain job attachment is measured in the questionnaires. This leads to higher estimates of employment in NIDS-CRAM compared to the QLFS for both a pre-pandemic baseline and over the entire period investigated (February 2020 to March 2021). This implies the two data sources are not strictly comparable, but rather complimentary when analysing different aspects of the labour force. We discuss the implications for labour market research based on these data sources.

**Keywords:** labour market statistics, questionnaire design, labour force status determination, COVID-19 lockdowns

**JEL Codes:** J21, J23, J63

## **1. Introduction**

This paper conducts an analysis of labour force states in South Africa (SA) during the first year of the COVID-19 pandemic, including those in employment – at work and not at work (with known & uncertain job attachment), and those who are not employed (unemployed – narrow (searching) and broad (discouraged), plus not economically active). Due to the impact of Government imposed lockdowns, which have included regulations that sometimes prohibit or restrict the normal operation of selected legal industries, the labour market has become precarious for many occupations. When such uncertainty exists, the measurement of labour force states becomes complicated by changes to regulations that directly affect labour force participation and non-participation. The objective of this paper is to critically assess how well we can understand what happened in the labour market in SA during the first year of the COVID-19 pandemic using the National Income Dynamics Study: Coronavirus Rapid Mobile Survey (NIDS-CRAM) and the Quarterly Labour Force Survey (QLFS).

Labour force states frequently undergo scrutiny in terms of their definitions, an effort led by the International Conference of Labour Statisticians (ICLS) and the International Labour Organisation (ILO). The definitions are consequential because they have a direct bearing on how employment and unemployment are defined and calculated. As Brandolini & Viviano (2019: 1) point out: ‘permanent, full-time work is increasingly replaced by multiple job spells, often intertwined with periods of non-employment and engagement in non-market activities...’ The onset of the COVID-19 pandemic has made the measurement of labour force states all the more complex as governments the world over have massively increased their regulation of the economy in an attempt to curb the spread of the disease.

Measuring labour force states using household surveys has a long tradition with excellent scholarship devoted to understanding the strengths, weaknesses and possible biases that are unavoidable in such endeavours (see Desiere & Costa, 2019). No survey instrument is without limitations, and it is the duty of both survey organisations and the research community to interrogate these to understand how the statistics may be correctly used. During the pandemic, survey efforts became complicated because of lockdown restrictions that prohibited data collection organisations from face-to-face contact, forcing transitions to telephonic modes of data collection in a very short space of time. Data collection agencies had very little time to adapt, and this had important effects on

the timeliness and overall quality of the data. Acknowledging these constraints, the ILO published several guidelines for labour statistics data collection in the second quarter of 2020 (ILO, 2020a, 2020b, 2020c, 2020d), and we utilize those recommendations to guide our analysis of NIDS-CRAM and the QLFS.

To allow for comparisons to before the pandemic, the ILO (2020b) advised National Statistical Offices and labour force survey collectors not to change any definitions and methods of measurement of central headline indicators of the labour market. Rather, clarifications of questions were encouraged to consistently treat special cases and to allow for uncertainty about when or to what extent government-imposed restrictions would be eased or removed. The QLFS dealt with this by adding a new section at the end of the questionnaire asking about COVID-19 specific outcomes. NIDS-CRAM, on the other hand, was designed from the ground up to identify the impact of lockdowns associated with COVID-19 on the labour market, household welfare, early childhood development, education, health and selected other topics (see Spaul et al., 2020 for the Wave 1 NIDS-CRAM questionnaire). Consequently, there are important differences between the two instruments that affect point estimates about employment and unemployment.

While it is possible to glean sufficient information to determine broad aggregates like ‘employment’ and ‘unemployment’ rates with considerable precision in both surveys, the estimates will tell different stories about the labour market because of the different reference periods and job attachment information. NIDS-CRAM identifies labour force outcomes in a particular month that can be closely associated with specific lockdown levels: February 2020 (pre-COVID-19), April 2020 (Level-5 (L5) lockdown and Wave 1 of NIDS-CRAM), June 2020 (L3 lockdown and Wave 2 of NIDS-CRAM) October 2020 (L1 lockdown and Wave 3 of NIDS-CRAM), January 2021 (adjusted L3 lockdown and Wave 4 of NIDS-CRAM) and March 2021 (adjusted L1 lockdown and Wave 5 of NIDS-CRAM). The QLFS identifies labour force outcomes in the week preceding the respondent’s interview, with respondent interviews spread over each month of a three-month (quarterly) period. The employment rate therefore reflects the levels of the quarter, as opposed to NIDS-CRAM where it is the level for a specific month. This means the two data series are not strictly comparable. However, we argue that they are complimentary and shed light on different aspects of the labour market during the first year of COVID-19.

An important research question then becomes how the research and policy-making communities can understand what happened to labour force states and trends in SA using these two surveys. We answer this important research question below. The rest of the paper proceeds as follows: firstly we discuss the ideal measurement of labour force states and the challenges confronted in household surveys. We then discuss the NIDS-CRAM and the QLFS samples, and the sources of sampling and non-sampling error in the two surveys, before turning to results for estimates of employment, unemployment, and not economically active labour force states in both instruments. The conclusion summarizes.

## 2. Measuring labour force states in the era of COVID-19

This section discusses how the measurement of labour force states has changed during COVID-19 due to the ILO’s recommendations to national statistical agencies about data production methods, given that many nations entered various forms of lockdown regulations which altered the world of work profoundly. We begin by tracing recent developments in employment statistics recommendations because important changes were made to official definitions of employment, depending on hours worked and whether workers were paid or not. These two issues turn out to be instrumental to understanding the labour market during COVID-19.

### 2.1 Measuring employment, unemployment, and not economically active (NEA)

Labour market statistics firstly must distinguish between various forms of work – whether paid or voluntary – and how that translates back to the System of National Accounts (SNA), which also provide estimates of employment (non-agricultural employment in the case of the SA Reserve Bank).

Figure 1. Forms of work and the System of National Accounts 2008

<i>Intended destination of production</i>	<i>for own final use</i>		<i>for use by others</i>				
	<i>Forms of work</i>	Own-use production work		<b>Employment</b> (work for pay or profit)	<b>Unpaid trainee work</b>	<b>Other work activities</b>	<b>Volunteer work</b>
of services		of goods	in market and non-market units				in households producing goods
<i>Relation to 2008 SNA</i>			Activities within the SNA production boundary			Activities inside the SNA General production boundary	

Source: ILO (2013).

Figure 1 provides an illustration of forms of work and their relationship to the SNA. In this diagram, the form of work identified as ‘employment’ sets the reference scope of activities for labour force statistics, while the concept ‘labour force’ refers to the current supply of labour for the production of goods and services in exchange for pay or profit (ILO, 2013: 3). Given this definition of employment, labour market statistics must also capture those defined as unemployed (both narrow and broad), as well as those outside the labour force. Persons outside the labour force are those of working age who were neither in employment nor in unemployment in the reference period (ILO, 2013: 4). The three categories of labour force status are mutually exclusive and exhaustive, but the ‘working age’ population is allowed to be flexibly determined by countries to be sensitive to local context. In SA (and much of the rest of the world), the convention is to define those of working age, also known as the economically active population (EAP), as 15-64 year olds.

An important change to employment statistics was recommended by the ICLS in 2013, where Resolution 1 concerning statistics of work, employment and labour underutilization, narrowed the definition of employment to ‘work for pay or profit’. The narrower definition aimed to meet the demand for more targeted indicators to monitor access to employment opportunities that generate an income, and to inform the design and evaluation of policies aimed at job creation, promoting entrepreneurship, and reducing gaps in labour market participation between population groups (ILO, 2013).

As Benes & Walsh (2018) point out, in contrast with the previous standards, work activities that contribute to production but are not done in exchange for remuneration, such as own-use production work, volunteer work and unpaid trainee work, were no longer included within the concept of employment. This led to the need to revise survey questionnaire sequences to establish a boundary with work activities that are not done in exchange for remuneration. In the case of own-use production of goods in Figure 1 above, the new standards recommended using the ‘main intended destination of the output’ as a key criterion, where an activity is considered as ‘employment’ if done for pay or if the main intended destination of the output is for sale or barter (i.e. market-oriented production); by contrast, the activity is considered as ‘own-use production work’ (and thus excluded from employment), if the main intended destination of the output is for final use by the producer or by family members (ibid: 9).

It is interesting to note that after this ICLS 2013 recommendation, the ILO embarked upon a multi-year, multi-country pilot study in 2015 to test how different sequences of questions could be framed to identify persons employed, including using cognitive interviewing tests as well as different question combinations and sequences. This led to several reports with suggestions for questionnaire design to national statistical agencies undertaking labour force surveys. Statistics South Africa (SSA) have over the course of the Labour Force Survey and QLFS adjusted their questionnaires to take these recommendations into account. However, during COVID-19 a new set of recommendations were published by the ILO to guide data collection of labour force surveys.

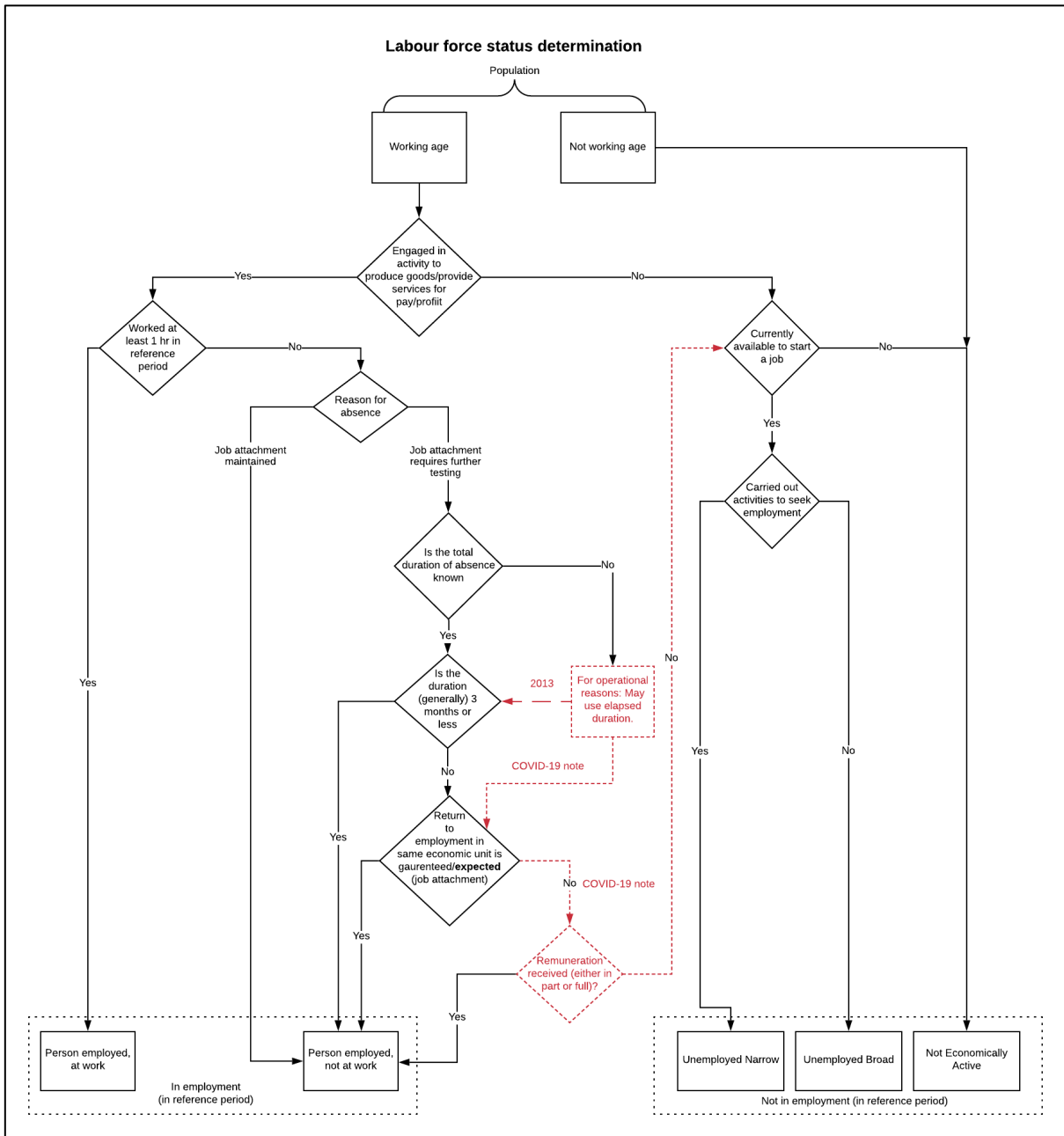
## ***2.2 ILO Recommendations for data collection during COVID-19***

During 2020, the ILO published four guidelines for data collection and questionnaire design for labour market statistics (ILO 2020a, 2020b, 2020c, 2020d). This was due to the impact of lockdown regulations across most of the world in an effort to curb the spread of COVID-19, which inhibited data collection agencies from going into field to conduct face-to-face surveys – the most common survey mode for most labour force surveys across the world. Recommendations for questionnaire design were made to better capture new labour market states like ‘working from home’ and temporary business closures, with or without pay.

Figure 2 provides a schematic representation of the process that data production agencies could use to accurately identify labour force states using carefully created questionnaires (created from a combination of ILO 2013 & 2020b). In order to understand the impact of lockdowns on employment, a key part of the determination of employment status is understanding the ‘reason for absence’ in the diagram. Examples of ‘job attachment is maintained’ include sick leave (due to own illness/injury); public holidays; vacation/annual leave; maternity/paternity leave (as specified by legislation); and not working due to working time arrangements or because it is the typical nature of the work. Examples where ‘job attachment requires further testing’ include parental leave; educational leave; care for others; other personal absences/leave; strikes/lockouts; reduction in economic activity (e.g. temporary lay-off, slack work); disorganization /suspension of work; mandatory leaves; furlough; layoff; lack of client, capital or materials; government lockdown; quarantine; disaster; and insecurity (ILO, 2013 & ILO, 2020b).



Figure 2. Determining labour market states & uncertain job attachment (UJA)



Source: Adapted from ILO (2013) & ILO (2020b).

If job attachment is not maintained, the dashed lines in the diagram denote a pathway that the authors identify as pointing to uncertainty in the determination of ‘Person employed, not at work’, which potentially leads to respondents being filtered into the unemployment / NEA section of the questionnaire. This happens if respondents say they worked zero hours worked and received zero remuneration, which would not capture all furloughed workers if it was due to lockdown regulations that prohibited or restricted an industry from operating for a limited amount of time, but that intended to reopen after

restrictions were lifted. In this paper, we call this employed group those with Uncertain Job Attachment (UJA), which corresponds to the ‘Job attachment requires further testing’ group in Figure 2.

The differences in the questionnaire design of NIDS-CRAM and QLFS is included in Appendix Table 1. Important to note is that in NIDS-CRAM, it is not possible to calculate narrow (searching) or broad (discouraged) unemployment rates for February 2020, because of space constraints in the questionnaire and the fact that February was used only as a reference month for the pre-pandemic employment baseline.

Compared to the QLFS, the labour market section of the NIDS-CRAM questionnaire is much shorter by design. This is because it is not designed to only capture labour market information, but also household welfare and grants, education, mental and physical health, as well as public opinion on various aspects of COVID-19. When it comes to labour market statistics then, the key constructs of employment, unemployment and NEA are the main foci, with no emphasis devoted to measuring time-related under-employment in NIDS-CRAM (something that is possible to investigate in the QLFS).

Various authors writing about NIDS-CRAM labour market results dealt with defining ‘job attachment’ differently when estimating labour force outcomes (see Ranchhod & Daniels, 2020, 2021; Casale & Posel, 2020; Casale & Shepherd, 2020, 2021a, 2021b; Jain et al., 2020a, 2020b; Bassier et al., 2020; Espi et al., 2020, 2021a, 2021b). The approach that we recommend here is actually to deviate from the ILO’s flow of questions when using NIDS-CRAM. This is because when looking at the default definition of employment used in NIDS-CRAM, the people who are returning are included in the employed, regardless of whether they worked zero hours or had zero pay. Similarly, for the definition of UJA, (what many authors termed ‘furloughed’ for simplicity), those who are returning to a job in the next four weeks are included in ‘employed, not at work’, regardless of whether they worked zero hours or had zero pay, because job attachment is maintained. This is in contrast to the recommendations of the ILO in Figure 2 above, but is completely relevant given how lockdown restrictions were implemented in SA.

The reason we recommend this approach is because the zero hours and zero pay criterion was manifestly important during SA’s experience with lockdown regulations, which at times were highly restrictive – banning certain industries involved in international travel, inter-provincial travel, alcohol and tobacco sales and trading, while

restricting hours of operation (see Casale & Shepherd, 2021c for details of lockdown restrictions in each level for the reference employment months). This is a similar approach taken in Ranchhod & Daniels (2020, 2021), which is also similar to Casale & Posel (2020), Casale & Shepherd (2020, 2021a, 2021b, 2021c), and Espi et al. (2020, 2021a 2021b). The QLFS, however, filters out those returning to a job in over 3 months, and those who are unsure about when they will return, and those who receive zero pay from the ‘employed’ category if job attachment is not maintained.

However, the QLFS also has a specific section in the questionnaire devoted to understanding the impact of COVID-19 on the labour market (in section 5.10-5.19). The ILO (2020b: 4-6) has a special section on ‘Essential LFS statistics and data items during the COVID-19 pandemic’. The QLFS questionnaires cover everything that is recommended by the ILO, plus have additional questions specific to lockdowns, such as whether the respondent is not able to work due to lockdown regulations, whether they are working from home, whether the respondent has continued to earn a salary, whether the respondent will be returning to the same job or business after lockdown, and whether the respondent thinks they might lose their jobs / businesses in the next four weeks due to COVID-19 (see Appendix 1 for a comparison with NIDS-CRAM questions). These questions are only asked of respondents that have previously been identified as ‘employed’ in prior sections of the QLFS questionnaire.

### ***2.3 Changes to the survey mode***

Data collection efforts changed from face-to-face to telephonic interviews during COVID-19, which imposed new constraints on national statistical agencies – many of whom were ill-equipped to make the transition and had to contract in third-party service providers to undertake data collection using Computer Assisted Telephonic Interview (CATI) surveys. This was a situation that SSA confronted too at the beginning of lockdown level 5 at the end of March 2020, which imposed severe limitations on the movement of people. In SSA’s documentation it is apparent that they made the transition to CATI (possibly also utilizing a third-party service provider) on 19 March 2020, and have continued to use CATI (at least for the QLFS) since then.

The shift to a CATI-based survey also meant that the design of labour force surveys had to evolve. For SSA, they could no longer rotate 25% of the sample out of the survey, which they had done since the QLFS began. They also could not interview those in the sample without phone numbers, and had to change the final weights in the survey

to account for the bias induced by this (SSA, 2021). Since the QLFS changed to a fully longitudinal survey, it remains unclear how they adjusted the weights to newer population totals. Furthermore, since the QLFS is a survey of dwelling units, it remains unclear from existing survey documentation how SSA dealt with individuals and entire households moving out of dwelling units during 2020-2021, and the new people moving into them.

### **3. The NIDS-CRAM and QLFS samples**

In this section we discuss the samples utilized to estimate labour force states for both NIDS-CRAM and the QLFS. The NIDS-CRAM sample is much smaller because it is a sub-sample of the National Income Dynamics Study (NIDS) Wave 5. The Wave 1 sample size was 7073, but due to attrition between the waves the sample was topped up in Wave 3 in order to ensure that each wave of NIDS-CRAM had a cross-sectional sample size above 5,000, which was the critical threshold for achieving sufficient statistical power for efficient point estimates of nationally representative labour force states. Tables 1 and 2 below present the sample size for key demographic subgroups for NIDS-CRAM and the QLFS.

An important point to note in the sample for NIDS-CRAM is that the cell sizes become very small when disaggregated by key demographics like population group and age category. For Indian / Asian people in particular, the sample sizes are too small to be nationally representative for that population group as a whole. This was also found to be the case in NIDS, where survey participation for this population group was always the lowest and often led to researchers omitting that group from analysis.

One of the most important points to take home from an analysis of the sample of NIDS-CRAM is that due to the relatively smaller sample size, it is not fit for purpose when it comes to providing representative employment rates at any geographical level other than national (it is recommended that those authors who do use the data for provincial or more disaggregated geographical level analyses, must always display the standard errors of point estimates to demonstrate the variance about the estimates).

Table 1: Sample characteristics: NIDS-CRAM Waves 1 and 2 cross-sections

	Wave 1				Wave 2			
	# of obs.	Unweighted %	Weighted %	se	# of obs.	Unweighted %	Weighted %	se
Total	6378				5104			
<b>NIDS-CRAM sample</b>								
Original NIDS-CRAM Sample	6378	100.0	100.0	(0.0)	5104	100	100.0	(0.0)
Top-up Sample								
<b>Gender</b>								
Male	2530	39.7	47.9	(1.0)	2013	39.4	47.9	(1.2)
Female	3848	60.3	52.2	(1.0)	3091	60.6	52.1	(1.2)
<b>Population group</b>								
African/Black	5511	86.4	80.4	(2.4)	4453	87.2	80.7	(2.5)
Coloured	569	8.9	9.5	(2.3)	434	8.5	9.4	(2.4)
Asian/Indian	65	1.0	2.2	(0.7)	41	0.8	2.1	(0.7)
White	233	3.7	7.8	(1.0)	176	3.4	7.8	(1.1)
<b>Age category in wave</b>								
Youth (18-29)	1797	28.2	33.0	(1.0)	1434	28.1	32.9	(1.0)
Prime aged (30-49)	3563	55.9	48.3	(1.1)	2805	55.0	46.9	(1.2)
Older (50-64)	1018	16.0	18.7	(0.8)	865	16.9	20.2	(0.9)
<b>Highest level of education reported in 2020</b>								
< Matric	2997	47.4	42.1	(1.3)	2416	47.8	42.6	(1.4)
Matric	1534	24.2	23.3	(0.9)	1226	24.2	22.5	(1.0)
> Matric	1795	28.4	34.6	(1.3)	1415	28.0	34.9	(1.4)
<b>Location in wave</b>								
Traditional	1147	18.0	13.7	(1.0)	1387	27.9	21.6	(1.6)
Urban	4952	77.7	82.7	(1.1)	3428	69.0	75.8	(1.6)
Farms	273	4.3	3.6	(0.5)	151	3.0	2.6	(0.6)

Table 1 (continued). Sample characteristics: NIDS-CRAM Waves 3, 4 and 5 cross-sections

	Wave 3				Wave 4				Wave 5			
	# of obs.	Unweighted %	Weighted %	se	# of obs.	Unweighted %	Weighted %	se	# of obs.	Unweighted %	Weighted %	se
Total	5511				5051				5259			
<b>NIDS-CRAM sample</b>												
Original NIDS-CRAM Sample	4577	83.1	86.4	(0.7)	4330	85.7	86.5	(0.8)	4515	85.9	86.6	(0.8)
Top-up Sample	934	16.9	13.6	(0.7)	721	14.3	13.5	(0.8)	744	14.1	13.4	(0.8)
<b>Gender</b>												
Male	2187	39.7	48.2	(1.1)	1965	38.9	49.1	(1.2)	2047	38.9	48.5	(1.1)
Female	3324	60.3	51.8	(1.1)	3086	61.1	50.9	(1.2)	3212	61.1	51.5	(1.1)
<b>Population group</b>												
African/Black	4873	88.4	81.0	(2.5)	4468	88.5	81.4	(2.6)	4620	87.8	81.8	(2.2)
Coloured	429	7.8	10.1	(2.4)	394	7.8	9.9	(2.5)	440	8.4	9.1	(2.0)
Asian/Indian	41	0.7	2.2	(0.7)	36	0.7	2.2	(0.7)	39	0.7	2.2	(0.7)
White	168	3.0	6.6	(1.0)	153	3.0	6.6	(1.0)	160	3.0	6.9	(1.0)
<b>Age category in wave</b>												
Youth (18-29)	1713	31.1	31.1	(1.0)	1499	29.7	30.4	(1.1)	1540	29.3	30.1	(1.1)
Prime aged (30-49)	2792	50.7	48.1	(1.2)	2620	51.9	48.2	(1.2)	2730	51.9	48.1	(1.2)
Older (50-64)	1006	18.3	20.8	(0.9)	932	18.5	21.4	(0.9)	989	18.8	21.8	(0.9)
<b>Highest level of education reported in 2020</b>												
< Matric	2628	48.1	42.7	(1.3)	2391	47.7	43.0	(1.4)	2462	47.2	42.9	(1.4)
Matric	1353	24.8	22.9	(0.9)	1259	25.1	22.7	(0.9)	1305	25.0	22.9	(1.0)
> Matric	1482	27.1	34.4	(1.3)	1358	27.1	34.3	(1.4)	1445	27.7	34.3	(1.3)
<b>Location in wave</b>												
Traditional	1513	28.6	21.4	(1.5)	1374	28.4	21.9	(1.6)	1374	27.5	21.1	(1.5)
Urban	3617	68.3	76.3	(1.6)	3319	68.6	75.9	(1.6)	3472	69.5	76.6	(1.6)
Farms	165	3.1	2.3	(0.3)	143	3.0	2.2	(0.4)	153	3.1	2.3	(0.4)

Notes: 1. For the cross-sections, the sample includes only people aged 18-64 in that wave. 2. All statistics are weighted with survey weights.

Table 2. Sample characteristics: QLFS 2020 Q1 and QLFS 2020 Q2

	2020 Q1 (%)				2020 Q2 (%)			
	# of obs.	Unweighted %	Weighted %	se	# of obs.	Unweighted %	Weighted %	se
Total	38276				26766			
<b>Gender</b>								
Male	17891	50.9	49.6	(0.3)	12191	49.5	49.6	(0.4)
Female	20385	58.0	50.4	(0.3)	14575	59.2	50.5	(0.4)
<b>Population group</b>								
African/Black	31438	82.1	80.5	(0.2)	22547	84.2	80.6	(0.2)
Coloured	3683	9.6	9.0	(0.1)	2074	7.7	9.0	(0.1)
Asian/Indian	806	2.1	2.7	(0.1)	539	2.0	2.7	(0.1)
White	2349	6.1	7.8	(0.1)	1606	6.0	7.7	(0.2)
<b>Age category</b>								
Youth (18-29)	12696	33.2	34.6	(0.3)	9028	33.7	34.4	(0.3)
Prime aged (30-49)	17225	45.0	46.8	(0.3)	11816	44.1	47.0	(0.3)
Older (50-64)	8355	21.8	18.5	(0.2)	5922	22.1	18.6	(0.3)
<b>Highest level of education</b>								
< Matric	21117	55.7	53.0	(0.3)	14342	54.1	51.6	(0.3)
Matric	11987	31.6	33.2	(0.3)	8624	32.5	34.2	(0.3)
> Matric	4808	12.7	13.8	(0.2)	3544	13.4	14.3	(0.2)
<b>Location</b>								
Traditional	11156	29.1	27.6	(0.1)	8778	32.8	27.5	(0.1)
Urban	25793	67.4	68.8	(0.1)	17172	64.2	68.4	(0.1)
Farms	1327	3.5	3.6	(0.1)	816	3.0	4.2	(0.1)

Table 2 (continued). Sample characteristics: QLFS 2020 Q3, QLFS 2020 Q4 and QLFS 2021 Q1

	2020 Q3 (%)				2020 Q4 (%)				2021 Q1 (%)			
	# of obs.	Unweighted %	Weighted %	se	# of obs.	Unweighted %	Weighted %	se	# of obs.	Unweighted %	Weighted %	se
Total	26717				27584				25764			
<b>Gender</b>												
Male	12167	49.4	49.6	(0.4)	12488	49.1	49.6	(0.3)	11611	48.8	49.6	(0.4)
Female	14550	59.1	50.4	(0.4)	15096	59.4	50.4	(0.3)	14153	59.5	50.4	(0.4)
<b>Population group</b>												
African/Black	22544	84.4	80.7	(0.2)	23418	84.9	80.8	(0.2)	21969	85.3	80.8	(0.2)
Coloured	2062	7.7	9.0	(0.1)	2009	7.3	9.0	(0.1)	1806	7.0	9.0	(0.2)
Asian/Indian	546	2.0	2.7	(0.1)	562	2.0	2.7	(0.1)	540	2.1	2.7	(0.1)
White	1565	5.9	7.6	(0.2)	1595	5.8	7.6	(0.2)	1449	5.6	7.5	(0.2)
<b>Age category</b>												
Youth (18-29)	8867	33.2	34.2	(0.3)	9065	32.9	34.1	(0.3)	8335	32.4	34.0	(0.4)
Prime aged (30-49)	11901	44.5	47.1	(0.3)	12257	44.4	47.1	(0.3)	11467	44.5	47.2	(0.4)
Older (50-64)	5949	22.3	18.7	(0.3)	6262	22.7	18.8	(0.3)	5962	23.1	18.9	(0.3)
<b>Highest level of education</b>												
< Matric	14434	54.4	51.8	(0.3)	14991	54.7	52.1	(0.3)	13800	53.9	51.0	(0.3)
Matric	8733	32.9	34.9	(0.3)	8950	32.7	34.6	(0.3)	8542	33.4	35.6	(0.4)
> Matric	3353	12.6	13.4	(0.2)	3445	12.6	13.3	(0.2)	3252	12.7	13.4	(0.2)
<b>Location</b>												
Traditional	8552	32.0	27.5	(0.1)	9095	33.0	27.6	(0.1)	8527	33.1	27.3	(0.2)
Urban	17368	65.0	68.5	(0.2)	17684	64.1	68.6	(0.2)	16517	64.1	68.8	(0.2)
Farms	797	3.0	4.0	(0.1)	805	2.9	3.8	(0.1)	720	2.8	3.9	(0.1)

Notes:1. For each cross-section, the sample includes only people aged 18-64 years; 2. The aggregate number of observations in a demographic group may be less than that of the overall sample due to 'refused' or 'missing' responses; 3. All statistics are weighted with survey weights.



For the QLFS we see that the sample drops from 38,276 in 2020-Q1 to 26,766 by 2020-Q2, a reduction in sample size of about 33%. This was partly due to the effect of shifting survey modes to CATI, because many of the respondents didn't have phone numbers and SSA had to compensate for this with new survey weights (SSA, 2021). By 2021-Q1, the sample had further reduced to 25,764, which is about a 3.75% drop.

#### **4. Results for labour force status determination**

As Jain et al (2020a), Casale and Posel (2020) and Ranchood and Daniels (2021) point out, the initial conditions for labour force states differ between the surveys at the time they commenced in 2020, with NIDS-CRAM showing higher baseline levels of the employment to population ratio (57%), compared to the QLFS (46%), for a pre-pandemic baseline. This difference of 9 percentage points makes comparing trends in employment levels problematic between the two surveys, as does the different reference period between the two surveys (one month in NIDS-CRAM compared to one week in the QLFS). The key question then becomes: to what extent are these two datasets comparable? The short answer is that they are not directly, but they do provide us with complimentary information to understand different aspects of employment trends over the period. In this section we compare the labour force trends between the two datasets and discuss how they mimic or diverge to clarify the comparative insights provided by each source of information. All figures in this section are derived from Appendix 2: Appendix Tables 2-5, which also presents the standard errors for each series of data.

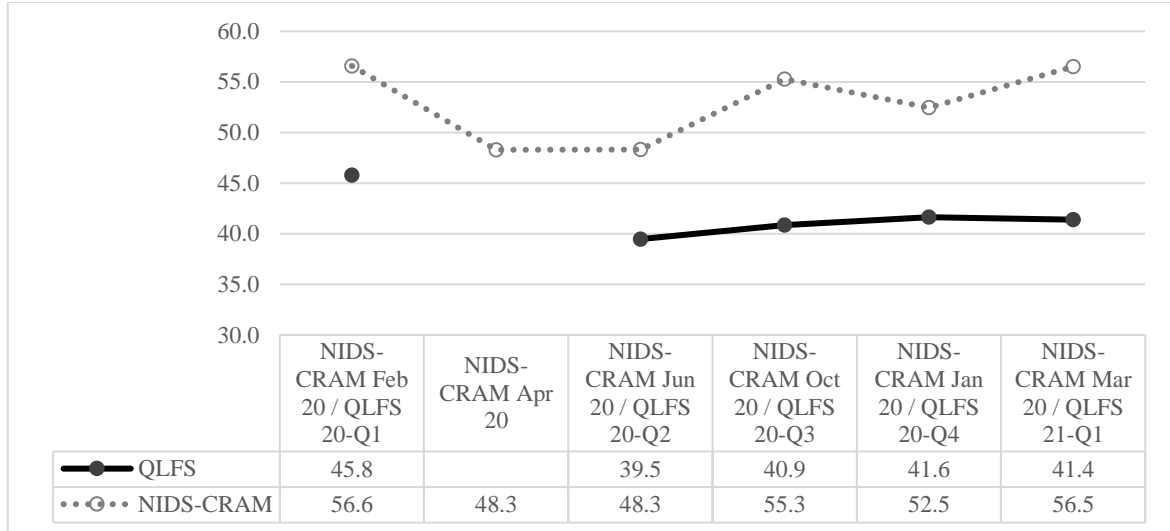
##### ***4.1 Cross-sectional estimates of labour force status***

###### ***4.1.1 The employment to population ratio***

Results for the employment to population (EPOP) percentage for 18-64 year olds are presented in Figure 3. Note that we restrict the sample in the QLFS to 18-64 to match the age range of the NIDS-CRAM sample. From the figure it is evident that because NIDS-CRAM has a longer reference period for a respondent to have worked, as well as a higher baseline level of employment, the EPOP pre-pandemic is higher compared to the QLFS: 56.6% in February 2020 for NIDS-CRAM compared to 45.8% for QLFS 2020-Q1. Furthermore, NIDS-CRAM has one extra data point in the series compared to the QLFS. This means that time periods are not strictly comparable. Consequently, the trend for the QLFS breaks at April 2020 in NIDS-CRAM. We therefore treat the QLFS 2020-

Q1 and NIDS-CRAM February levels as the pre-pandemic baseline for the respective surveys.

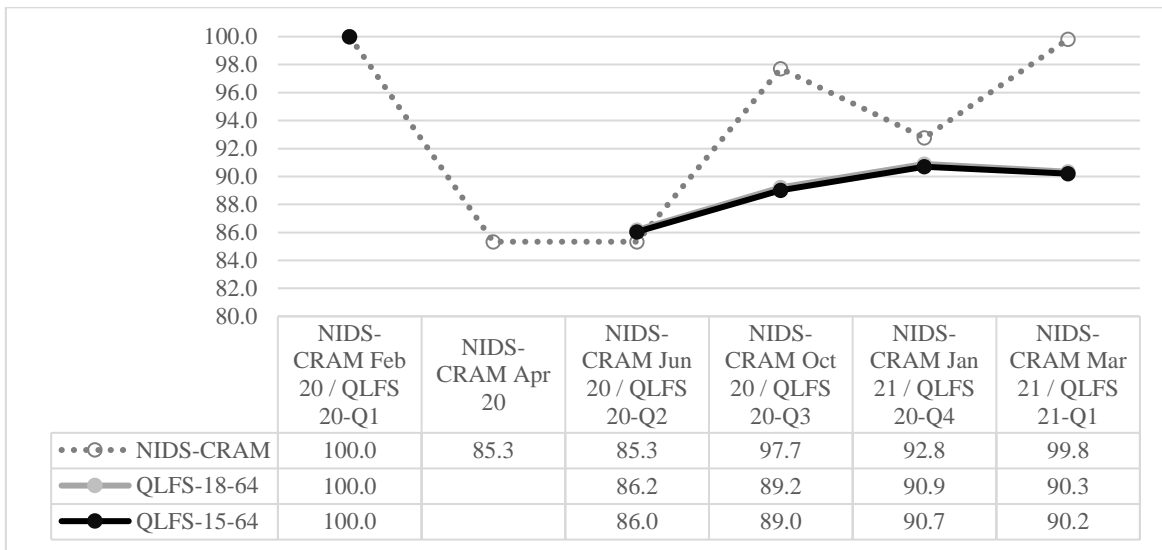
Figure 3. EPOP percentages for the QLFS and NIDS-CRAM: ages 18-64



The biggest fall in the EPOP in NIDS-CRAM occurs in April 2020 during L5 lockdown, where employment falls from 56.6% to 48.3% - a difference of 8.3 percentage points. This stays the same in June, but then recovers close to pre-pandemic levels in October with L1 lockdown regulations, before falling again in January (adjusted L3 lockdown) and then recovering to pre-pandemic levels by March 2021 (adjusted L1 lockdown). The biggest decline in the QLFS is also between baseline and 2020-Q2, where we see employment losses of 6.3 percentage points. Unlike NIDS-CRAM, however, the QLFS trend never recovers to its pre-pandemic level by QLFS 2020-Q1. This is the first evidence that the QLFS, with its reference week, provides less information about the impact of different lockdown levels compared to NIDS-CRAM, where the reference month in the questionnaire very precisely provide employment levels in particular states of lockdown.

We can obtain a better idea of the relative movements between the two surveys by indexing them to the pre-pandemic baseline.

Figure 4. NIDS-CRAM & QLFS EPOP indexed: 2020-Q1=100



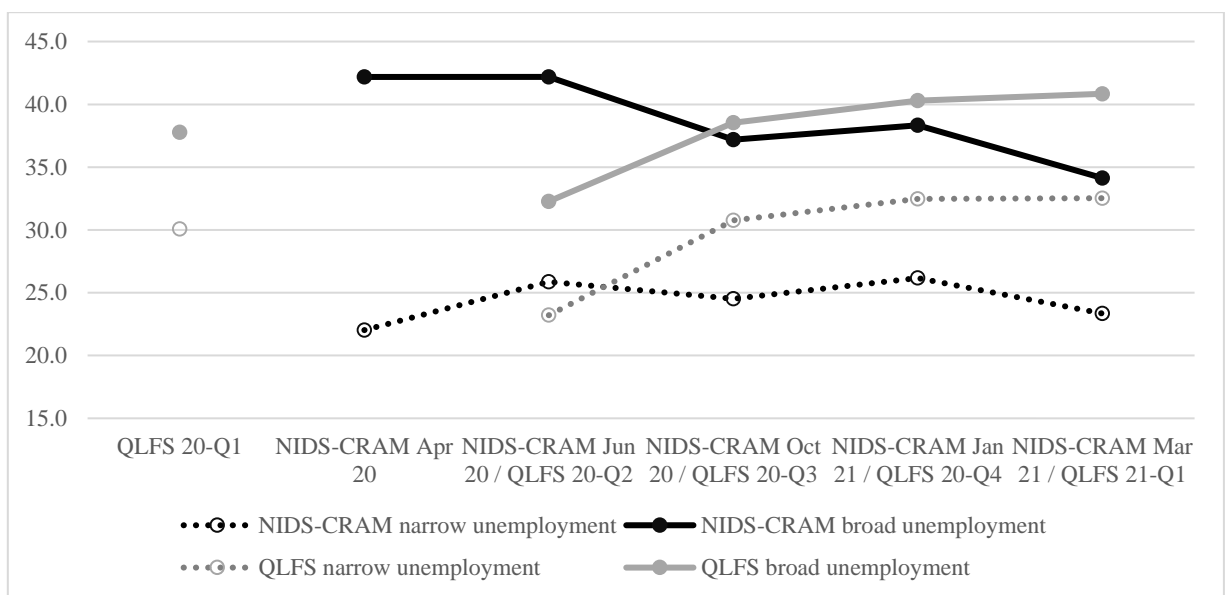
From the figure, the NIDS-CRAM employment trend shows the sensitivity of the estimates to differences in lockdown levels. The most volatile impacts are from L5 lockdown in April 2020, which extended throughout L3 lockdown in June. The return to L1 lockdown in October saw a dramatic return to near pre-pandemic levels, before dropping again with the adjusted L3 lockdown associated with January 2021. The move back to L1 lockdown in March 2021 saw a substantial recovery to pre-pandemic levels. Thus, the NIDS-CRAM data shows that lockdown regulations matter greatly for the labour market, and are highly responsive to the details of lockdown regulations.

The QLFS data in Figure 4 show that for the SA economy as a whole, nominal employment levels over the course of the entire year have not recovered to their pre-pandemic levels. Herein lies the strength of the QLFS data: it's precisely because the questionnaire focuses on a reference week, rather than a reference month, that the QLFS is able to offer better insight into the overall (nominal, seasonally unadjusted) employment levels over the course of the year. NIDS-CRAM cannot do this by definition, implying that researchers working with the data would be well advised to stay away from any such comparisons. This implies that the QLFS must be used when trying to understand quarterly and annual changes in labour force states, while NIDS-CRAM is useful to understand the impact of particular Lockdown regulations on labour force states during the corresponding months.

### 4.1.2 Unemployment rates

For unemployment rates, it is not possible to calculate a baseline for February 2020 using NIDS-CRAM because of insufficient space in the questionnaire to include sufficient questions for its calculation. However in April 2020, and every wave of NIDS-CRAM thereafter, it is possible to calculate unemployment rates. To show the differences in the estimates of unemployment rates, we therefore start the series in April 2020, which corresponds to L5 lockdown, while the baseline period of 2020-Q1 is used as the starting point for the QLFS series.

Figure 5. Broad (discouraged) and narrow (searching) unemployment rates: ages 18-64

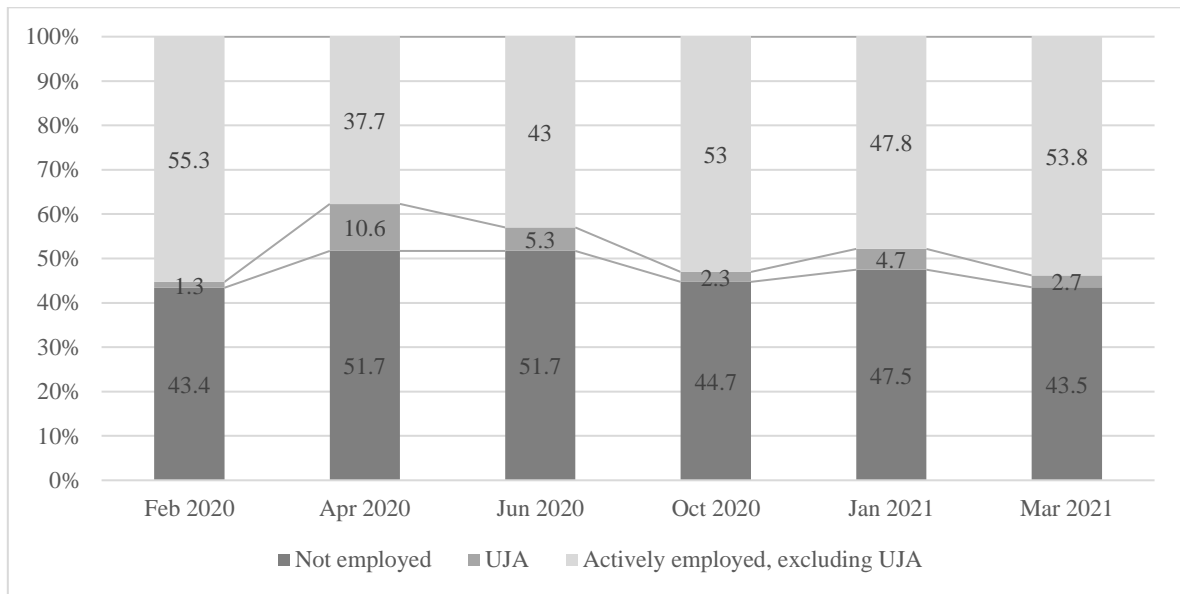


From the figure we see that the starting point for NIDS-CRAM shows a higher broad unemployment rate than the QLFS because it starts in April (once lockdown restrictions had been introduced), while the narrow unemployment rate is below the QLFS. The two QLFS trends mimic each other in terms of their direction over all five periods, whereas in NIDS-CRAM they diverge at the beginning before trending in a similar direction from October. This is partly because of the complications associated with searching for a job during lockdown, which is a big reason behind the QLFS trends.

### 4.1.3 Employed trends, including UJA

For NIDS-CRAM, if we split the EPOP for 18-64 year olds to include workers who are in UJA, we obtain the following results:

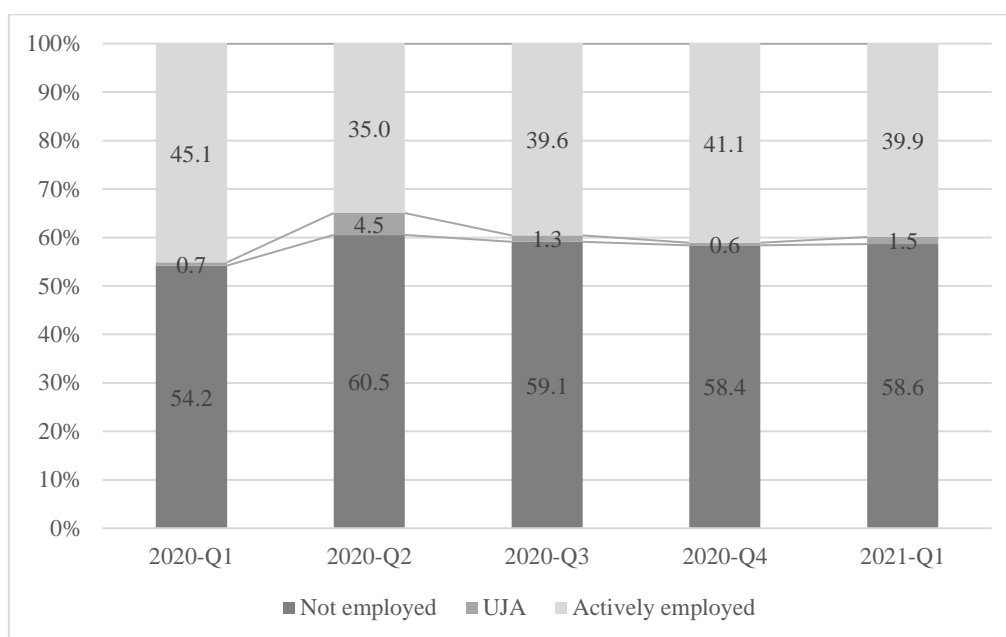
Figure 6. NIDS-CRAM cross-sectional EPOP, including UJA: ages 18-64



The figure shows that those who have UJA also fluctuate with lockdown levels and their varied restrictions, and that every time the regulations become stricter, more workers have UJA. This is to be expected, but what is important about these trends is how clearly they demonstrate the sensitivity of the labour market to varying lockdown regulations.

When we do the same for the QLFS, we obtain much smaller estimates of UJA, due to the questionnaire filters associated with Figure 1 above, which filter those workers who will only return to a job within 3 months into the employed state, while filtering those individuals with zero pay and no further information about job attachment into the unemployed / not economically active sequence of questions. Figure 7 below displays the trends. The much reduced UJA category is a direct consequence of the questionnaire skip patterns in Figure 1, but this underestimates UJA relative to NIDS-CRAM, resulting in *definitionally* lower estimates of UJA.

Figure 7. QLFS cross-sectional employment to population ratio (EPOP), ages 18-64



We see from the figure that, as in NIDS-CRAM, UJA is at its maximum in the second quarter of 2020, before reaching pre-pandemic levels by the fourth quarter of 2020, then increasing again in the first quarter of 2021. While the magnitudes are clearly much smaller than NIDS-CRAM, the trends in UJA employment are similar. However, the results for UJA employment in Figure 7 do not consider additional information on COVID-19 that is available in the QLFS questionnaire, but that does not constitute part of the questions that determine labour force status (employed, unemployed and NEA). These lead to skip patterns that prematurely classify “employment” and “not employed”, rendering the QLFS definition of UJA different to NIDS-CRAM. As a result of the premature skip patterns, the researcher is faced with having to either create new variables or over-write some of the information previously captured on employment with the COVID-19 questions in section 5.10-5.19 of the QLFS questionnaires (that are only asked for those that follow the “employed” skip patten in Figure 1), if they want to further understand the implications on the labour force. However, it is not possible to do this with the current versions of the QLFS released by Statistics South Africa because many of the questions are not available to the public in official releases of the QLFS on the Statistics South Africa website (as of July, 2021).

## 5. Conclusion

This paper conducted an analysis of labour force states in SA during the first year of the COVID-19 pandemic, including those in employment – at work and not at work (with known job attachment and uncertain job attachment), and those who are not employed (unemployed – narrow (searching) and broad (discouraged), plus not economically active), using both NIDS-CRAM and the QLFS. Due to the impact of Government imposed lockdowns, which have included regulations that sometimes prohibit or restrict the normal operation of selected legal industries, the labour market has become precarious for many occupations. NIDS-CRAM and the QLFS are the most representative household surveys in SA to investigate labour force states. Both surveys capture labour force states in nominal terms, i.e. before seasonal adjustment.

However, because of the different reference periods for labour force participation questions (one month for NIDS-CRAM compared to one week for the QLFS), the two instruments are not directly comparable. Instead, they tell us different things about the labour force that can be used in combination to better understand the impact of COVID-19 on the labour market. NIDS-CRAM is the superior instrument when attempting to understand the immediate short-term impact of lockdown regulations on the labour market, because it asks about the outcome in a particular month that can very precisely be linked to a lockdown level's specific regulations. On the other hand, the QLFS is the superior instrument when attempting to understand employment and unemployment rates over the course of a quarter and the entire year.

Results using NIDS-CRAM show that the labour market in SA is very responsive to lockdown regulations, fluctuating dramatically when bans or restrictions on trading hours and curfews are at their strictest, and recovering relatively quickly when they are relaxed. The QLFS shows that employment rates in SA have still not recovered to their pre-pandemic levels, remaining approximately 10% below the pre-pandemic baseline's first quarter 2020 estimates. There is also less variation in the QLFS EPOP trend compared to the NIDS-CRAM trend, but this is a direct result of the different reference period being the week prior to interview compared to a specific month (in NIDS-CRAM), which effectively smooths out the QLFS trend lines.

For NIDS-CRAM, if we separate out those with UJA from the rest of the employed, we see that levels of UJA employment fluctuated directly proportional to lockdown levels, and that every time the regulations became stricter, more workers

entered a state of UJA. This result points to the fact that lockdown restrictions can have tremendously negative economic impacts, and that wherever possible, all efforts should be made to geographically differentiate lockdowns to minimize their national impact, while maximizing the capacity of local economies to recover as quickly as possible.

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## Appendices

Appendix Table 1. Questionnaire design of the labour market section in NIDS-CRAM and the QLFS

ILO Variables for employed	NIDS-CRAM W1: February 2020	NIDS-CRAM W1-5: April 2020 – March 2021	QLFS 2020 Q1
Employed, at work <ul style="list-style-type: none"> <li>• Small jobs recovery</li> <li>• Family helper recovery</li> </ul>	Yes (Ca1 & Ca2 & Ca3) <ul style="list-style-type: none"> <li>• Yes (Ca2 &amp; Ca3)</li> <li>• No</li> </ul>	Yes (Cb1 & Cb2 & Cb3) <ul style="list-style-type: none"> <li>• Yes (Cb2 &amp; Cb3)</li> <li>• No</li> </ul>	Yes (2.4a & 2.4b & 2.4c) <ul style="list-style-type: none"> <li>• Yes (2.4a &amp; 2.4b &amp; 2.4c)</li> <li>• 2.4c</li> </ul>
Employed, not at work <ul style="list-style-type: none"> <li>• Reason for absence</li> <li>• Duration of absence</li> <li>• Pay during absence (source of pay)</li> </ul>	No <ul style="list-style-type: none"> <li>• No</li> <li>• No</li> <li>• No</li> </ul>	Partly (Cb4) <ul style="list-style-type: none"> <li>• Yes (Cb5)</li> <li>• No</li> <li>• For some (those routed to work pay in April questions).</li> </ul>	Yes (2.5a & 2.5b & 2.5c) <ul style="list-style-type: none"> <li>• Yes (2.7)</li> <li>• Yes (2.7a)</li> <li>• Yes (2.7b)</li> </ul>
Main destination of production	No	No	Some (although 5.9 will capture some production for home use)
Main job characteristics <ul style="list-style-type: none"> <li>• Occupation</li> <li>• Industry</li> <li>• Status in employment</li> <li>• Institutional sector (public/ private/ household)</li> <li>• Type of place of work</li> <li>• Job tenure</li> <li>• Social protection coverage</li> <li>• Informal nature of job</li> </ul>	Some <ul style="list-style-type: none"> <li>• No</li> <li>• No</li> <li>• Not fully (Cf7 - own a/c workers vs. employers)</li> <li>• No</li> <li>• No</li> <li>• No</li> <li>• No</li> <li>• No</li> <li>• No</li> </ul>	Some <ul style="list-style-type: none"> <li>• Yes (Cd1; Cf1)</li> <li>• No</li> <li>• Yes (Cb6; Cf8 (own a/c workers vs. employers))</li> <li>• No</li> <li>• No</li> <li>• No</li> <li>• Not really – some questions on receipt at individual and household level.</li> <li>• Partly (Cf4 for self-employed; Ce8 for employees).</li> </ul>	Most <ul style="list-style-type: none"> <li>• Yes (4.2a; 4.2b)</li> <li>• Yes (4.3a; 4.3b)</li> <li>• Yes (4.5)</li> <li>• Yes (4.15)</li> <li>• No</li> <li>• Yes (4.4)</li> <li>• Yes (4.6, 4.7, 4.7b, 4.8, 4.9)</li> <li>• Yes (4.7, 4.8, 4.10, 4.11, 4.12, 4.13, 4.14)</li> </ul>

Hours usually worked per week	Not exactly (Ca4 & Ca5 combined mixes actual and normal worked).	Not exactly (Cd2; Cd3 & Cf2; Cf3 (mix with hours actually worked)).	Yes (Single job: 4.18, Multiple jobs: 4.20)
Hours actually worked	Cannot distinguish between “usual” and “actual”.	Cannot distinguish between “usual” and “actual”.	Yes (Single job: 4.19, Multiple jobs: 4.21)
Reasons for more/less hours worked	No	Partly (Cb5 asks reason for no work, only for those asked if they have a job to return to and answered yes to this).	No
Desire to work more hours	No	Partly (Cc1 asked only of those who do not answer any of the employment filter questions, including return, with the affirmative. Those that say they worked 0 hours in the reference month are thus not asked this question).	Yes (4.22; Also 4.24 for whether current rate of pay is acceptable for this)
Availability to work more hours	No	Partly (same explanation as above).	Yes (4.23; 4.25)
<b>ILO Variables for not employed</b>	<b>No</b>	<b>Partial</b>	<b>Yes</b>
Job search (4 weeks / 30 days)	No	Yes (Cg1 – about April)	Yes (3.1a & 3.1b)
Method of job search	No	No	Yes (3.2)
Duration of job search	No	No	Yes (3.6)
Reasons for not searching	No	Partial. Cb5 asks “reason not working”, which is different to “reasons not searching” but has options that overlap	Yes (3.8 & 3.3)
Desire to work at present	No	Yes, in next 7 days (Cc1)	Yes, in the previous week (3.4)
Availability to take up employment	No	Yes, in next 7 days (Cc1)	Yes, in the previous week (3.9, 3.10). Also for those not available then, when they would be (3.11b)
Reasons for not being available	No	Yes (Cc3)	Yes (3.11)

Last employment in previous X months <ul style="list-style-type: none"> <li>• Duration since last stopped work</li> <li>• Reasons for last job/business ending</li> <li>• Occupation</li> <li>• Industry</li> <li>• Status in employment</li> </ul>	No	Some <ul style="list-style-type: none"> <li>• Yes (Cc2 &amp; Cg2)</li> <li>• No</li> <li>• Yes (Cg3)</li> <li>• No in Wave 1, Yes in Waves 2-5</li> <li>• No in Wave 1, Yes in Waves 2-5</li> </ul>	Yes <ul style="list-style-type: none"> <li>• Yes (Ever worked: 3.12, duration since: 3.13)</li> <li>• Yes (3.14)</li> <li>• Yes (3.15a; 3.15b)</li> <li>• Yes (3.16a; 3.16b)</li> <li>• Yes (3.17)</li> </ul>
<b>ILO variables for receipt of government benefits</b>	<b>No</b>	<b>Yes</b>	<b>Yes</b>
Unemployment benefits	No	Some (Cg4 asks about UIF reduced time benefit, not other UIF in general)	Yes (3.19e)
Others as per national context	No	Yes (Ce9, Da6)	Yes (3.19), but Social Relief of Distress Grant & Temporary Employment Relief Grants cannot be identified. They would be covered by 3.19i – other welfare grants
<b>ILO additional variables for COVID-19 specific circumstances</b>	<b>No</b>	<b>Partial</b>	<b>Yes, from QLFS Q2</b>
Recommendations in ILO (2020b: 4-6), concerning “Essential LFS statistics and data items during the COVID-19 pandemic”	No	Yes (Cb4, Cb5)	Yes, from QLFS Q2 (section 5.10-5.17)

Appendix Table 2. Employment to population ratio (EPOP), including and excluding UJA, in NIDS-CRAM

	February 2020		April 2020		June 2020		October 2020		January 2021		March 2021	
	All workers	Excluding 0 hrs & 0 pay	All workers	Excluding UJA	All workers	Excluding UJA	All workers	Excluding UJA	All workers	Excluding UJA	All workers	Excluding UJA
<b>Total</b>	56.6 (1.1)	55.3 (1.1)	48.3 (1.0)	37.7 (1.0)	48.3 (1.3)	43.0 (1.3)	55.3 (1.1)	53.0 (1.1)	52.5 (1.2)	47.8 (1.3)	56.5 (1.2)	53.8 (1.3)
<b>Gender</b>												
Male	63.2 (1.7)	62.4 (1.7)	57.6 (1.7)	45.5 (1.7)	55.7 (1.8)	50.0 (1.9)	63.1 (1.6)	61.1 (1.7)	60.5 (1.7)	56.4 (1.8)	65.0 (1.7)	62.8 (1.8)
Female	50.6	48.8	39.7	30.4	41.5	36.5	47.9	45.5	44.7	39.4	48.5	45.4
<b>Population group</b>												
African/Black	54.1 (1.1)	52.7 (1.1)	45.9 (1.1)	34.4 (1.1)	44.5 (1.4)	38.6 (1.4)	52.6 (1.1)	50.1 (1.2)	49.4 (1.2)	44.6 (1.4)	54.0 (1.3)	51.0 (1.3)
Coloured	60.7 (4.3)	59.8 (4.2)	51.0 (2.6)	43.0 (2.7)	53.7 (3.2)	52.6 (3.2)	59.9 (4.0)	58.3 (4.1)	56.9 (3.9)	53.9 (3.5)	60.7 (4.5)	59.1 (4.5)
Asian/Indian	56.4 (8.1)	51.0 (8.2)	36.9 (7.0)	29.2 (8.5)	62.9 (7.8)	56.5 (6.7)	62.8 (10.2)	61.6 (10.1)	61.9 (10.1)	45.9 (10.4)	63.5 (10.2)	61.0 (11.8)
White	77.2 (3.2)	77.2 (3.2)	72.3 (3.6)	66.8 (3.6)	77.2 (3.7)	72.4 (4.0)	78.4 (3.5)	78.3 (3.5)	79.7 (3.4)	78.3 (3.5)	78.2 (3.6)	78.2 (3.6)
<b>Age category in wave</b>												
Youth (18-29)	43.0 (1.9)	41.3 (1.9)	36.4 (1.8)	28.0 (1.7)	36.4 (2.1)	33.0 (2.1)	44.1 (1.8)	41.6 (1.8)	40.9 (1.8)	36.8 (1.8)	44.6 (1.8)	42.4 (1.8)
Prime aged (30-49)	67.6 (1.4)	66.6 (1.4)	58.3 (1.4)	46.0 (1.5)	56.7 (1.5)	50.4 (1.6)	64.2 (1.4)	61.7 (1.5)	62.8 (1.5)	58.0 (1.7)	66.2 (1.5)	63.9 (1.5)
Older (50-64)	52.0 (2.5)	50.7 (2.4)	43.2 (2.5)	32.9 (2.3)	48.0 (3.0)	41.8 (2.9)	51.2 (2.6)	49.9 (2.6)	45.4 (2.6)	40.3 (2.6)	51.4 (2.5)	47.5 (2.6)

Notes:

1. For each cross-section, the sample includes only people aged 18-64 in that wave.
2. UJA means "temporarily absent" OR (zero hours & zero earnings).
3. All workers: Employed = 1, Not employed = 0. Excluding UJA: Employed (Excluding those known to be UJA) = 1, Not employed and those known to have UJA = 0.
4. All statistics are weighted with cross-sectional weights.
5. People whose labour market status could not be determined are excluded from the calculations.
6. Standard errors in parentheses.



Appendix Table 3. EPOP, including and excluding UJA workers overall and by gender, population group and age, QLFS 2020 Q1 to 2021 Q1

	2020 Q1		2020 Q2		2020 Q3		2020 Q4		2021 Q1	
	All workers	Excluding UJA	All workers	Excluding UJA	All workers	Excluding UJA	All workers	Excluding UJA	All workers	Excluding UJA
<b>Total</b>	45.8 (0.3)	45.1 (0.3)	39.5 (0.3)	35.0 (0.3)	40.9 (0.3)	39.6 (0.3)	41.6 (0.3)	41.1 (0.3)	41.4 (0.4)	39.9 (0.3)
<b>Gender</b>										
Male	51.6 (0.4)	51.0 (0.4)	44.9 (0.5)	40.6 (0.5)	46.4 (0.5)	45.3 (0.5)	47.1 (0.5)	46.6 (0.5)	46.8 (0.5)	45.5 (0.5)
Female	40.1 (0.4)	39.4 (0.4)	34.1 (0.5)	29.4 (0.4)	35.4 (0.5)	34.0 (0.5)	36.3 (0.5)	35.6 (0.5)	36.1 (0.5)	34.4 (0.5)
<b>Population group</b>										
African/Black	42.8 (0.3)	42.1 (0.3)	36.5 (0.4)	32.3 (0.3)	38.0 (0.4)	36.7 (0.4)	38.5 (0.4)	38.0 (0.4)	38.3 (0.4)	36.8 (0.4)
Coloured	51.7 (0.9)	50.7 (0.9)	43.9 (1.3)	37.0 (1.3)	44.8 (1.3)	43.3 (1.3)	47.0 (1.3)	46.4 (1.3)	46.4 (1.5)	44.7 (1.4)
Asian/Indian	55.7 (1.9)	55.2 (1.9)	50.7 (2.4)	47.2 (2.4)	49.5 (2.5)	47.8 (2.5)	53.1 (2.4)	52.3 (2.4)	51.3 (2.6)	50.3 (2.6)
White	66.9 (1.1)	66.3 (1.1)	61.2 (1.4)	56.6 (1.5)	63.7 (1.5)	62.5 (1.5)	64.3 (1.4)	64.0 (1.4)	65.4 (1.5)	64.3 (1.5)
<b>Age category</b>										
Youth (18-29)	26.2 (0.4)	25.8 (0.4)	20.7 (0.5)	18.2 (0.5)	21.5 (0.5)	20.9 (0.5)	21.5 (0.5)	21.2 (0.5)	20.7 (0.5)	20.0 (0.5)
Prime aged (30-49)	59.4 (0.4)	58.6 (0.4)	52.1 (0.5)	46.3 (0.5)	53.7 (0.5)	52.1 (0.5)	54.6 (0.5)	53.9 (0.5)	55.1 (0.5)	53.4 (0.5)
Older (50-64)	48.1 (0.6)	47.2 (0.6)	42.5 (0.8)	37.3 (0.7)	43.9 (0.8)	42.2 (0.8)	45.5 (0.7)	44.9 (0.7)	44.4 (0.8)	42.2 (0.8)

Notes:

1. For each cross-section, the sample includes only people aged 18-64 years.
2. UJA means "temporarily absent" OR zero hours. However there are no observations with zero hours. This differs to the definition used in the NIDS-CRAM UJA variable in two important ways: temporarily absent means absent for 3 months or less (including those starting a new job and those absent for health or vacation/maternity/paternity leave are treated as temporarily absent), instead of 4 weeks in NIDS-CRAM. The restriction of zero pay is also not added to zero hours, however this makes no difference since there are no observations with 0 hours.
3. All workers: Employed = 1, Not employed = 0. Excl. UJA: Employed (excl. those known to have UJA) = 1, Not employed and those known to have UJA = 0.
4. All statistics are weighted with survey weights.
5. People whose labour market status could not be determined are excluded from the calculations.
6. Standard errors in parentheses.

Appendix Table 4. Labour market status between April 2020 and March 2021 in NIDS-CRAM (%)

	April 2020				June 2020				October 2020				January 2021				March 2021			
	NEA	DU	SU	Emp.	NEA	DU	SU	Emp.	NEA	DU	SU	Emp.	NEA	DU	SU	Emp.	NEA	DU	SU	Emp.
<b>Total</b>	16	22	14	48	16	18	17	48	12	15	18	55	15	14	19	52	14	12	17	57
	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
<b>Gender</b>																				
Male	12	17	13	58	13	15	16	56	10	10	17	63	12	10	18	60	10	9	16	65
	(1)	(1)	(1)	(2)	(1)	(1)	(1)	(2)	(1)	(1)	(1)	(2)	(1)	(1)	(1)	(2)	(1)	(1)	(1)	(2)
Female	20	25	15	40	19	21	18	41	14	19	19	48	18	18	19	45	18	15	18	49
	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(2)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(2)	(1)	(1)	(1)	(1)
<b>Population group</b>																				
African/Black	16	24	14	46	17	20	19	44	11	16	20	53	15	15	20	49	14	13	19	54
	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
Coloured	16	13	20	51	13	21	12	54	14	10	16	60	12	15	17	57	14	13	13	61
	(2)	(3)	(4)	(3)	(4)	(3)	(4)	(3)	(3)	(2)	(2)	(4)	(2)	(4)	(2)	(4)	(3)	(2)	(3)	(4)
Asian/Indian	33	14	16	37	18	2	18	63	15	14	9	63	21	2	15	62	16	7	14	63
	(7)	(4)	(6)	(7)	(4)	(1)	(9)	(8)	(6)	(8)	(5)	(10)	(9)	(2)	(7)	(10)	(7)	(7)	(6)	(10)
White	14	10	4	72	12	6	5	77	15	4	2	78	16	3	1	80	14	4	3	78
	(3)	(2)	(2)	(4)	(3)	(2)	(2)	(4)	(3)	(1)	(1)	(4)	(3)	(1)	(1)	(3)	(3)	(1)	(2)	(4)
<b>Age category in wave</b>																				
Youth (18-29)	19	24	21	36	21	19	24	36	12	20	24	44	15	18	26	41	15	16	25	45
	(1)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(1)	(1)	(2)	(2)	(1)	(2)	(2)	(2)	(1)	(1)	(2)	(2)
Prime aged (30-49)	8	22	12	58	7	20	17	57	5	13	18	64	6	13	18	63	6	11	17	66
	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(2)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(2)	(1)	(1)	(1)	(1)
Older (50-64)	33	18	6	43	31	14	7	48	29	12	7	51	35	11	9	45	32	9	7	51
	(2)	(2)	(1)	(2)	(2)	(2)	(1)	(3)	(2)	(2)	(1)	(3)	(2)	(2)	(2)	(3)	(2)	(1)	(1)	(2)

Notes:

1. NEA = Not economically active, DU = Discouraged unemployed, SU = Searching unemployed, Emp = Employed.
2. For each cross-section, the sample includes only people aged 18-64 years.
3. All statistics are weighted with survey weights.
4. Standard errors in parentheses.

Appendix Table 5. Labour market status overall and by gender, population and age groups between QLFS 2020 Q1 and QLFS 2021 Q1 (%)

	2020 Q1				2020 Q2				2020 Q3				2020 Q4				2021 Q1			
	NEA	DU	SU	Emp.	NEA	DU	SU	Emp.	NEA	DU	SU	Emp.	NEA	DU	SU	Emp.	NEA	DU	SU	Emp.
<b>Total</b>	26.4 (0.2)	8.1 (0.1)	19.7 (0.2)	45.8 (0.3)	41.7 (0.3)	6.9 (0.2)	11.9 (0.2)	39.5 (0.3)	33.5 (0.3)	7.5 (0.2)	18.2 (0.3)	40.9 (0.3)	30.3 (0.3)	8.1 (0.2)	20.0 (0.3)	41.6 (0.3)	30.1 (0.3)	8.6 (0.2)	20.0 (0.3)	41.4 (0.4)
<b>Gender</b>																				
Male	20.6 (0.3)	7.5 (0.2)	20.3 (0.3)	51.6 (0.4)	35.7 (0.5)	6.7 (0.3)	12.6 (0.3)	44.9 (0.5)	27.1 (0.4)	7.0 (0.3)	19.5 (0.4)	46.4 (0.5)	24.4 (0.4)	7.4 (0.3)	21.1 (0.4)	47.1 (0.5)	23.9 (0.4)	8.0 (0.3)	21.4 (0.4)	46.8 (0.5)
Female	32.1 (0.4)	8.6 (0.2)	19.2 (0.3)	40.1 (0.4)	47.6 (0.5)	7.0 (0.2)	11.2 (0.3)	34.1 (0.5)	39.9 (0.5)	7.9 (0.2)	16.9 (0.4)	35.4 (0.5)	36.1 (0.5)	8.8 (0.3)	18.9 (0.4)	36.3 (0.5)	36.1 (0.5)	9.2 (0.3)	18.6 (0.4)	36.1 (0.5)
<b>Population group</b>																				
African/Black	26.1 (0.3)	9.3 (0.2)	21.8 (0.3)	42.8 (0.3)	42.6 (0.4)	7.9 (0.2)	13.0 (0.3)	36.5 (0.4)	33.6 (0.3)	8.4 (0.2)	20.0 (0.3)	38.0 (0.4)	30.1 (0.3)	9.2 (0.2)	22.2 (0.3)	38.5 (0.4)	29.8 (0.3)	9.8 (0.2)	22.1 (0.3)	38.3 (0.4)
Coloured	27.5 (0.8)	4.9 (0.4)	16.0 (0.7)	51.7 (0.9)	42.1 (1.3)	3.9 (0.5)	10.0 (0.8)	43.9 (1.3)	36.1 (1.3)	5.4 (0.6)	13.8 (0.9)	44.8 (1.3)	31.7 (1.2)	5.1 (0.6)	16.2 (0.9)	47.0 (1.3)	31.7 (1.4)	6.4 (0.8)	15.5 (1.0)	46.4 (1.5)
Asian/Indian	33.5 (1.8)	2.5 (0.6)	8.4 (1.1)	55.7 (1.9)	38.1 (2.3)	2.7 (0.8)	8.6 (1.7)	50.7 (2.4)	35.7 (2.4)	3.7 (0.9)	11.2 (1.9)	49.5 (2.5)	36.5 (2.3)	3.3 (0.8)	7.1 (1.4)	53.1 (2.4)	36.9 (2.5)	2.8 (0.8)	9.0 (1.7)	51.3 (2.6)
White	26.2 (1.1)	1.1 (0.2)	5.9 (0.6)	66.9 (1.1)	33.7 (1.4)	1.1 (0.3)	4.0 (0.6)	61.2 (1.4)	28.9 (1.4)	1.3 (0.4)	6.0 (0.8)	63.7 (1.5)	28.3 (1.3)	1.2 (0.3)	6.2 (0.8)	64.3 (1.4)	28.4 (1.4)	0.6 (0.2)	5.7 (0.8)	65.4 (1.5)
<b>Age category</b>																				
Youth (18-29)	36.8 (0.5)	11.3 (0.3)	25.8 (0.4)	26.2 (0.4)	56.4 (0.6)	8.9 (0.3)	14.0 (0.4)	20.7 (0.5)	47.3 (0.6)	9.5 (0.3)	21.7 (0.5)	21.5 (0.5)	44.0 (0.6)	10.2 (0.4)	24.3 (0.5)	21.5 (0.5)	43.7 (0.6)	11.0 (0.4)	24.7 (0.6)	20.7 (0.5)
Prime aged (30-49)	12.9 (0.3)	7.4 (0.2)	20.3 (0.3)	59.4 (0.4)	28.3 (0.5)	6.6 (0.3)	13.1 (0.3)	52.1 (0.5)	19.3 (0.4)	7.3 (0.3)	19.7 (0.4)	53.7 (0.5)	15.8 (0.4)	8.0 (0.3)	21.6 (0.4)	54.6 (0.5)	15.3 (0.4)	8.4 (0.3)	21.2 (0.4)	55.1 (0.5)
Older (50-64)	41.2 (0.6)	3.8 (0.2)	7.0 (0.3)	48.1 (0.6)	48.6 (0.8)	3.7 (0.3)	5.2 (0.3)	42.5 (0.8)	44.3 (0.8)	4.1 (0.3)	7.7 (0.4)	43.9 (0.8)	41.8 (0.7)	4.6 (0.3)	8.1 (0.4)	45.5 (0.7)	42.4 (0.8)	4.8 (0.3)	8.4 (0.5)	44.4 (0.8)

Notes:

1. NEA = Not economically active, DU = Discouraged unemployed, SU = Searching unemployed, Emp = Employed.
2. For each cross-section, the sample includes only people aged 18-64 years.
3. People whose labour market status could not be determined are excluded from the calculations.
4. The reference period for the QLFS employment questions is the last week, whereas in NIDS-CRAM it is a reference month. The reference period for having a job to return to is 3 months in the QLFS, whereas it is 4 weeks in NIDS-CRAM.
5. The aggregate number of observations in a demographic group may be less than that of the overall sample due to 'refused' or 'missing' responses.
6. All statistics are weighted with survey weights.
7. Standard errors in parentheses.



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Founded in 1975, the Southern Africa Labour and Development Research Unit (SALDRU) is a research-based social responsiveness initiative housed in the School of Economics at the University of Cape Town.

The unit carries out research and capacity building in applied empirical microeconomics with an emphasis on poverty and inequality, labour markets, human capital and social policy. We strive for academic excellence and policy relevance.

SALDRU has implemented a range of innovative surveys in South Africa including the Project for Statistics on Living Standards and Development (PSLSD), Cape Area Panel Study (CAPS) and the National Income Dynamics Study (NIDS), among others. Building on these large data gathering projects, we conduct a range of training and capacity building activities in the use of survey data to analyse social well-being.

Our mission is to challenge inequalities through policy relevant academic research.

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