



# **Developing a Multidimensional Youth Employability Index to unpack vulnerabilities in the lived realities of youth in Post-apartheid South Africa**

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This work forms part of Evelien Storme's doctoral research and is the quantitative tier of a mixed method study looking into youth and livelihood in South Africa.

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# **Developing a Multidimensional Youth Employability Index to unpack vulnerabilities in the lived realities of youth in Post-apartheid South Africa**

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## **Abstract**

Employability, understood as the ability to gain, sustain, and move on in employment, depends on and shapes circumstances in a young person's lifeworld. In a Post-apartheid South Africa individual attributes as well as vulnerabilities in the young person's home and neighbourhood all impact on labour outcomes. We develop a multidimensional youth employability index to capture this complexity following the Alkire and Foster method. We use the Census 2011 data. The results show that various forms of networks in the youth's household and neighbourhood make a stronger contribution to their employability than do the individual's attributes such as education, despite the latter's prominence in the employability literature. There is a strong geographical component to employability and results are highly differentiated across municipalities. It matters greatly whether youth are in formal or informal work, have become discouraged or are unemployed and looking for a job when it comes to being employability deprived. However, large proportions of employed youth are employability deprived and lived realities at the lower end of the labour market are very similar with or without a job. Our results therefore demonstrate the usefulness of an expanded view on youth employability as it is able to unpack hardships that remain masked when using "employment" as a single indicator for youth's socio-economic inclusion into the labour market.

Key words: livelihood; youth; employability, employment; South Africa; multidimensional

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## Introduction

Youth employment strategies take up a prominent role in poverty alleviation and social justice policies in South Africa. There is much recognition that the wrongs of a racially discriminatory past continue to skew opportunities and outcomes on the labour market away from particularly African, female, and poor youth (Bhorat et al. 2016; De Lannoy et al. 2018a). Policy and practise since the country's democratisation have supported youth in many areas yet had their own shortcomings (Graham et al. 2019). They have been compounded by structural changes in the labour market reflecting shifts in the local and international economies (Seekings and Natrass 2016). None of these developments have made the world of work more inclusive for its youth.

Drivers of youth unemployment at the macro and micro level are well documented (Branson et al. 2019a; De Lannoy et al. 2018a), so are the experiences of youth having to navigate the unreceptive environment of the labour market (Baldry et al. 2019; De Lannoy et al. 2018b; Newman and De Lannoy 2014). The President recently pledged to have two million more youth in employment in the next decade (The President of the Republic of South Africa 2019) among other initiatives that intend to create a wide spectrum of support and opportunities (Graham et al. 2019) to turn around young people's prospects into more hopeful ones. Yet the scale at which tables need to be turned is enormous, with Statistics South Africa reporting that the majority of South Africa's youth often falls within one of three categories: uneducated, unemployed, and unemployable (Statistics South Africa 2019).

It remains unclear however how "unemployable" is defined, what employability is constituted of, and what contributes to low levels among South African youth. "The concept of employability has been important to how national and supranational policy makers understand and seek to address unemployment and labour market exclusion" (Lindsay 2009: 951), particularly in Europe where it was a pillar of the European Union's employment and social policy guidelines (Arrowsmith and Pulignano 2013). In the South African context, it is equally necessary to bring more clarity conceptually and empirically. The Multidimensional Employability Index we develop in this paper is a contribution to this need as it allows us to measure and identify who and what vulnerabilities towards employability can be targeted from a policy perspective. It is the first of its kind to look into the employability of a young individual within the lived realities of the home and neighbourhood.

## Multidimensional youth employability

The concept of employability essentially originates from a concern to include the unemployed in the labour market (McQuaid and Lindsay 2005). The ideological perspective in which the concept emerged during the British economic boom of the 1950's mostly served an economic purpose to reach full employment (Sels and Forrier 2003). The less prosperous economic tides two decades later and rising unemployment prompted individuals to signal their knowledge and skills. Within this setting employability turned into the economic necessity of "being as employable as possible", as it has remained ever since for people relying on employment for livelihood (Sels and Forrier 2003: 104). While employability underwent further conceptual evolutions (see for example Sels and Forrier 2003), the link between skills, knowledge and employability became widely accepted and promoted in policy and practise. The employability literature has therefore gravitated towards individuals and organisations at the centre of the labour market, including tertiary-educated graduates, formal sector employees, as well as companies and their interests in human resources (Green 2013). Various indices that reflect a match between skills and organisational needs have been developed since, some of them also extending beyond the individual and taking external factors into consideration (Sels and Forrier 2003).

While an employability literature focussing on skills and education contributes towards understanding skills matches, overall it falls short in exploring what constitutes employability for young South Africans since factors at the household and community levels remain excluded. Scholarship and policy approaches interested in those that are socio-economically vulnerable and that take in the wider environment of the individual as well as other individual attributes are more fruitful for our purpose. In a labour market context, vulnerable people are mainly but not exhaustively those that are discouraged, unemployed, in precarious employment, and people in the more recently created policy category of those who or not in training, education or employment (NEET). The position of vulnerability that many people experience is closely connected to the socio-economic environments they are in, as many young South Africans experience (Branson et al. 2019b). Looking at increasing precarious employment and high unemployment levels globally, Ferguson and Li point out that those who are most vulnerable to unemployment find themselves on the margins of the labour market exactly because of the systemic fault lines of the socio-economic system (Ferguson and Li 2018).

A useful definition of employability for our purpose is that of McQuaid and Lindsay who understand employability as the dynamic interaction between the three components of individual attributes, personal circumstances, and context factors that makes one more likely to progress towards, gain, sustain, and move on in employment (McQuaid and Lindsay 2005). Their broad approach is well-suited for a context where high inequality, poverty, and unemployment continue to heavily distort circumstances at the individual, household, and neighbourhood level.

Multidimensional perspectives on and measurement of human development that take external factors and social political contexts as well as their interconnections into consideration have gained support (McDonald et al. 2019). Notably the multidimensional measurement of poverty, through the use of the Multidimensional Poverty Index (MPI), has become widespread (Sabina Alkire 2016). The MPI is grounded in the acknowledgment that the experiences and effects of poverty to people are multidimensional and interconnected in multiple domains of their lives including education, health and living standards (S Alkire et al. 2015). The South African Multidimensional Poverty Index (SAMPI) includes a fourth dimension on economic activity, using employment as indicator. Since 2008, SAMPI officially complements a range of money-metric measurements including the food poverty line, the lower-bound poverty line and the upper-bound poverty line, and uses Census data – an example we follow. A youth-specific version of SAMPI was developed to look into deprivations and their interrelatedness in the lives of young South Africans (Frame et al. 2016).

The methodology underlying these measurements, the Alkire and Foster method (AF) (Alkire et al. 2015), has also found its way into the literature concerning employment. Garcia-Perez et al construct a multidimensional measure for the incidence and intensity of precarious employment created by low wages, fixed-term contracts and part-time work (Garcia-Perez et al. 2017). Gradín et al. measure jobless households in the European Union as employment deprivation (Gradín et al. 2012). There is however no application of the AF methodology that looks at employability of the individual, which also acknowledges the impact of the home and neighbourhood context. For policy, this is an important lacuna that this article addresses.

In what follows we first ground the concepts of the individual youth, their households, and neighbourhoods in the South African context before we apply the AF methodology to develop the employability index.

### *On youth*

Throughout history, societal needs and conditions have shaped the conception and experience of childhood and youth (Honwana and De Boeck 2005). The relation between employment and youth has been strong throughout, morphing over time and space as projects of nation building, democracy, cultural identity, modernism, capitalism, and consumerism emerged (Fass 2005). The South African youth definition is a compelling example of this as it includes those aged 15-34 to bear testimony to

the hardship young South Africans experience in the aftermath of apartheid, including their obstructed entry into the labour market. We however apply the international definition of youth and restrict the sample for our analysis to individuals aged 15 to 24. We do this to reflect that the lifeworlds of this younger youth cohort differ from those of the older youth cohort (25-34), and thus an evaluation of their employability would need an adapted conceptualisation.

### *On household and municipality*

We aim to reflect the layered composition of the lifeworld whereby the household and neighbourhood are active actors rather than the passive backdrops of a young person's life (Das and Randeira 2015). In South Africa, both household and neighbourhood are constructs heavily shaped by apartheid and until today, remain building blocks of socio-economic exclusion for youth (Klasen and Woolard 2008). We therefore add household and municipal aggregates in our evaluation of employability. To the best of our knowledge this is a conceptual novelty in an application of the Alkire and Foster method, but one that is instructive in fully capturing the vulnerabilities the individual has to navigate.

In geographical terms, today's neighbourhoods in South Africa bear the testimony of extreme spatial planning according to ethnicity during apartheid through which personal movement, living arrangements, land ownership, and employment became strictly regulated (Newman and De Lannoy 2014). Spatial reconstruction in post-apartheid policy has been slow (Parnell and Crankshaw 2013), and the majority of South Africa's youth experiences on a daily basis the harshness of the outskirts of cities and towns usually separated by an infrastructural fence of railways, bridges, and highways hard to penetrate for the people forced to live on the wrong side of the tracks. Jobs, services and affordable transport for youth are scarce in former homelands and small towns dotted across the country. Even closer to employment nodes in larger towns and cities, youth struggle to connect as post-apartheid urban planning has not been able to demolish the material and immaterial barriers that ringfence youth in townships at the city's outskirts. Socially, the forced displacement ripped out social networks rooted in kinships, friendships, and spatial proximity and the reliance on each other for various forms of support over generations. The uprooting of people's livelihoods hit traditions of craftsmanship, artisanship, trade, and employment options.

While today's youth have no direct experience of these events, their effects are a legacy that taint their options for making a livelihood. In response to the lack of access to opportunities to do so, an environment of available options to youth has developed wherein a variety of activities and actors join forces, situated on a continuum of formal to informal, and legal to illegal. Public and private job-creating schemes (Graham et al. 2019), survivalist entrepreneurship, various forms of waged labour, and even the recruitment of youth by criminal syndicates (Jensen 2010) are all strategies and tactics deployed by institutions and individuals to fill these voids.

The above discussion shows that it is not simple to decide which geographical unit is best suited for the purpose of our analysis. Moreover, people's circles of influence and movement often go far beyond boundaries of enumeration area or ward, whereas on the other hand a municipal analysis risks brushing over what are vastly heterogeneously areas. The Census 2011 10% sample that we use allows us to analyse down to the municipal level. While this is a vast improvement on national and provincial analyses, disaggregation up to an even smaller level would strengthen our understanding of employability. Taking note of this limitation, we consider the municipality as a proxy for people's neighbourhood.

Household demarcation is equally rooted in the apartheid history particularly due to migrant labour policies that restricted movement of Black<sup>2</sup> labourers and prohibited families from living closer to employment opportunities, usually towns and cities. Children often stayed with extended family who took up day-to-day care. The Lund Committee notes the apartheid regime "positioned the Christian

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<sup>2</sup> This includes African, Coloured, Asian/Indian people \_\_\_\_\_

Family as the centrepiece of the white nation [while] at the same time economic growth was premised on the fracturing of the family lives of those who were not white” (Child Gauge 2018:26). Household formation in contemporary South Africa still is intricately linked with livelihood strategies and labour. In the absence of an unemployment grant, unemployed people look for access to resources by moving in with parents, relatives or friends (Klasen and Woolard 2008; Ross 2010). As such, the “household” in surveys like the Census comprises people living under the same roof but not automatically denotes a nuclear family.

### *Social categories*

Lastly, we are attentive towards the porousness of the labels we use. Formal/informal employment, deprived/non-deprived, youth/adult, and the opening and closing of opportunities are but snapshots in time and space within contexts of overall want and precarity (Das and Randeira 2015). In such contexts “informal” employment is often not the negation but rather the foundation of “formal” employment (Pulignano 2019).

In South Africa, employment contributes least to the livelihoods of the poorest<sup>3</sup>, pointing towards a plurality of livelihood strategies necessary to make a living (Statistic South Africa 2017).<sup>4</sup> The fluidity of the boundaries between formal and informal is illustrated in South Africa by the many more informal workers who transit into the formal sector compared to those moving within formal jobs (Ranchhod and Dinkelman 2008). Many more momentary movements remain invisible for the surveyor. That said, few people are able to permanently improve their employment circumstances over time, with especially unemployed and discouraged work seekers battling to escape unemployment (Ranchhod and Dinkelman 2008). This raises the question whether and in which ways these people are vulnerable towards making a livelihood through employment.

As such, the index’ results should be taken for what they are: snapshots that freeze a highly fluid reality but nonetheless help to unpack the complex dialectic of multiple vulnerabilities regarding employability people experience in their lifeworlds.

## **Data**

We use the cross-sectional survey data from the Census 2011 10% sample, compiled by Statistics South Africa (Statistics South Africa 2012). The data is accessible via <https://www.datafirst.uct.ac.za/dataportal/index.php/catalog/485>. The Census reports on various relevant variables to this study, such as education, employment, health, and living environment. Household and individual identifiers can be matched, and municipal characteristics can be computed, so that the individual can be grounded in the home and neighbourhood environment. After data from individual and household records are matched and non-responses and missing values as well as the data of youth in transient, tourist hotels and institutions are removed, our sample consists of 798 166 youths between 14 and 25 years old, a weighed representation of 9 517 064 youth in South Africa.

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<sup>3</sup> In 2014-2015, the average South African gets 72.6% of total income from work. For the poorest decile this is 13.9%, and social security through pensions and family allowances (60.9%) fills the gap, followed by rental income (15.4%) (Statistic South Africa 2017).

<sup>4</sup> We cannot fully take account of these livelihood strategies here. Qualitative research into youth and livelihoods is being undertaken by the lead author in which the multiplicity of livelihood tactics is a central research interest.

# The development of a Multidimensional Youth Employability Index for Post-Apartheid South Africa

## Methodology

*“While the proximate objective of poverty measurement is rigour and accuracy, an underlying objective must also be to use well-crafted measures to give a different kind of voice to concerns with injustice – to document raw disadvantage, to order complexity, monitor and evaluate advances, and mark routes for tangible policy responses” (Alkire et al. 2015: 3)*

The Alkire and Foster (AF) counting approach is a multidimensional extension of the widely-used Foster-Greer-Thorbecke approach from 1984 (Sabina Alkire 2016). The attraction of the AF method lies in its applicability in a range of developmental fields, in this case allowing us to use categorical data from the Census. Four areas motivate our choice for the AF method. Firstly, AF makes it possible to systematically disentangle the clustered disadvantage that South African youth experience when it comes to their ability to gain and sustain and move on in employment. Secondly, it enables us to make visible the highly differentiated profiles of interconnected deprivations young people experience in relation to employability. Thirdly, the family of three AF measures reaches further than unemployment as a single indicator which is inadequate to capture multiple deprivations towards employability. A similar conclusion was arrived at by Klasen who found large mismatches in South Africa between those that are severely income deprived and those that are severely multiple deprived in other articulations of poverty (Klasen 2000). Fourthly, Alkire et al’s normative motivation captured in the quote above resonates with our prime motive of looking into South Africa’s skewed youth outcomes in the labour market. Seeing the harsh impact of the unemployment crisis on young people’s lives (De Lannoy et al. 2018b; Seekings 2014), we seek with the MYEI to offer a well-crafted measure that helps understand the complexity and severity of the experiences related to employability youth face across multiple spheres of their lives. In turn, this might inform state and non-state actors (such as employers) in adapting practices and relief hardship where possible.

Methodologically, the AF framework requires the explicit selection of dimensions and indicators, weights, and cut-offs. As for the choice of indicators, Sels and Forrier’s overview of employability measures shows a wide range of potential employability indicators (Sels and Forrier 2003). Critics may therefore point out that alternative choices to ours are possible. To ground our selection of indicators specifically in the South African context in which youth live, we draw on extensive work on youth outcomes and transitions in South Africa’s labour market, and how they are impacted upon by individual, household and neighbourhood level factors (Anand et al. 2016; Banerjee et al. 2008; Borat et al. 2016; Branson et al. 2019a; Burns et al. 2010; De Lannoy et al. 2018a; Frame et al. 2016; Mlatsheni and Ranchhod 2017). We furthermore test our indicators’ relevance to employment and discuss this in the appendix.

The dimensions in which we group the indicators mirror discourses on youth development and employability in which much attention has gone to education, social capital, economic opportunities, and access to commodities that connect to the labour market (Graham et al. 2016; Western Cape Government 2013). According to the AF method, we also decide on a weighing of the dimensions to reflect their relative importance towards employability. Standard AF practice is to assign equal weighing across and within dimensions, unless there are justified normative or empirical reasons not to (Alkire 2016). This makes the interpretation of the results straightforward and reflects that deprivations in the lived experience of people are equally deserving of attention. As such, the index distributes equal weights across the five dimensions (1/5 each), and indicators within each dimension receive equal weight.

Next, we set a cut-off for each indicator and an overall threshold to determine whether a person is deprived. We equally follow the existing literature and apply the standard cut-off of 1/3 of dimensions,



or 33.3%, meaning that people are considered employability deprived if they are deprived in a third or more of the weighted deprivations.

The AF method provides a range of robustness checks to minimise the normative and arbitrary nature encapsulated in the above decisions (Alkire et al. 2015). We describe the checks and their results in the appendix. In addition to the empirical ground we find for our selection in the literature, our checks provide solid statistical ground to accept the relevance of the indicators we have identified and show that the index is robust against changes in weights and cut-off points.

The insights from this collective body of work results in the framework of the multidimensional youth employability index, featuring five dimensions and fifteen indicators, each with a cut-off, and overall threshold to indicate clustered disadvantage towards employability.

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### Multidimensional Youth Employability Index: dimensions, indicators, and cut-offs

#### DIMENSION 1: ECONOMIC OPPORTUNITIES

*Captures the presence of an active and realised connection to the labour market via people in employment in the immediate proximity of the young individual.*

**Indicator 1.1 Household employment** *captures the presence of an employed person living under the same roof as the young individual who represents an active and realised connection to the labour market through which information about the world of work including concrete job opportunities would enter the immediate living vicinity of the young individual.*

**Cut off:** *Individual lives in a household where no one is employed*

**Indicator 1.2 Youth employment in the municipality** *captures the active and realised connection via peers in the neighbourhood, through whom information about the world of work including concrete job opportunities would enter the lifeworld of the young individual.*

**Cut-off:** *Individual lives in a municipality where less than 15.4% (municipal mean across country) of youth (15-24) are employed*

#### DIMENSION 2: EDUCATION AND LEARNING

*Capture the developmental trajectory of a young person in learning to acquire, process, and share information and knowledge.*

**Indicator 2.1 Education attainment** *captures the farthest point of the educational trajectory in a schooling institution of the young individual*

**Cut-off:** *Individual is aged 15-16 and has completed less than primary school, individual is aged 17-20 and has completed less than grade 9, or individual is aged 21-24 and has completed less than matric or matric equivalent*

**Indicator 2.2 Literacy** *captures the ability to identify, understand, interpret, create, communicate and compute, using printed and written materials associated with varying contexts*

**Cut-off:** *Individual has difficulty in at least one of the following things: writing her/his name; reading; filling in a form; writing a letter in any language; calculating/working out how much change should be received when buying something; reading road signs and has no tertiary education*

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## Multidimensional Youth Employability Index: dimensions, indicators, and cut-offs (Cont)

### **DIMENSION 3: HEALTH AND WELLBEING**

*Captures the individual's physical and emotional wellbeing that allows for unimpeded engagement with the labour market*

**Indicator 3.1 Physical health** captures the individual's physical basic functioning

*Cut-off: Individual has difficulty in at least one: seeing, hearing, communicating, walking, remembering or concentrating, self-care*

**Indicator 3.2 Shock event** captures an event that can be expected to negatively affect the individual's mental wellbeing within the household<sup>5</sup>

*Cut-off: Individual lives in a household where at least one household member passed away in the past 12 months*

**Indicator 3.3 Youth discouragement in the municipality** captures the negative outlook of peers towards the labour market in the individual's municipality

*Cut-off: Individual is living in a municipality where more than 5.8% (= municipal mean across the country) of the unemployed youth have given up looking for work because no jobs available in the area, lack of money to pay for transport to look for work, unable to find work requiring her/his skills, lost hope of finding any kind of work, no transport available*

### **DIMENSION 4: SOCIAL CAPITAL**

*Captures the bonding, linking and bridging capability of social networks between the individual and the labour market*

**Indicator 4.1 Parental bereavement** captures the loss of networks, information, and relations a parent would be able to provide to the youth as a result of that parent's death.<sup>6</sup>

*Cut-off: At least one of the individual's biological parents is no longer alive.*

**Indicator 4.2 Educational attainment in the household** captures the bonds, linkages and opportunities a young individual would be part of and benefit from through the networks offered by household members with higher education levels

*Cut-off: Individual lives in a household where the average educational attainment of adults is less than matric or matric equivalent*

**Indicator 4.3 Youth educational attainment in municipality** Captures the bonds, linkages and opportunities a young individual would be part of and benefit from through the networks offered by higher educated peers

*Cut-off: Individual lives in a municipality where more than 27% (=municipal mean across the country) of the youth is deprived in educational attainment*

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<sup>5</sup> Lloyd and Leibbrandt (2013) find that the lived reality of unemployment, poverty, and inequality causes high level of stress and discouragements, affecting people's mental health and wellbeing negatively. The Census captures discouragement among unemployed people in a sub-question only and leaves the mental wellbeing of other respondents unquestioned, rendering this question not useable for us as we need full information for the full sample. The Census does ask all respondents about mortality in the household, and we use this as a proxy for a shock event we expect to negatively affect the individual's mental wellbeing.

<sup>6</sup> It is worthwhile pointing out that we look for the death of a parent and not for parental cohabitation. As described above, childcare arrangements are fluid in South Africa. While many youth do not live with their parents, we assume that they would still benefit from tapping into the relations, networks and information of their mothers and fathers if alive.

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## Multidimensional Youth Employability Index: dimensions, indicators, and cut-offs (Cont)

### DIMENSION 5: CONNECTIVITY COMMODITIES

*Capture material resources in the individual's household that enable engagement with the labour market*

**Indicator 5.1 Electricity in the household** captures the individual's opportunity to use electrical appliances that enable engagement with the labour market (e.g. job search, study, training, entrepreneurial activities from home)

*Cut-off: Individual lives in a household that uses mainly paraffin/candles/nothing/other for lighting*

**Indicator 5.2 Internet** captures the presence of an internet connection in the household which the individual can use to engage with the labour market (e.g. Job search, study, training, entrepreneurial activities from home)

*Cut-off: Individual lives in a household that has no access to internet*

**Indicator 5.3 Mobile phone** captures the presence of a mobile phone in the household which can be used as a point of incoming and outgoing contact between the individual and the labour market

*Cut-off: Individual lives in a household without a mobile phone*

**Indicator 5.4 Car** captures the presence of a car in the household which enables engagement with the labour market

*Cut-off: Individual lives in a household without a car*

**Indicator 5.5 Residence type** captures whether an individual lives in an informal housing type which usually is less connected to employment nodes than formal residences<sup>7</sup>

*Cut-off: Individual lives in an informal type of residence*

**Overall cut-off = 1/3 of the indicators or more.**

*If an individual's circumstances are such that she/he scores below the cut-off point in a third or more of the indicators, then we consider her/him employability deprived.*

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## Unpacking vulnerabilities towards employability

### Deriving a family of three measures

The AF method generates a set of three employability deprivation measures, derived by a process of identification and aggregation. See Alkire et al. (2015) for a full methodological description. Table 1 shows the results. The first measure is the headcount ratio ( $H$ ), obtained as the proportion of youth that is employability deprived. This is also understood as the incidence of deprivation. Our results show that of the 9.4 million youth between 15-24 in 2011, 45.2% or 4.3 million youth are employability deprived.<sup>8</sup> The second measure is the intensity ( $A$ ) of the deprivations experienced. This is calculated as the average proportion of indicators in which youth are deprived. Our analysis indicates a value of 47.5%, meaning that overall youth deprived in employability experience deprivations simultaneously in just under half of the indicators. The third measure is the Multidimensional Employability Index score (MEI), also referred to as the adjusted headcount ratio ( $MO$ ). This is the product of the headcount

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<sup>7</sup> We look at formal/informal housing instead of rural/urban to capture the high proportions of urban youth that lose out on the urban dividend because access to opportunities remains low due to socio-spatial planning. Neighbourhoods however can be highly heterogeneous, with formal and informal housing areas next to each other, or with informal structures in the backyards of formal housing.

<sup>8</sup> This figure does only include youth living in households, not those residing in institutions as we cannot match them with household characteristics.

ratio  $H$  and the intensity of employability deprivation  $A$ . Its value ranges from zero to one, where one means all youth are deprived in all indicators. The national value of the score is 0.21.

When decomposing these measures by population group in Table 1, we see that half of African youth are employability deprived and comprise by far the most vulnerable group. Interestingly, the intensity of the deprivations varies much less across all population groups, with Africans still experiencing proportionality more deprivations than all other groups. Young men and women experience deprivation in similar proportions and intensities. The higher unemployment rates for young women may therefore point towards factors outside of their own employability, such as labour demand side factors that discriminate against young women, burden of childcare, or safety concerns in public transport. Youth living in non-urban areas are proportionally more often deprived, along with slightly higher intensities of deprivations compared to urban youth. We delve into the geography of employability in more detail below.

**Table 1: Family of three employability measures disaggregated by population group, gender, and geography.**

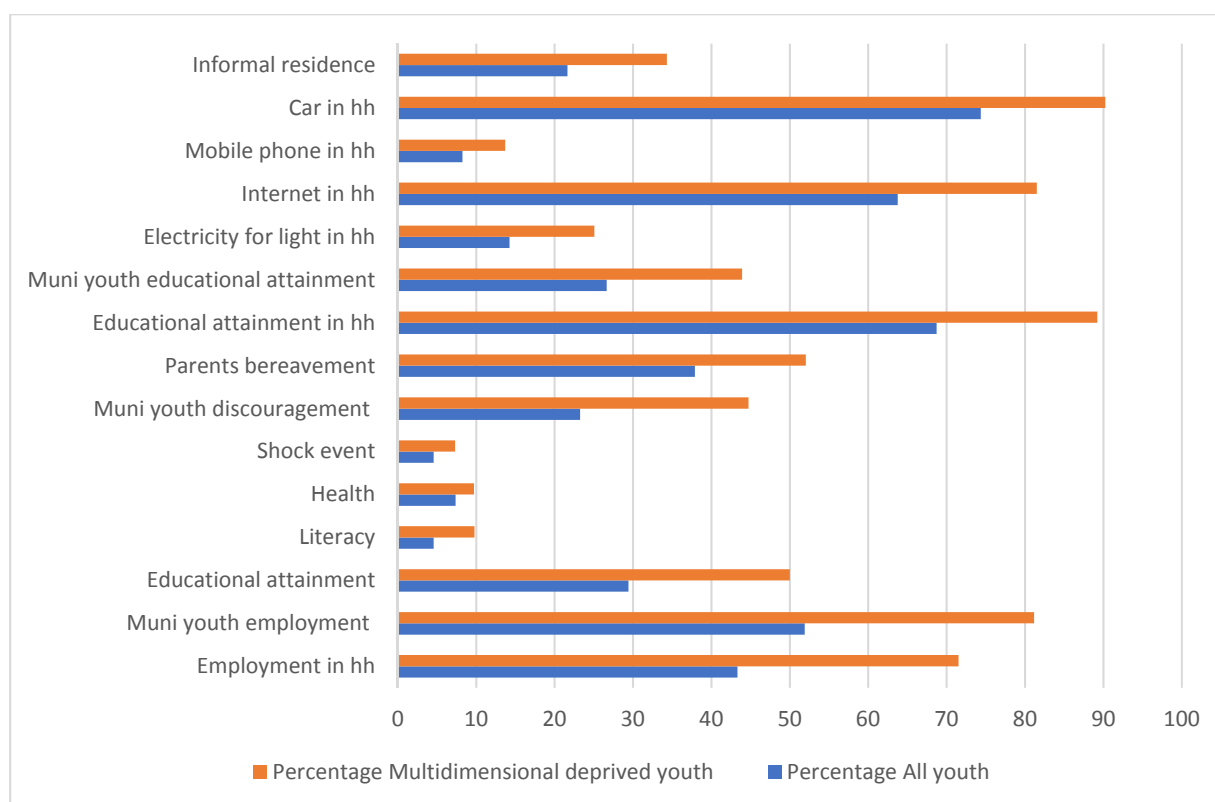
	H (incidence)	A (intensity)	Mo (index score)
All youth	45.2%	47.5%	0.21
Population group			
African	51%	48%	0.24
Coloured	21%	43%	0.09
Indian or Asian	7%	42%	0.03
White	4%	40%	0.02
Other	28%	44%	0.12
Gender			
Male	46%	48%	0.22
Female	44%	47%	0.21
Geography			
Urban	26%	44%	0.11
Not in urban area	73%	49%	0.36

Source: own calculations based on weighted data from the Census 2011 10% sample.

### Youth and the deprivations they experience

Next, we examine the proportions of youth who are deprived per indicator. Figure 1 shows the results for the overall youth population as well as for those we identify as employability deprived according to the cut-off of being deprived in a third or more of the indicators. While the proportions of deprivation in each indicator are substantially higher for the employability deprived youth compared to the total youth population, the trends of the deprivations are similar, with some spikes which we discuss below.

**Figure 1: Deprivations in indicators among youth in South Africa**



Source: own calculations based on weighted data from the Census 2011 10% sample.

Having a direct link or contact to the labour market has been found to be especially significant in a context like South Africa's where employers and youth predominantly rely on informal recruiting methods mostly provided by family and household (Mlatsheni and Ranchhod 2017). Moreover, an employed person in the household represents a feasible starting point for job-searching and helps to familiarise the young person with other relevant practices such as hiring, applying, and the use of transport, which otherwise remain unknown and may be intimidating and deterring (De Lannoy et al. 2018a; Graham et al. 2016; Mlatsheni and Rospabe 2002). As such, the high rates of youth living in a jobless household (43% for all youth and 71.5% for employability deprived youth) are cause for concern. Joblessness among peers is extremely high for employability deprived youth (81%), and clearly points towards clustered geographical disadvantage.

High levels of deprivation in education at all levels, the individual, the household and peers in the municipality, stand out.<sup>9</sup> Half of employability deprived youth are several years behind in education or have not completed the final year of high school despite their age; nine out of ten live with household members in the same situation. Typically, higher educated households have a higher socio-economic status. Their networks usually span across equally socio-economically powerful social circles, in turn implying a closer connection to professional opportunity and life – in South Africa a

<sup>9</sup> These rates are especially high seeing our relatively lenient cut-off points which follow the Youth MPI (Frame et al, 2016). Branson et al 2014 find that students who are more than two years older than the recommended age for their grade are 24.3 percentage points more likely to drop out of school (Branson, Hofmeyr, and Lam 2014). Our thresholds allow for even more of an age difference, thereby permitting for grade repetition and potential stints out of school. As for the youth aged 21-24, we use a high-school degree as the threshold to account for the South African labour market characterised by an oversupply of labour. This results in skewed recruiting practices towards candidates with a high school level degree or equivalent, thereby often unnecessarily inflating the requirements in the job specification (Banerjee et al. 2008; Borat and Mayet 2012).

strong driver of the intergenerational transmission of poverty (De Lannoy et al. 2015). A tertiary educated person is also more likely to create employment (Mlatsheni and Ranchhod 2017), and thus more likely to constitute a bridge between the world of work and the young individual.

As youth are susceptible to peer behaviour, being surrounded disproportionately by discouraged unemployed peers may wear down dreams, hopes, and perceived opportunities of the young individual. Geographical pockets of particularly concentrated discouragement exist where 44.7% of employability deprived youth reside.

Connectivity deprivations are high among all youth. One out of four employability deprived youth uses mainly paraffin and candles for lighting at home or goes without electricity at all. Electrification has been shown to improve employment outcomes in South Africa's rural areas as job search, study, training, and entrepreneurial activities from home become more feasible (Dinkelman 2011). Relatively few youth live in a household without a mobile phone. When put against the electricity deprivation rates above, it seems that many households would have a mobile phone while having no electricity, illustrating the need for and existence of other points of access to an electrical grid for example to charge the phone. Data costs are high in South Africa however and research has indicated that they add to the costs of job-hunting exacerbating poverty in poor households (Graham et al. 2016). Our results show these trends as well. Despite the promises of a digital transformation for youth (Porter et al. 2018), the vast majority of youth (63.7%) has no access to the internet from home via either PC or mobile phone, and for employability deprived youth this is even 81.5%.

As earlier explained, apartheid-era spatial planning continues to constrain youth's connection to labour markets and geographical proximity to opportunities is therefore not always an accurate indicator of youth's connection to it. (Mlatsheni and Ranchhod 2017). The lack of reliable and affordable transport constrains youth in their job search and considerably reduces their take-home income when employed (Graham et al. 2016; Mlatsheni and Ranchhod 2017). Safety concerns particularly among young women (Gillian and Kgomotso 2019) may discourage the use of public transport even where available. Yet the vast majority of all youth, and over nine out of ten employability deprived youth, have no car at home and would need to make use of other modes of transport.

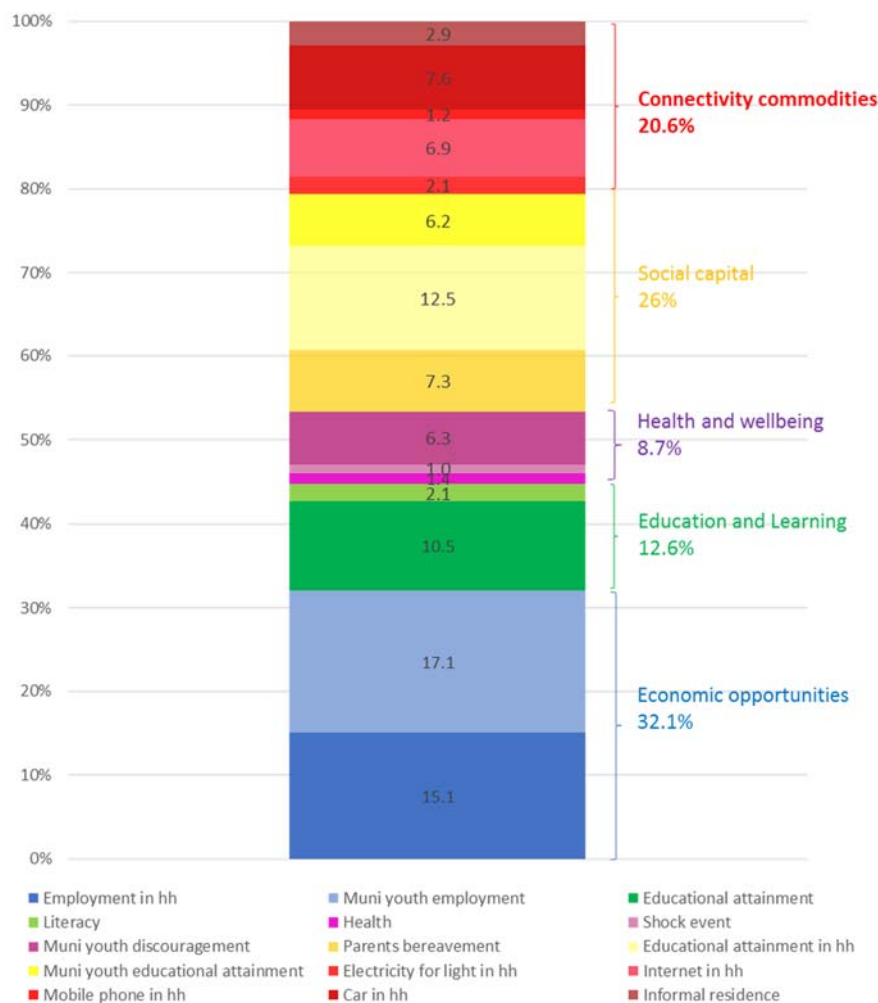
### **The composition of employability deprivation: contributions of indicators and dimensions towards (un)employability of youth.**

We turn now, in Figure 2, to the composition of employability by looking at the contributions of the indicators and dimensions to the MYEI for youth whom are employability deprived.

The overall picture shows that factors beyond individual attributes contribute greatly to deprivations in employability. This demonstrates the usefulness of a broad approach to employability like ours which includes factors at the home and the municipal environment of the young person.

Figure 2 adds further detail on this point by showing the weighted contribution of each dimension. Economic opportunities contribute the most to youth's low employability, followed by social capital and connectivity commodities. While capturing different aspects, arguably, these dimensions all capture networks of some sort. In this sense, we start to see how low employability levels concur with social exclusion in various forms. While the benefits of education and learning are hard to overstate in a youth development context, the contribution of education and learning is relatively low in our analysis and points towards the interconnections of factors at play in employability.

**Figure 2: Contributions of weighted indicators and dimensions to the Multidimensional Youth Employability Index.**



Source: own calculations based on weighted data from the Census 2011 10% sample.

## Geography of youth employability deprivation

### By province

Table 2 shows that the distribution of youths who are multidimensional deprived significantly differs across provinces. The intensity of the deprivations varies less across the provinces compared to the variance in headcount ratio. This indicates that the employability deprived across the country experience a similar degree of cumulative deprivation irrespective of their location. Since the index is the product of the incidence and intensity, it follows that the values for the provinces roughly follow the headcount ratios. Gauteng and the Western Cape have the lowest youth employability deprivation (meaning the least people experiencing the least deprivations), which is less than a sixth of the value for the Eastern Cape.

**Table 2: Employability deprivation measures at provincial level, 2011**

Province	Youth MEI Population	% Youth MEI Population	Headcount ratio (H)	Intensity (A)	Youth MEI index (HxA)
Western Cape	147 017	3.5	0.159	0.407	0.065
Eastern Cape	943 744	22.2	0.775	0.531	0.412
Northern Cape	89 200	2.1	0.461	0.474	0.218
Free State	287 102	6.8	0.570	0.462	0.263
Kwazulu-Natal	1 105 956	26.0	0.538	0.486	0.261
North West	340 327	8.0	0.555	0.487	0.270
Gauteng	261 141	6.1	0.132	0.409	0.054
Mpumalanga	391 579	9.2	0.486	0.448	0.217
Limpopo	689 805	16.2	0.616	0.437	0.269
<b>South Africa</b>	<b>4 255 870</b>	<b>100</b>	<b>0.452</b>	<b>0.475</b>	<b>0.215</b>

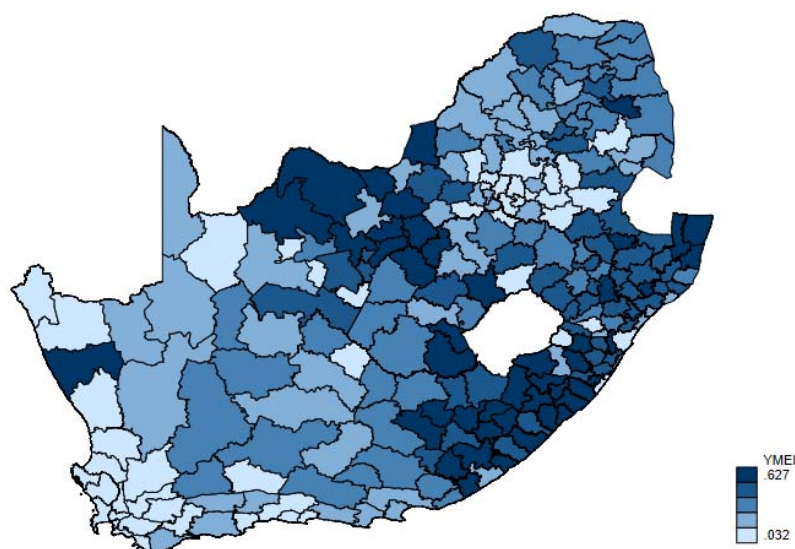
Source: own calculations based on weighted data from the Census 2011 10% sample.

#### *By municipality*

Vastly heterogenous spatial patterns exist at municipal level, as Figure 3 depicts with darker shades of blue highlighting higher unemployability levels (i.e. higher proportions of youth experiencing higher proportions of deprivation). The municipality with the highest employability deprivation is Ntabankulu (0.627), being nearly twenty times the deprivation rate of the municipality with the lowest employability deprivation in the country, Drakenstein (0.032). The next four most deprived municipalities, i.e. Port St Johns (0.597), Engcobo (0.591), Mbhashe (0.589) and Ngquza Hill (0.583) are all situated in the Eastern Cape. The next four least deprived municipalities are City of Tshwane (0.039), Stellenbosch (0.04), City of Johannesburg (0.042) and City of Cape Town (0.046). Overall, deprivation patterns correspond highly with former homeland areas which remained highly underserved under apartheid while playing also a smaller role than urban centres in post-apartheid investment (Parnell and Crankshaw 2013).



**Figure 3: Youth Multidimensional Employability Index by municipality, 2011**



Source: Own calculations based on weighted data from the Census 2011 10% sample

### **Labour market status of youth and their employability**

The severity of the youth unemployment crisis in South Africa, a highly complex puzzle, tends to be expressed in the single indicator of the unemployment rate whereby youth falls into either the category of employed or unemployed. Such narratives mostly popular in media and other public reporting overlook all kinds of nuance, but two are of particular interest here. Firstly, they tend to see employed and unemployed youth as opposites, leaving out other kinds of ‘states’ youth may find themselves in with regards to the labour market. In what follows, we therefore extend the analysis: in addition to the employed and unemployed, we look into the results for those who are discouraged and those who are not economically active. While this is an improvement on the binary categories of unemployed/employed, we acknowledge that there are nuances which we cannot make because of our use of the Census. Unfortunately, the Census has to be a short survey and cannot probe any area in detail. Also, it is cross-sectional which does not allow the tracking of changes over time.

Secondly, these narratives tend to treat the “employed” as an internally homogeneous group, while this is not the case. Increasingly, scholarly attention is given to South Africa’s working poor (Lilenstein et al. 2016; Omomowo 2011), a group that is highly vulnerable yet remains invisible when employment is the prime focus. Since our prime focus is employability of the most vulnerable youth, we look further into formal and informal sector employees and compare the outcomes among those that are and are not employability deprived.

Table 3 shows how according to the AF method we split up the youth population into those that are employability deprived and those that may experience some deprivations but in less than a third of the indicators. We therefore call them non-deprived according to employment status categories, i.e. employed; unemployed (wanting to work and actively looking for work); discouraged (unemployed, wanting to work, but no longer looking for work); and those that are not economically active (at the time of the survey they are not in or out a job for reasons like study, childcare, homemaking, or long-term illness, but they may want to take up employment at some stage).

For those that are employability deprived, we disaggregate the three measures (H, A, and Mo). Youth with work are significantly less exposed (H) to multiple deprivations compared to the unemployed

(43%) and discouraged youth (60%). But yet still nearly a quarter (24%) of the employed youth is employability deprived. Discouraged youth proportionately suffer more often (H) and the most severe (A) deprivations<sup>10</sup>. The M0 score of the employed is exactly half that of the unemployed and a third of the discouraged.

**Table 3: Youth population in South Africa by employment status**

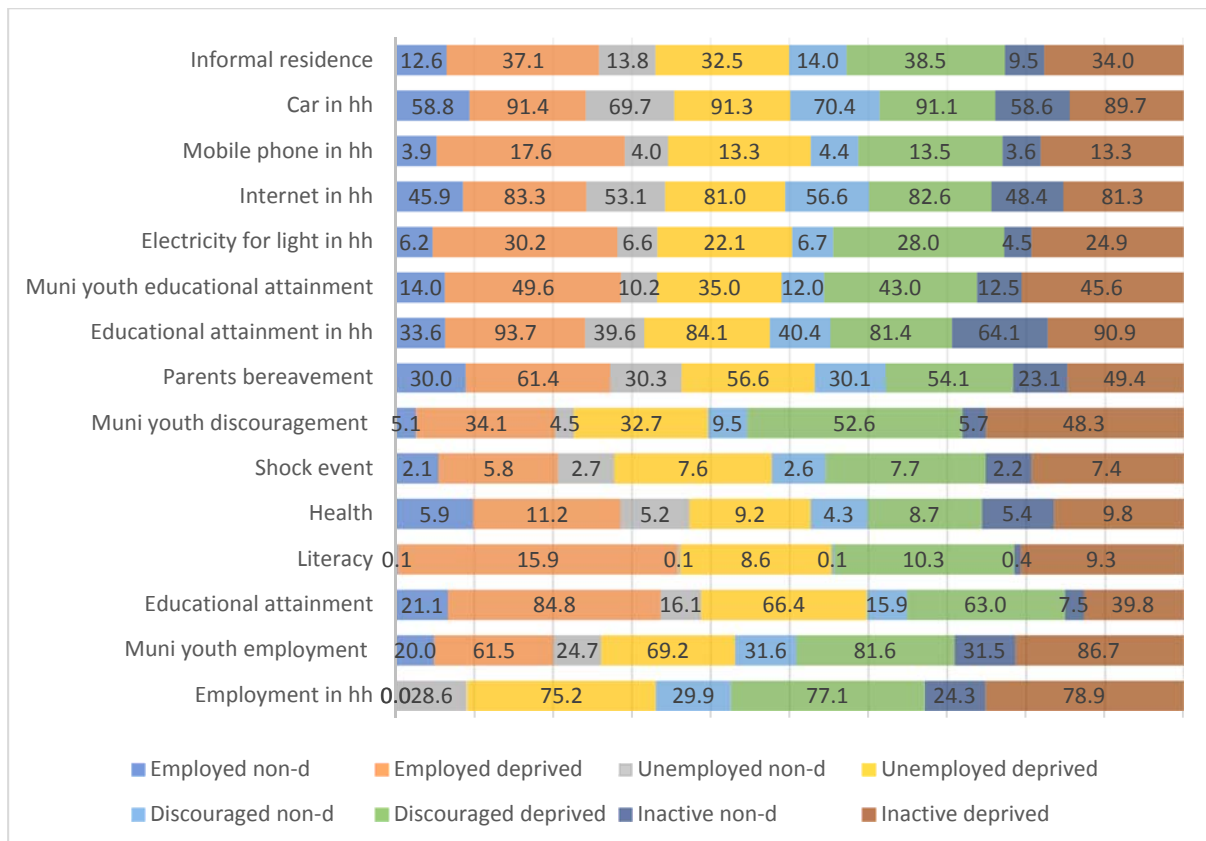
Employment status	Non-deprived		Employability deprived		Deprivation Measures		
	Total number	Percentage	Total number	Percentage	H	A	M0
Employed	1 126 726	21.8	356 280	8.4	0.24	0.44	0.1
Unemployed	9 67 054	18.8	738 123	17.3	0.43	0.47	0.2
Discouraged workers	2 23 626	4.3	331 596	7.8	0.60	0.5	0.3
Not economically active	2 841 205	55.1	2 829 871	66.5	0.50	0.48	0.24
<b>Total</b>	<b>5 158 611</b>	<b>100</b>	<b>4 255 870</b>	<b>100</b>	<b>0.45</b>	<b>0.48</b>	<b>0.21</b>

Source: Own calculations based on weighted data from the Census 2011 10% sample

Figure 4 looks at each indicator and the proportions of youth per employment status who are deprived in it. The figure splits those that are employability deprived and those that are deprived in that indicator but not necessarily in more than a third of them. We see that the large difference is not driven by employment status, but rather by being employability deprived or not. In other words, once youth are deprived in a third or more of the indicators, their lived realities start to look very similar irrespective of where they find themselves in the labour market. Even higher proportions of youth that are employed and employability deprived are hit by deprivations in educational attainment (84.4%) and educational attainment in the household (93.7) than those that are employability deprived and unemployed and discouraged. The discouraged youth that are employability deprived are significantly more likely (52.6%) to live in municipalities where high proportions of youth are discouraged. Overall, this figure shows that high proportions of youth who are employed still experience multiple deprivations that affect their employability.

<sup>10</sup> Lloyd and Leibbrandt 2013 have exposed high vulnerability of discouraged work seekers in subjective wellbeing.

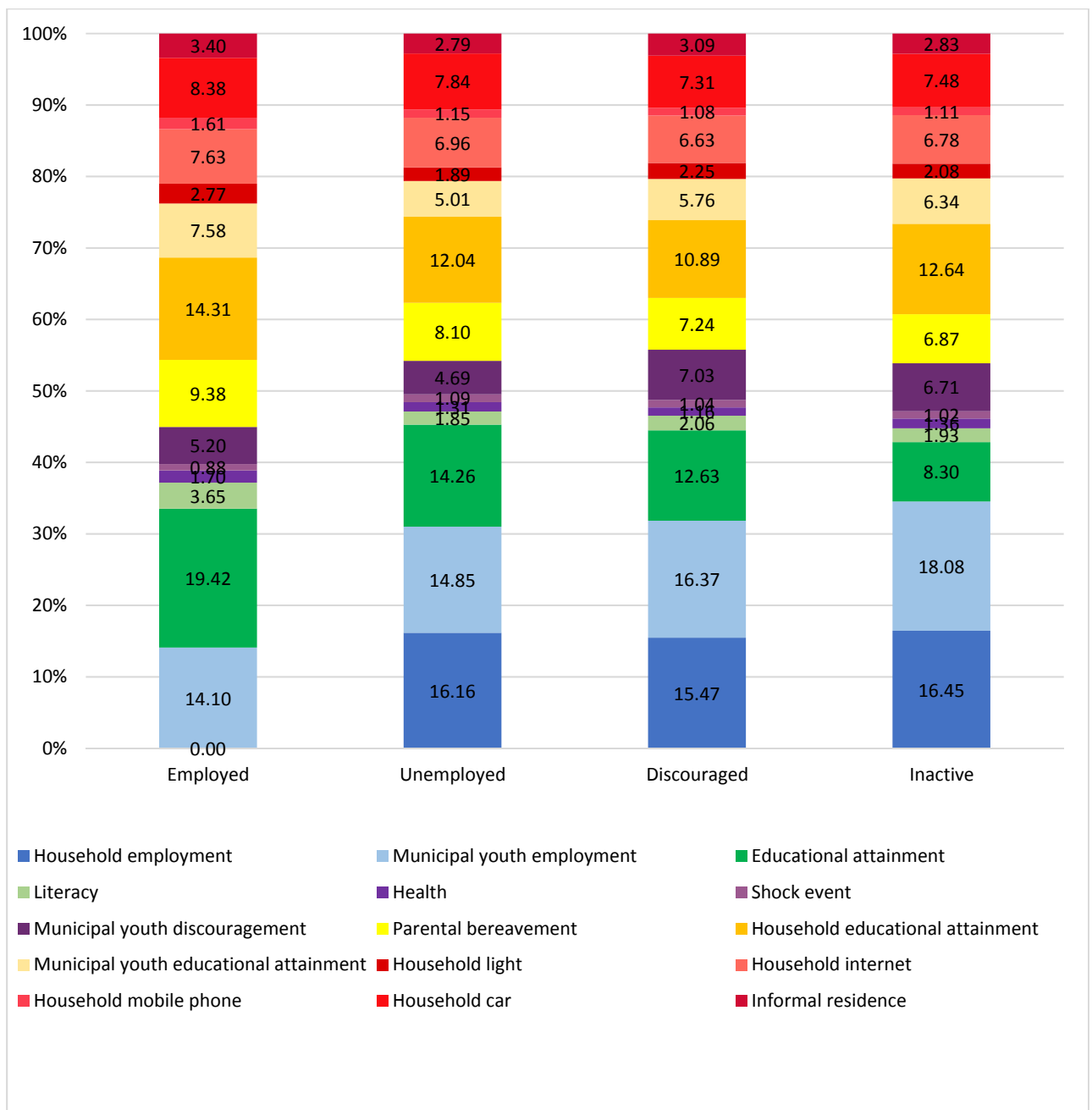
**Figure 4: Percentage of youth deprived per indicator according to employment status**



Source: Own calculations based on weighted data from the Census 2011 10% sample

We now hone in on the groups per employment status that are employability deprived, in order to depict the contributions of the weighed indicators towards their employability. These results are shown in Figure 5. The composition looks very similar across the employment statuses. Deprivation in household employment is equal to zero for the employed as they represent at least one household member in employment. For the three other categories, i.e. the unemployed, discouraged, and inactive, the large gap in household employment and economic opportunities stands out. The large contribution of educational attainment deprivation is remarkable for the employed, rather than for the unemployed or discouraged as could have been expected. Deprivations in social capital and connectivity commodities follow similar patterns across the categories.

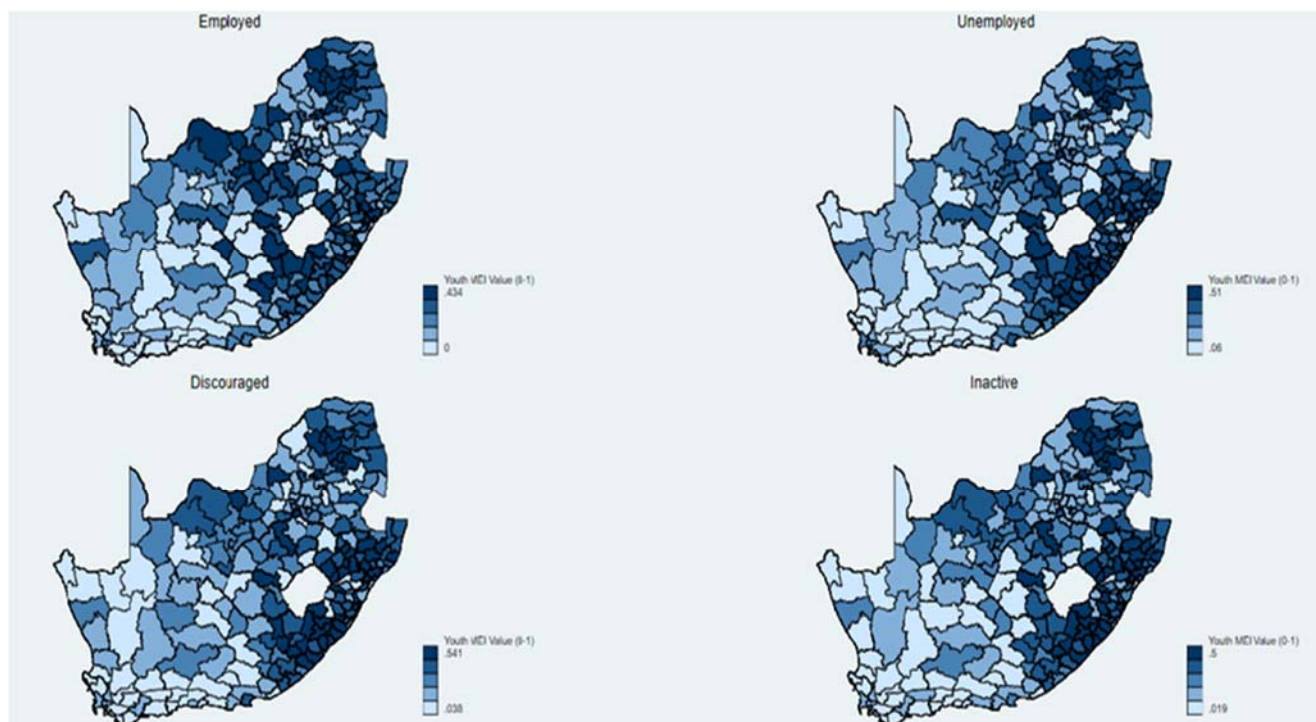
**Figure 5: Contributions per indicator according to employment status**



Source: Own calculations based on weighted data from the Census 2011 10% sample

In Figure 6 we elaborate the geographical analysis of employability deprivation (M0) from earlier and disaggregate into employment status. There is little variance between the municipalities where employed, unemployed, discouraged, and inactive youth who are employability deprived live. Clustered disadvantage therefore is geographically strong across employment status, but highly heterogeneous among municipalities as the wide variety of shades indicate (again, darker shades indicate high deprivation).

**Figure 6: Youth Multidimensional Employability Index per employment status, by municipality, 2011**



Source: Own calculations based on weighted data from the Census 2011 10% sample

Next, we seek to further break up the heterogeneity within the “employed” category. That a quarter of all employed youth is still highly employability vulnerable raises questions as to the kinds of jobs they have. In Table 4 we see that 20% of formally employed youth is employability deprived compared to 38% of the informally employed. Proportionally, formally employed youth are less likely to be employability deprived than those in informal work. Yet, the quasi identical intensity of the deprivations for both formally and informally employed youth shows a complex reality in which the fine line between the formal and informal sector becomes very thin at the lower end of the formal sector jobs as described above. The Census allows us to look into the kinds of jobs and sectors these youth work in. The majority of youth works in elementary occupations (27.68%), craft and related trades (15.72%), service work and shops (15.43%) and domestic work (11.54%). Young people in elementary sales jobs (23.69%), extraction and building jobs (10.11%), agricultural and fishery jobs (9.47%) and labourers in mining (5.81%) are mostly deprived according to our analysis (Statistics South Africa 2012).

**Table 4: Employability measures by sector**

By sector when employed	H	A	M0
Formal	0.20	0.43	0.09
Informal	0.38	0.44	0.17

Source: Own calculations based on weighted data from the Census 2011 10% sample

Lastly, we look at the incidence of deprivation in each indicator according to formal and informal employees, but we add an internal comparison for both categories between those that are deprived in that particular indicator but not employability deprived, and those that are deprived in that indicator and employability deprived. We seek to build a picture that encompasses all the “employed”, yet at very different spaces in the employment spectrum.

Table 5 illustrates the heterogeneity of the “employed” category and with that, the inadequacy of a single indicator such as “employment” to depict youth’s employability. Sharp contrasts in the circumstances of informal sector workers who are employability deprived and formal sector workers who are not deprived remain masked if the indicator (or policy objective for that matter) is simply employment. Conversely, informal employees that are not deprived are on average much better off than workers in the formal sector who are employability deprived. Again, this finding cautions towards the connotations that labels such as formal/informal evoke and how they may taint our perception of who is worse off.

The results for the non-deprived are similar irrespective of youth being employed in the formal or informal sector. Potentially this indicates that in people’s lived realities the line between formal and informal employment is much finer than often thought, and that formally-employed youth may not necessarily have jobs which enable them to escape particular deprivations leaving them still vulnerable towards employability.

**Table 5: Deprivations among youth working in the formal and informal sector**

<b>Indicator</b>	<b>Employed in informal sector and not deprived</b>	<b>Employed in informal sector and deprived</b>	<b>Employed in formal sector and not deprived</b>	<b>Employed in formal sector and deprived</b>
<b>Employment in hh</b>	0.0%	0.0%	0.0%	0.0%
<b>Muni youth employment</b>	24.2%	61.0%	19.4%	61.6%
<b>Educational attainment</b>	27.7%	89.1%	19.5%	82.2%
<b>Literacy</b>	0.2%	19.6%	0.1%	13.8%
<b>Health</b>	5.1%	10.2%	6.1%	11.2%
<b>Shock event</b>	2.1%	4.6%	2.1%	6.4%
<b>Muni youth discouragement</b>	7.0%	33.4%	4.9%	34.8%
<b>Parents bereavement</b>	31.3%	60.6%	29.4%	62.1%
<b>Educational attainment in hh</b>	40.8%	95.1%	32.0%	92.8%
<b>Muni youth educational attainment</b>	18.1%	50.2%	13.5%	49.9%
<b>Electricity for light in hh</b>	9.0%	32.0%	5.6%	29.1%
<b>Internet in hh</b>	55.2%	85.6%	44.3%	82.0%
<b>Mobile phone in hh</b>	4.9%	18.9%	3.7%	17.0%
<b>Car in hh</b>	68.6%	91.9%	56.6%	91.4%
<b>Informal residence</b>	17.0%	35.0%	11.6%	37.5%

Source: own calculations based on weighted data from the Census 2011 10% sample.

## Conclusion

We develop a multidimensional understanding and measurement of employability following the AF method to unpack the impact of clustered deprivations on youth's employability at the individual, household and neighbourhood levels. We find that 45.2% of the South African youth are employability deprived. Differences between ethnic lines are vast, with African youth being more than twelve times more likely to be employability deprived than White youth, and more than double compared to Coloured youth. Networks of different kinds and factors at the household and neighbourhood level mostly drive employability deprivation. The impact of individual attributes such as education and health is surprisingly low, given the strong historical link between employability and knowledge and skills, and their prominence in employability theory and practise (Sels and Forrier 2003).

The intensity of deprivation is overall high with youth facing deprivations in just under half of the indicators. The levels of deprivation of the employability deprived youth are similar irrespective their ethnicity. Clustered disadvantage is geographically highly heterogeneous among municipalities, yet very strong across employment status. Youth in jobs are less likely to be employability deprived compared to those who are unemployed, discouraged or economically inactive. However, an important finding is that for those who are employability deprived, the composition and intensity of the deprivations are nearly identical irrespective of their employment status. Lived realities of the most vulnerable youth therefore seem to have more in common than categories of employment status suggest.

We find that looking through the lens of "employability" generates more nuanced insights than an "employment" lens as we can unpack highly heterogeneous outcomes that remain masked otherwise. For example, there are important differences between youth who are all categorised as "employed" in public data. In other instances, simply looking at "employment" suggests highly differentiated outcomes where we find hardly any. Nearly a quarter of all employed youth are employability deprived, and their employment status does not seem to matter all that much for their lived realities. Again, this points towards the usefulness of an employability perspective that captures the multiple and interrelated realities of people, including the working poor.

We conclude that employability deprived youth, whom we find in and out jobs, would be better served by youth strategies that look beyond employment as a single indicator and instead plan, implement, and evaluate from an employability perspective encompassing the lived realities of young people within the contexts of their homes and neighbourhoods.

## Appendix

### Robustness checks for weighting and deprivation cut-offs

The applied weighing and cut-off choices remain to a certain extent arbitrary and require robustness checks to ensure that the implied decisions do not significantly skew the results (Sabina Alkire and Santos 2011). To achieve this, we compute the index for 234 municipalities with alternative weighing structures and deprivation cut-off points. We then check whether the rankings between the 234 municipalities are robust to changes in the weighing structure and deprivation cut-off points.

For the weighed dimensions, we apply three alternative weighting structures: (1) giving 40% of the relative weight to one dimension and 15% to each of the remaining four in turn; (2) giving 28% of the relative weight to one dimension and 18% to each of the remaining four in turn; and (3) giving 36% of the relative weight to one dimension and 16% to each of the remaining four in turn (as shown in Table 6). Then rankings between municipalities were built for each estimation, including the original estimation with equal weighing and employment deprivation cut-offs of 1/3, and rank correlation coefficients were computed.

Table 7 presents the Spearman's Correlation Coefficients of the alternative weight structures based on alternative (3). These coefficients highlight the level of association between the alternative weight structures, with a coefficient closer to 1 highlighting higher association. With Spearman's coefficients ranging between 0.806 (weights 5 and 6) and 0.986 (Weights 1 and 2) for the alternative weight structures, it's evident that all the alternative weight structures are highly correlated. The Spearman's Correlation Coefficients of the alternative weight structures based on alternative (2) and (3), not reported here, also reveals high correlation of the alternative weight structures. Accordingly, the results suggest that the Youth MEI ranking is robust to the choice of weights.

**Table 6: Alternative weighting structures for the Youth MEI**

Youth MEI Weights 1	Youth MEI Weights 2	Youth MEI Weights 3	Youth MEI Weights 4	Youth MEI Weights 5	Youth MEI Weights 6
20% EC	36% EC	16% EC	16% EC	16% EC	16% EC
20% Educ	16% Educ	36% Educ	16% Educ	16% Educ	16% Educ
20% H&W	16% H&W	16% H&W	36% H&W	16% H&W	16% H&W
20% SC	16% SC	16% SC	16% SC	36% SC	16% SC
20% CC	16% CC	16% CC	16% CC	16% CC	36% CC

Notes: EC – Economic Opportunities; Educ – Education; H&W – Health and Wellbeing; SC - Social Capital and CC - Connection Commodities.

**Table 7: Spearman's rank correlation matrix for different Youth MEI using alternative weights**

	Weights 1	Weights 2	Weights 3	Weights 4	Weights 5	Weights 6
Weights 1	1					
Weights 2	0.9759	1				
Weights 3	0.9681	0.9096	1			
Weights 4	0.9526	0.8864	0.9823	1		
Weights 5	0.9816	0.9467	0.9587	0.9327	1	
Weights 6	0.9927	0.9756	0.9599	0.9392	0.9713	1

Total municipalities: 234

Source: Own calculations based on weighted data from the 2011 10% Census Sample.

Furthermore, we carry out robustness checks for the Youth MEI deprivation cut-off point. We estimate the index using different deprivation cut-offs, ranging from 20 – 80%. Using these different cut-off



points, rankings between municipalities were built for each estimation cut-off, including the original equal weighing structure and rank correlation coefficients were computed. Table 8 presents the Spearman's Correlation Coefficients of the alternative cut-off structures. These coefficients highlight the level of association between the alternative cut-off points, with a coefficient closer to 1 highlighting higher association. With Spearman's coefficients ranging between 0.719 (cut-off 33 and 80) and 0.999 (Cut-off 30 and 33) for the alternative cut-off points, it's evident that all the alternative cut-off points are highly correlated. Accordingly, the results suggest that the Youth MEI ranking is robust to changes in cut-off points.

**Table 8: Spearman's rank correlation matrix for different Youth MEI using alternative cut-offs.**

Deprivation Cut-off	33	20	30	40	50	60	70	80
33	1							
20	0.997	1						
30	0.999	0.998	1					
40	0.997	0.996	0.995	1				
50	0.990	0.989	0.988	0.994	1			
60	0.967	0.967	0.965	0.971	0.981	1		
70	0.887	0.892	0.884	0.896	0.910	0.935	1	
80	0.719	0.728	0.718	0.731	0.748	0.770	0.779	1

Total municipalities: 234

Source: Own calculations based on weighted data from the 2011 10% Census Sample.

Using a Linear Probability Model (LPM), we look at the association between employment and deprivation in column 1, as well as the association between employment and individual indicators, first grouped by dimensions in column 2-6 and then looking at the indicators together in column 7. Indicators are found to be significantly correlated with employment. Educational attainment is an exception and deprivation increases the probability of employment. This however should be regarded in the context of our youth sample where many of the 15-17 year olds are still in school and not employed, and where the average years of schooling for 21-24 is under our cut-off point which we have set at 12 years of schooling to reflect the premium of a matric qualification in the labour market. Furthermore, high levels of vulnerability in education among the employed may point towards many who have no alternative than to accept precarious employment in South Africa. We moreover motivate our inclusion of the indicator by its pivotal role in youth policies in South Africa.

**Table 9: Linear Probability Model of employment for a selection of indicators**

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Multid_deprived	- 0.135*** (0.001)						
Household employment		- 0.260*** (0.001)					- 0.261*** (0.001)
Municipal employment rate		- 0.059*** (0.001)					- 0.048*** (0.001)
Educational attainment			0.060*** (0.001)				0.144*** (0.001)
Literacy			- 0.058*** (0.002)				- 0.017*** (0.002)
Health				- 0.005*** (0.002)			- 0.006*** (0.001)
Shock event				- 0.057*** (0.002)			- 0.024*** (0.002)
Parental bereavement					0.004*** (0.001)		0.023*** (0.001)
Household educ attainment					- 0.151*** (0.001)		- 0.178*** (0.001)
Municipal youth educ attainment					- 0.009*** (0.001)		- 0.020*** (0.001)
Electricity for light						- 0.005*** (0.001)	- 0.023*** (0.001)
Internet						- 0.047*** (0.001)	- 0.003*** (0.001)
Mobile phone						-0.000 (0.002)	0.024*** (0.001)
Car						- 0.047*** (0.001)	- 0.014*** (0.001)
Informal residence						- 0.008*** (0.001)	- 0.009*** (0.001)
Municipal youth discouragement rate							- 0.005*** (0.001)
Constant	0.218*** (0.001)	0.301*** (0.001)	0.142*** (0.000)	0.160*** (0.000)	0.262*** (0.001)	0.225*** (0.001)	0.349*** (0.001)
Observations	798,166	798,166	798,166	798,166	798,166	798,166	798,166
R-squared	0.034	0.149	0.005	0.001	0.038	0.010	0.200

Standard errors in parentheses \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

## Bibliography

- Alkire, Sabina, Roche, José Manuel, Ballon, Paola, Foster, James, Santos, Maria Emma and Seth, Suman. (2015), *Multidimensional Poverty Measurement and Analysis* (Oxford: Oxford University Press).
- Alkire, Sabina (2016), 'Measures of Human Development: key concepts and properties', in Oxford Poverty and Human Development Initiative (ed.), *Working paper* (Oxford: University of Oxford).
- Alkire, Sabina and Santos, Maria Emma (2011), "'Training Material for Producing National Human Development Reports: The Multidimensional Poverty Index" ', in Oxford Poverty and Human Development Initiative (ed.), *OPHI Research in Progress* (Oxford: Oxford Poverty and Human Development Initiative ).
- Anand, Rahul, Kothari, Siddharth, and Kumar, Naresh (2016), 'South Africa: Labor Market Dynamics and Inequality', in International Monetary Fund (ed.), *IMF Working Paper* (International Monetary Fund).
- Arrowsmith, James and Pulignano, Valeria (eds.) (2013), *The Transformation of Employment Relations in Europe. Institutions and Outcomes in the Age of Globalization* (Abingdon: Routledge) 232.
- Baldry, Kim, Graham, Lauren, and De Lannoy, A. (2019), 'The agency and resilience of NEET youth and what we can do to support them. Evidence from a synthesis of qualitative research with young people in South Africa.', *Southern African Labour and Development Research Unit Working Paper* (Cape Town: University of Cape Town & Centre for Social Development in Africa, University of Johannesburg.).
- Banerjee, Abhijit., Galiani, Sebastian, Levinsohn, James, McLaren, Zoe and Woolard, Ingrid. (2008), 'Why has unemployment risen in the New South Africa?', *Economics of Transition and Institutional Change*, 16 (4), 715-40.
- Bhorat, Haroon and Mayet, Natasha (2012), 'Employment Outcomes And Returns To Earnings In Post-Apartheid South Africa', in University of Cape Town Development Policy Research Unit (ed.), *Dpru Working Paper* (Cape Town: Development Policy Research Unit).
- Bhorat, Haroon, Lilenstein, Kezia, Oosthuizen, Morne, and Thornton, Amy. (2016), 'Vulnerability In Employment: Evidence From South Africa', in University of Cape Town Development Policy Research Unit (ed.), *Dpru Working Paper* (Cape Town: Development Policy Research Unit).
- Branson, Nicola, Hofmeyr, Clare, and Lam, David (2014), 'Progress through school and the determinants of school dropout in South Africa', *Development Southern Africa*, 31 ( 1), 106-26.
- Branson, Nicola, De Lannoy, Ariane, and Kreft, Brynde (2019a), 'Review of Youth Labour Market Research', in Southern African Labour and Development Research Unit (ed.), *Policy Brief* (Cape Town: Southern African Labour and Development Research Unit).
- Branson, Nicola, De Lannoy, A., and Kreft Brynde (2019b), 'Review of youth labour market research', in Southern African Labour and Development Unit (ed.), *National Income Dynamic Study* (Cape Town: Southern African Labour and Development Unit).
- Burns, Justine, Godlonton, Susan, and Kessel, Malcolm (2010), 'Social networks, employment and worker discouragement: Evidence from South Africa', *Labour Economics*, 17 (April), 336-44.
- Das, Veena and Randeira, Shalini (2015), 'Politics of the urban Poor: Aesthetics, Ethics, Volatility, Precarity.', *Current Anthropology*, 56.
- De Lannoy, A., Leibbrandt, Murray, and Frame, Emily (2015), 'A focus on youth: An opportunity to disrupt the intergenerational transmission of poverty', in A. De Lannoy, et al. (eds.), *South African Child Gauge 2015* (Cape Town: Children's Institute, University of Cape Town), 22-33.
- De Lannoy, Ariane, Graham, Lauren, Patel, Leila, and Leibbrandt, Murray. (2018a), 'What Drives Youth Unemployment And What Interventions Help? A Systematic Overview Of The Evidence And A Theory Of Change. High-level Overview Report', (Johannesburg: Poverty & Inequality Initiative, University of Cape Town & Centre for Social Development in Africa at the University of Johannesburg ).
- De Lannoy, Ariane., Fortuin, Alicia, Mpofu-Mketwa, Tsitsi, Mudiriza, Gibson, Ngcowa, Sonwabiso, Storme, Evelien and Smith, Charmaine. (2018b), 'Unpacking Lived Realities of Western Cape Youth: Exploring the wellbeing of young people residing in five of the most deprived areas in the Western Cape Province', in Department of the Premier: Western Cape Government and SALDRU University of Cape Town (ed.), (Cape Town).
- Dinkelman, Taryn. (2011), 'The Effects of Rural Electrification on Employment: New Evidence from South Africa', *The American Economic Review*, 101 (7), 3078-108.
- Fass, Paula. (2005), 'Childhood and Youth as an American/Global Experience in the Context of the Past', in Jennifer Cole and Deborah Durham (eds.), *Figuring the Future: Globalization and the Temporalities of Children and Youth* (Santa Fe School for American Research Advanced Seminar Series, SAR Press ), 25-47.

- Frame, Emily, De Lannoy, Ariane and Leibbrandt, Murray (2016), 'Measuring multidimensional poverty among youth in South Africa at the sub-national level', in University of Cape Town (ed.), *SALDRU Working Papers* (169; Cape Town Southern Africa Labour and Development Research Unit).
- García-Pérez, Carmelo, Prieto-Alaiz, Mercedes, and Simon, Hipólito (2017), 'A New Multidimensional Approach to Measuring Precarious Employment', *Social Indicator Research*, 134, 437-54.
- Gillian, Eagle and Kgomo, Kwele (2019), "'You just come to school, if you made it, its grace": Young Black Women's Experiences of Violence utilizing public "minibus taxi" transport in Johannesburg, South Africa', *Journal for interpersonal violence*, 1-22.
- Gradín, Carlos, Cantó, Olga, and Río, Coral del (2012), 'Measuring employment deprivation among households in the EU', in Society for the Study of Economic Inequality (ed.), *ECINEQ Working Paper Series* (Society for the Study of Economic Inequality).
- Graham, Lauren, De Lannoy, Ariane, Rosa, Solange, and Breakey, Jessica. (2019), 'Towards a Basic Package of Support for Youth in South Africa. Policy review report and recommendations on an institutional approach', in Southern Africa Labour and Development Research Unit (ed.), *SALDRU Working paper* (Cape Town, Johannesburg: University of Cape Town & Centre for Social Development in Africa, University of Johannesburg).
- Graham, Lauren, Patel, Leila, Chowa, Gina, Masa de Vera, Rain, Khan, Zoheb, Williams, Leilanie, and Mthembu, Senzelwe. (2016), 'Siyakha Youth Asses. Youth assets for employability: An evaluation of youth employability interventions. ', (Johannesburg, South Africa: Centre for Social Development in Africa, University of Johannesburg).
- Green, Anna (2013), 'The concept of employability with a specific focus on young people, older workers and migrants. Literature review on Employability, Inclusion and ICT.', *European Joint Research Council Technical Reports* (1: European Union).
- Honwana, Alcinda and De Boeck, Filip (2005), *Makers and Breakers. Children and youth in Postcolonial Africa* (Oxford: James Currey).
- Jensen, Steffen (2010), 'The Security and Development Nexus in Cape Town: War on Gangs, Counterinsurgency and Citizenship', *Security Dialogue*, 41 (1), 77-98.
- Klasen, Stephan (2000), 'Measuring Poverty and Deprivation in South Africa', *Review of Income and Wealth*, 46, 33-58.
- Klasen, Stephan and Woolard, Ingrid (2008), 'Surviving Unemployment Without State Support: Unemployment and Household Formation in South Africa', *Journal of African Economies*, 18 (1), 1-51.
- Lilientstein, Kezia, Woolard, Ingrid and Leibbrandt, Murray (2016), 'In-Work Poverty in South Africa: The Impact of Income Sharing in the Presence of High Unemployment', in Southern Africa Labour and Development Research Unit (ed.), *SALDRU Working Paper* (Cape Town: University of Cape Town).
- Lindsay, Colin (2009), 'New perspectives on employability and labour market policy: reflecting on key issues', *Environment and Planning C: Government and Policy*, 27, 951-57.
- Lloyd, Neil and Leibbrandt, Murray (2013), 'New evidence on subjective wellbeing and the definition of unemployment in South Africa.', *A Southern Africa Labour and Development Research Unit Working Paper* (Cape Town: SALDRU, University of Cape Town).
- McDonald, Paula, Grant-Smith, Deanna, Moore, Katherine and Marston, Greg. (2019), 'Navigating employability from the bottom up', *Journal of Youth Studies*, 1-18.
- McQuaid, Ronald and Lindsay, Colin (2005), 'The concept of employability', *Urban Studies*, 42 (2), 197-219.
- Mlatsheni, Cecil and Ranchhod, Vimal (2017), 'Youth Labour Market Dynamics in South Africa: Evidence from NIDS 1-2-3.', (SALDRU, University of Cape Town).
- Mlatsheni, Cecil and Rospabe, Sandrine (2002), 'Why is Youth Unemployment So High and Unequally spread in South Africa?', in University of Cape Town Development Policy Research Unit (ed.), *Development and Poverty Research Unit Working Paper* (Cape Town: University of Cape Town).
- Newman, Katherine and De Lannoy, Ariane (2014), *After Freedom: The Rise of the Post-Apartheid Generation in Democratic South Africa* (Beacon Press).
- Omomowo, Kolawole E (2011), 'The changing nature of work: The creation of a 'working poor' population in post-apartheid South Africa', *Development Southern Africa*, 28 (5), 613-26.
- Parnell, Susan and Crankshaw, Owen (2013), 'The politics of 'race' and the transformation of the post-apartheid space economy', *Journal of Housing and the Built Environment*, 28 (4).
- Porter, Gina, et al. (2018), 'Youth Livelihoods in the Cellphone Era: Perspectives from Urban Africa', *Journal of International Development*, 30 (4), 539-58.
- Pulignano, Valeria (2019), 'Work in deregulated labour markets: a research agenda for precariousness', in European Trade Union Institute (ed.), (Brussels, Belgium: European Trade Union Institute).

- Ranchhod, Vimal and Dinkelman, Taryn (2008), 'Labour Market Transitions in South Africa: What Can We Learn from Matched Labour Force Survey Data', *SADRU Working paper* (Cape Town, South Africa: Southern African Labour and Development Unit).
- Ross, Fiona (2010), *Raw Life, New Hope: Decency, Housing and Everyday Life in a Post-apartheid Community* (Cape Town: Juta and Company Ltd).
- Seekings, Jeremy and Nattrass, Nicoli (2016), *Poverty, Politics & Policy in South Africa* (South Africa: Jacana Media).
- Seekings, Jeremy (2014), 'The Social and Political Implications of Demographic Change in Post-Apartheid South Africa.', *The Annals of the American Academy of Political and Social Science*, 652(1) (March), 70-86.
- Sels, Luc and Forrier, Anneleen (2003), 'The concept employability: a complex mosaic', *International Journal of Human Resources Development and Management*, 3 (102-124).
- Statistic South Africa (2017), 'Living Conditions of Households in South Africa. An analysis of household expenditure and income data using the LCS 2014/2015', (Pretoria: Statistic South Africa).
- Statistics South Africa (2012), 'Census 2011 Statistical Release', in Statistics South Africa (ed.), (Pretoria, South Africa: Statistics South Africa).
- 'SA Population reaches 58.8', <<http://www.statssa.gov.za/?p=12362>>, accessed 30 July 2019.
- The President of the Republic of South Africa (2019), 'State of the Nation Address 2019 of the 6th Parliament', (Republic of South Africa).
- Western Cape Government (2013), 'Western Cape Youth Development Strategy', (Cape Town: Western Cape Government ).



The Southern Africa Labour and Development Research Unit (SALDRU) conducts research directed at improving the well-being of South Africa's poor. It was established in 1975. Over the next two decades the unit's research played a central role in documenting the human costs of apartheid. Key projects from this period included the Farm Labour Conference (1976), the Economics of Health Care Conference (1978), and the Second Carnegie Enquiry into Poverty and Development in South Africa (1983-86). At the urging of the African National Congress, from 1992-1994 SALDRU and the World Bank coordinated the Project for Statistics on Living Standards and Development (PSLSD). This project provide baseline data for the implementation of post-apartheid socio-economic policies through South Africa's first non-racial national sample survey.

In the post-apartheid period, SALDRU has continued to gather data and conduct research directed at informing and assessing anti-poverty policy. In line with its historical contribution, SALDRU's researchers continue to conduct research detailing changing patterns of well-being in South Africa and assessing the impact of government policy on the poor. Current research work falls into the following research themes: post-apartheid poverty; employment and migration dynamics; family support structures in an era of rapid social change; public works and public infrastructure programmes, financial strategies of the poor; common property resources and the poor. Key survey projects include the Langeberg Integrated Family Survey (1999), the Khayelitsha/Mitchell's Plain Survey (2000), the ongoing Cape Area Panel Study (2001-) and the Financial Diaries Project.

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