

Free access

2,044 Views | 14 CrossRef citations to date | 6 Altmetric

Listen

Articles

Underemployment in South Africa

Rochelle Beukes, Tina Fransman, Simba Murozvi & Derek Yu

Pages 33-55 | Published online: 31 Jan 2017

Cite this article <https://doi.org/10.1080/0376835X.2016.1269634>

Check for updates

Full Article

Figures & data

References

Citations

Metrics

Reprints & Permissions

View PDF

Share

ABSTRACT

With the variable 'time-rel hours ar underem situation underem invest examini significa

We Care About Your Privacy

We and our 880 partners store and access personal data, like browsing data or unique identifiers, on your device. Selecting I Accept enables tracking technologies to support the purposes shown under we and our partners process data to provide. Selecting Reject All or withdrawing your consent will disable them. If trackers are disabled, some content and ads you see may not be as relevant to you. You can resurface this menu to change your choices or withdraw consent at any time by clicking the Show Purposes link on the bottom of the webpage .Your choices will have effect within our Website. For more details, refer to our Privacy Policy. [Here](#)

We and our partners process data to provide:

Use precise geolocation data. Actively scan device

I Accept

Reject All

Show Purposes

newly derived ding to the k longer oyment use article ons, before are

1. Introduction

Since the advent of democracy in South Africa, policy changes to promote equality have been occurring in spheres such as education, health care and within the labour market. There have been numerous measures enforced by the government with the aim of, amongst others, reducing unemployment, poverty, inequality, labour market discrimination and rigidities.

One of the major socio-economic issues the country is still grappling with to date remains the persistently high unemployment level. In the second quarter of 2016, the unemployment rate was 26.6%, way above the Accelerated and Shared Growth Initiative for South Africa (ASGISA) goal of reducing this rate to 15% by the end of 2014, with 5.63 million labour force being unemployed. Over the years, labour market analysis has focused mainly on the employed versus the unemployed, discouraged work-seekers also being accounted for. However, as the labour market grows in terms of complexity, the mere distinction between employed and unemployed may be inadequate. Also, economic policies around job creation always seem to focus on increasing the number of employed or setting out goals to create a certain number of new jobs within a particular period. However, little attention is paid to the extent to which jobs occupy people in terms of work hours and the way in which it utilises their skills and qualifications. The capacity of the labour force is therefore often disregarded.

Labour and unemployment. Some of the labour force is not fully utilised. The path of recovery is not as expected, with problems in an economy. With the South African (S) approach, which is willing and able to v



underemployment can also be analysed in the context of the ‘inadequate employment situations’ approach which highlights the under-utilisation of skills or over-qualification.

To date, the majority of existing studies focus on the characteristics of the unemployed, the causes of unemployment and policy options to alleviate unemployment (Kingdon & Knight, [2004](#); Banerjee et al., [2008](#); Borat, [2009](#), [2012](#)). However, there is a need to investigate underemployment in South Africa because there are currently only few local studies on it, and most of these studies did not examine underemployment in great depth (to be discussed later). This study aims to fill the existing research gap by examining underemployment using the time-based and inadequate employment approaches. The rest of the article is structured as follows: Section 2 presents the conceptual framework and theoretical framework as well as a review of past local and international studies, Section 3 explains the methodology and data as well as the results of the empirical data analysis, and Section 4 concludes the study.

2. Literature review

2.1. Conceptual framework

There are two commonly adopted approaches to distinguish the underemployed,

namely the time-based approach and the inadequate employment approach. In the former, underemployed individuals are those who work fewer hours than the full-time equivalent (FTE) position. In the latter, underemployed individuals are those who do not have the skills, training and experience to fully utilise their skills. (Kingdon & Knight, 2004; Borat, 2009; Borat & Wooden, 2011:14). The inadequate employment approach is more effective in identifying underemployment because it takes into account the quality of the work available. (Kingdon & Knight, 2004; Borat, 2009; Borat & Wooden, 2011:14). In the quality-based approach, underemployed individuals are those who are not working during the week (Yu, 2009:20). The inadequate employment approach is more effective in identifying underemployment because it takes into account the quality of the work available. In addition, the inadequate employment approach is more effective in identifying underemployment because it takes into account the quality of the work available.



in relation to his/her job title and before comparing this required level with his/her actual level, with the aid of information obtained from professional job analysts.³

McGuinness (2006) as well as Wilkins & Wooden (2011) argue that the subjective measures may have led to derivation of higher likelihood of underemployment than using objective measures. Issues arise from the quality of data collected, because workers may not have the best understanding of the requirements of the job in terms of qualification. However, the objective approaches are not without shortcomings; the measurement of over-qualification by means of the standard deviation approach has undergone criticism because the choice of cut-off points is arbitrary. In addition, as the standard deviation method makes use of the assumption of symmetry, it has been argued that it is unrealistic. Lastly, in the situation where a certain occupation comprises a large proportion of workers who are classified as being over-educated, this may result in an under-estimation of the actual level of over-qualification. This is attributed to the fact that the high proportion of over-educated workers will bring about a rise in the occupational average as well as the associated cut-off points (McGuinness, 2006:396). Alternatively, in the case of the occupation dictionary approach, it has also been criticised for being unrealistic. One reason for this is centred on the fact that this approach assumes that the educational requirements are the same for all jobs which fall within the same occupation code. Furthermore, these dictionaries are not updated on a regular basis and as a result the assumption is made that job requirements (in

terms of even at (Wilkins

Referenc or
quantita
employ
level
them
desire (t
[1994:5](#)).
(Barker,
normal h
working
underem

Finally,
tions
or
rience
nd
at they
& Claes,
nguished
ss than
esire
es workers

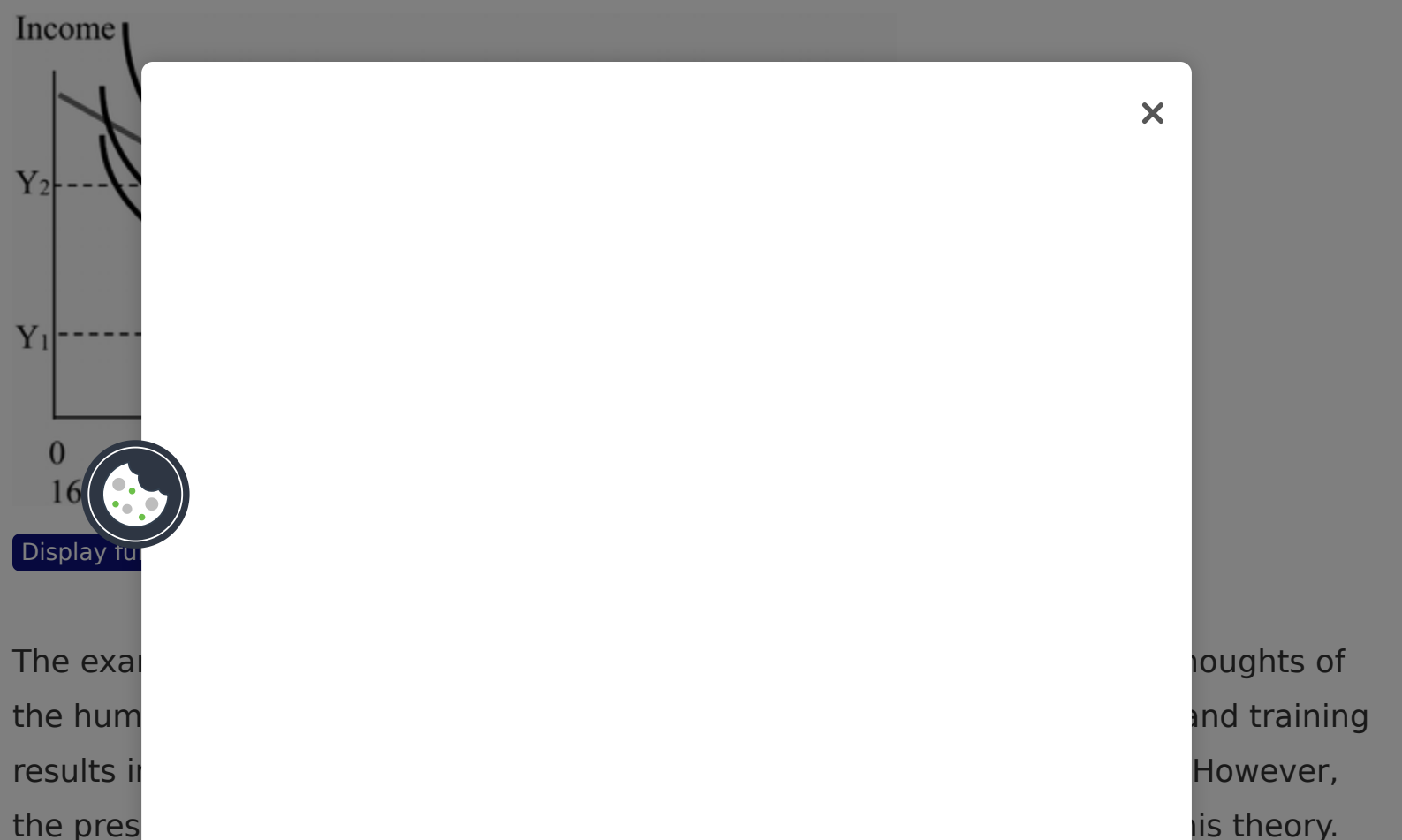


Few studies have even referred to the unemployed as being part of the underemployed (Clogg et al., [1986](#); Slack & Jensen, [2002](#)). Finally, underemployment brings about a number of consequences relating to economic outcomes as well as measures of the general well-being and self-esteem of individuals, in the areas of life satisfaction, job satisfaction and wages (Altman, [2007](#):7; Wilkins & Wooden, [2011](#):25).

2.2. Theoretical framework

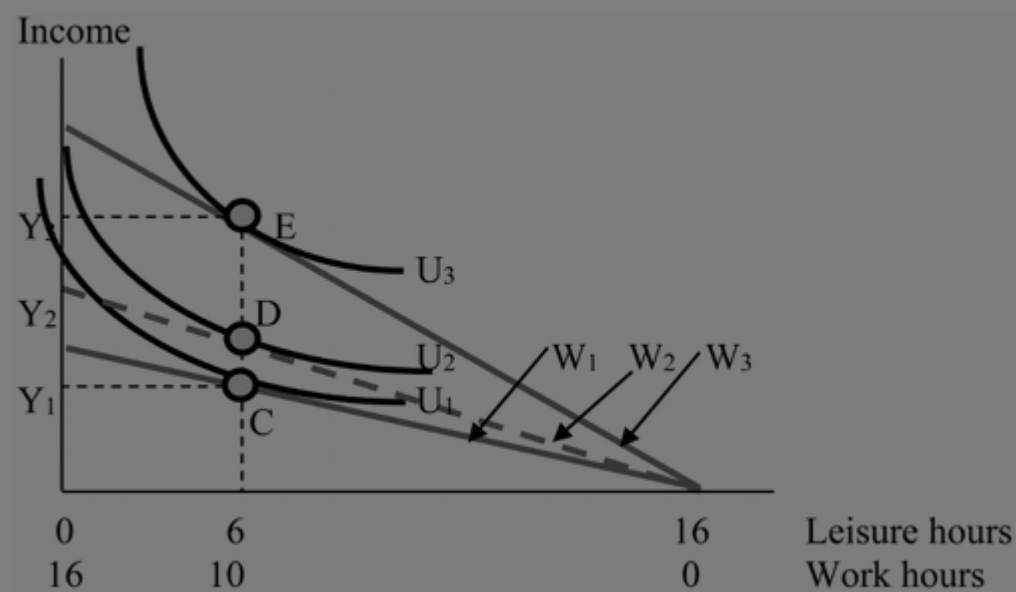
Figure 1 represents a graphical illustration of time-based underemployment. Assume the person spends 16 hours on either work or leisure each day. This person is currently employed at an hourly wage of W , but would have preferred to work 11 hours per day (as indicated by point A), attaining a utility level of U_3 . However, this individual is unfortunately offered employment that requires him or her to work only three hours per day (point B). As a result, this person attains a lower utility level of U_1 . The person is underemployed at point B, because he/she prefers to work an additional eight hours per day. Shorter work hours are associated with a lower wage income (Y_1) as compared with the prospective income that the individual would have earned (Y_2) had he/she been fully employed.

Figure 1. Underemployment: time-based approach.

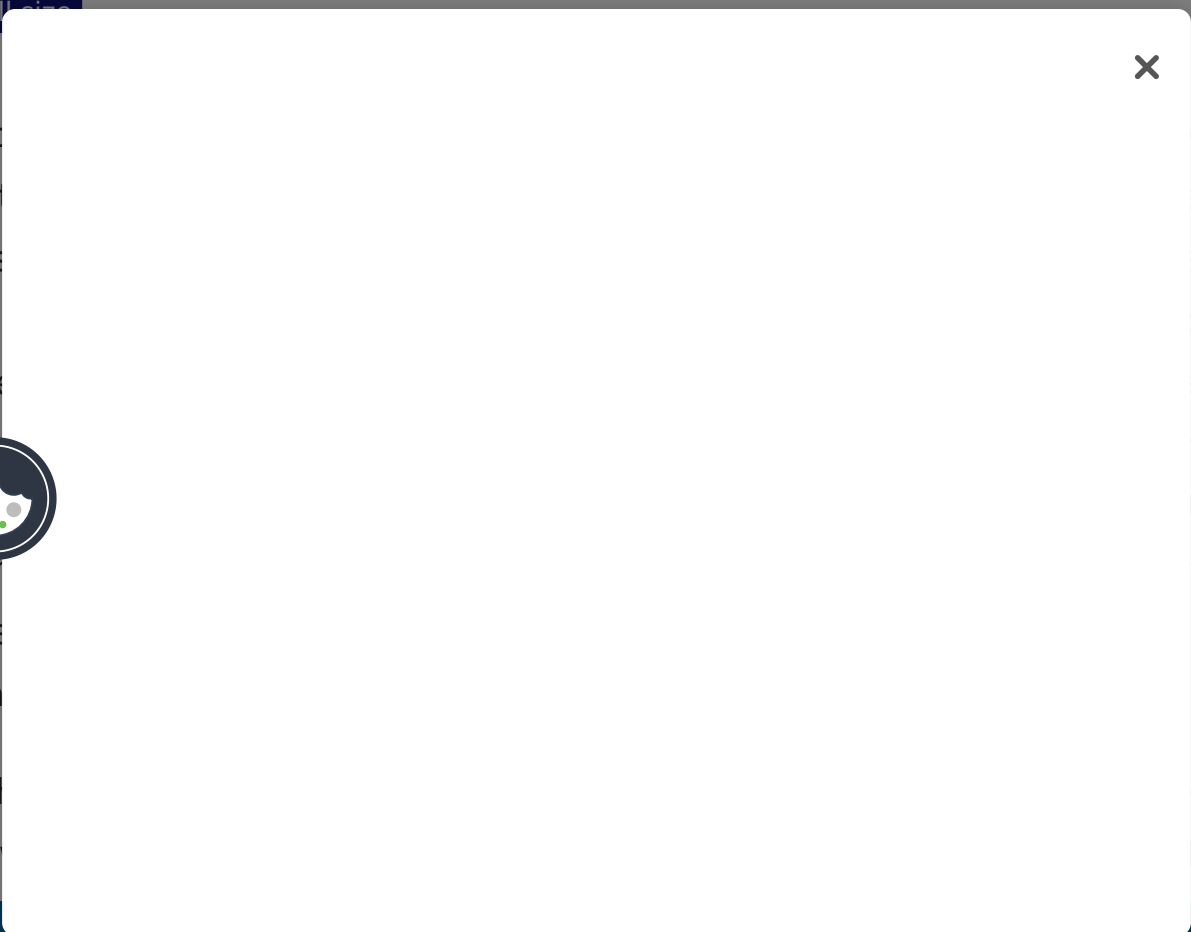


higher wage (W_3) by involving in a highly-skilled occupation, as shown in Figure 2. The individual therefore hopes to attain a utility of U_3 which is found at point E, and earns a total wage income of Y_3 by working 10 hours. However, the individual eventually could only find employment in a semi-skilled occupation which requires a lower educational qualification (e.g. Matric) than the level he possesses (bachelor degree). This job is in turn accompanied by a lower wage (W_1) which means that the equilibrium point will now be at point C. This point is also associated with a lower level of utility (U_1) and total wage income (Y_1), even though the daily work hours remains the same at 10 hours.

Figure 2. Underemployment: over-qualification approach.



Display full size



×

The dotted
 certifica
 (which is
 total lab
 possess
 require
 is full
 underem
 the expe
 qualifica
 Research
 of skills

Matric
 e of W_2
 and earns a
 person (who
 at only
 tificate and
 that if
 t contradicts

r-utilisation
 fit, as the

their job and its demands (McKee-Ryan & Harvey, [2011](#):971). Based on this theory, underemployment indicates a lack of fit and as a result is associated with negative labour market outcomes. Relating this back to the budget line/indifference curve analysis, the fact that the first employee (from [Figure 2](#)) was only able to find semi-skilled employment instead of highly-skilled employment related to his or her field of study verifies the situation of a misalignment between the skills and competencies of the person and their job.

2.3. Review of past studies

There are only six local studies at the time of writing. Altman ([2003](#)), whilst primarily examining whether jobless or job-creating growth took place during 1994–2001, briefly examined underemployment by defining them as those working in the informal sector, domestic services (private households) and subsistence agriculture. She found that these underemployed accounted for 14% of all employed in 1994 before rising to 21% in 2001. Altman ([2003](#):9–10) also mentioned that the underemployed wished to work longer hours and enjoy secure employment, better benefits and higher remuneration. The other study by Altman ([2009](#)) briefly examined the time-based underemployed in 2008 and found that they were more likely to be female blacks aged 15 to 24 years, residing in KwaZulu-Natal and Free State; Yu ([2009](#)) also examined underemployment briefly and found the majority of underemployed were blacks and females, involving in unskilled analysis females limited well as occupational Moleke univ first four operator underem Economi the exte reported

nometric and found that s, with al services as s of 2600 1998. He administrators, ee), with the e field of hetheless, respondents t job but this



took place, because some graduates who were originally underemployed later found work that matched their education/skills better. Also, the graduates initially had low reservation wages and preferred to be underemployed rather than unemployed; but over time, some of them searched for a better job and became fully employed (Moleke, [2005:23](#)).

Schoeman et al. ([2010](#)) examined the role labour conflict played in the persistence of macro underemployment (using capital/labour ratio as the proxy variable) during 1970-2004. The econometric analysis indicated that there was a significantly positive relationship between strike frequency and capital/labour ratio. That is, underemployment results through a switch in technology being the channel; bad labour relations have been shown to contribute to the choice of more capital-intensive techniques and hence less labour-absorptive measures. The co-integration analysis showed that once labour has been replaced by capital, a reversal is not likely (Schoeman et al., [2010:286](#)). Capital is highly inflexible even in the long run. Thus the long-term effects on underemployment due to structural reasons in an economy cannot be easily remedied.

Numerous international studies investigated the extent and nature, predictors and consequences of underemployment. Golub & Hayat ([2014](#)) cited the main reason for underemployment in Africa as a dualistic labour market that is deficient of labour

demand exists, w
presente
underem
producti
many lo
employ
the la
Wilkins
countrie
Bell & B
they felt
unemplo
consider

activities
In a report
[2014:7](#)),
time low-
yment in
s to absorb
the OECD
4.3% in Italy.
ers whether
nto
en sharply



since the recession in 2008. Tam ([2010](#)) also found that underemployment rates in the United Kingdom rose during recession as labour demand declined.

Walling & Clancy ([2010](#)) as well as Cam ([2014](#)) found that underemployment likelihood in the United Kingdom was typically higher for women than men, but varies across demographics and work-related factors. Those involved in part-time jobs, sales and customer services were associated with a greater likelihood of underemployment (Cam [2014:15](#)). Sengenberger ([2011](#)) found that time-based underemployment rose over the period 1990–2005 although results varied across countries. Time-related underemployment was higher for women than men. Wilkens ([2006](#)) similarly found underemployment to be more prevalent among females. Ansah ([2012](#)) found that most of Ghana's work activities took place in agriculture and the informal economy, and the time-based underemployment rate was higher in urban areas at 7.6% versus rural areas at 3.5% (Ansah, [2012:109](#)). Denu et al. ([2005](#)) found serious time-based youth underemployment in rural areas, as the mean weekly work hours of rural youth employed (21.3 hours) were significantly lower when compared with urban youth employed (36.8 hours).

The studies associated with the over-qualification definition typically adopted either objective measures or subjective measures as discussed in Section 2.1. First, Felstead & Green ([2013](#)) examined the 2012 UK survey data to determine the extent of

qualifica
rates of
work in s
in Austr
formal q
Mosca &
If a grad
back
graduate
Quality o
significa
contrast
was take
involunt

ound higher
part-time
employed
s having
d Kingdom.
r than a
arter of
luation.
tistically
elihood. In
997–2011
alification,
was found



utilisation through temporary work and minimum wages (Reynolds, [2012](#):11). Another objective measure to determine over-qualification is the standard deviation approach. Studies using this approach (Groot, [1996](#); Groot & Van den Brink, [2000](#); Bauer, [2002](#)) yielded lower incidence of underemployment than subjective measures.

For studies using the subjective approaches, in Bonnal et al.'s ([2009](#)) study, respondents were asked whether they thought they were underemployed, and the underemployment rates were 24.0% and 25.2% in 2004 and 2005 respectively in Alabama. Finally, few studies focused on examining the consequences of underemployment: Kazan ([2012](#)) found during recession that employers would make use of more part-time staff, leading to the under-utilisation of the workforce. Hence, Kazan raised some concerns that organisations should address various risks associated with the under-utilisation of labour, such as low morale, workplace stress and low productivity. Fleming & Kler ([2008](#)) found that across their six measures of satisfaction, over-qualified workers were less satisfied, while Wilkens ([2006](#)) found that mean job satisfaction was lower amongst part-time workers.

To conclude, the majority of the local and empirical studies derived the profile of the underemployed (females, youth, residing in rural areas and working in services industries), but there are hardly in-depth studies that examined whether the characteristics of various groups of underemployed differed significantly, and whether there was any relationship between underemployment and economic growth.

3. Empirical studies

3.1. Data sources

This study uses data from the Household Income and Expenditure Surveys (HIES) conducted by the National Bureau of Economic Research (NBER) in the United States. As far as the data is concerned, the HIES is a household-level survey that provides information on household income and expenditure. The HIES is a household-level survey that provides information on household income and expenditure. The HIES is a household-level survey that provides information on household income and expenditure.



underemployed in the LFSs 2000–2007, because all three key questions (see Section 2.1) were asked in these surveys. However, with regard to the third criterion, the question was asked as ‘if extra work was available, would you be able to start such work in the next four weeks?’ in the LFSs but rather asked as ‘would you have liked to work more hours than you actually worked, provided the extra hours had been paid?’ in the QLFSs.⁵ Hence, the time-based underemployment estimates may not be entirely comparable between the LFSs and QLFSs. In the OHSs, because the question on the third criterion was not asked, time-based underemployed could only be derived by considering the respondents’ answers to the first two criteria (i.e. the ILO ‘lenient’ approach is adopted), and the number of time-based underemployed could be over-estimated to some extent for the OHSs.

Two approaches are adopted to determine over-qualification. The first approach considers the educational requirement for each occupation category. Table A1 in Appendix 1 outlines the required education level for each broad occupation category, as indicated by Stats SA (2008). Hence, an employed worker is classified as underemployed if he/she is employed in an occupation where the required education level is below his/her educational attainment level. For example, if someone with Matric works in an elementary occupation (which only requires primary education), he/she would also be classified as underemployed. A second and perhaps more appropriate method to distinguish the underemployed using the over-qualification approach is that

the education level of the worker is compared to the required education level for the occupation category. At least one of the following criteria must be met for a worker to be classified as underemployed:

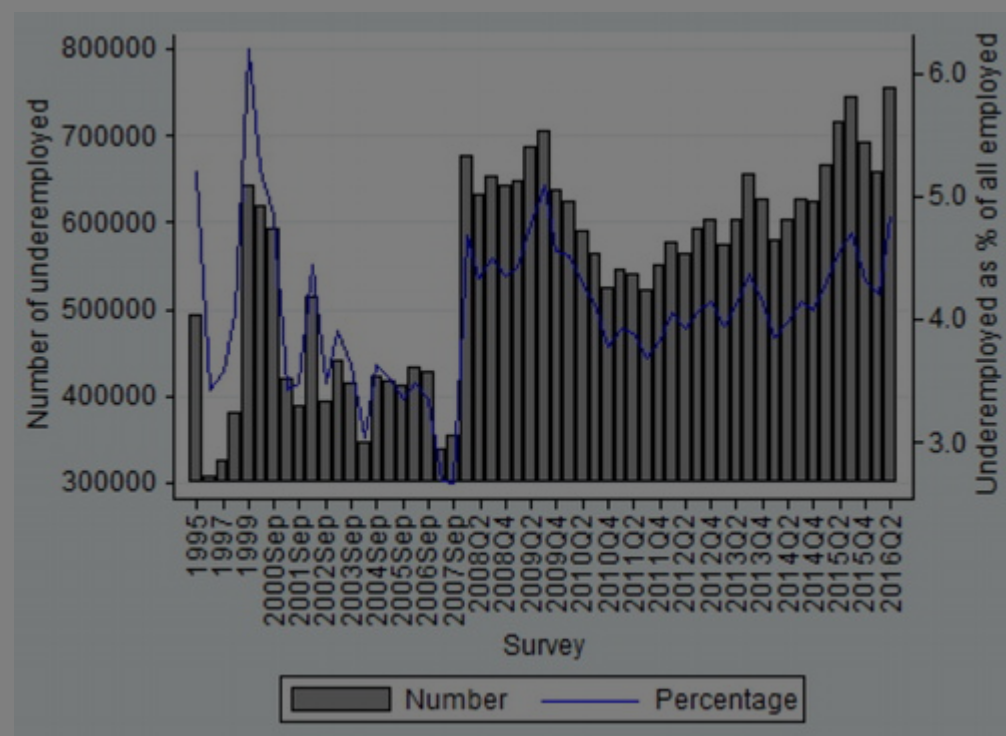
The demand for skills in the occupation is higher than the worker’s skills. This is examined using a regression analysis to determine whether the worker’s skills are significantly lower than the required skills for the occupation. The worker is classified as underemployed if the regression coefficient is significantly negative.

3.2. NU

Figure 3 shows the relationship between the number of underemployed and the number of OHS 1999 respondents for survey



Figure 3. Underemployment derived from the time-based approach, 1995–2016. Source: Authors' own calculations using OHS 1995–1999, LFS 2000–2007 and QLFS 2008–2016 data.



Display full size

Moving on to underemployment from the two over-education approaches, as mentioned earlier, one big drawback of the first approach (educational requirement for each occupation category) is that the educational requirement for each occupation is

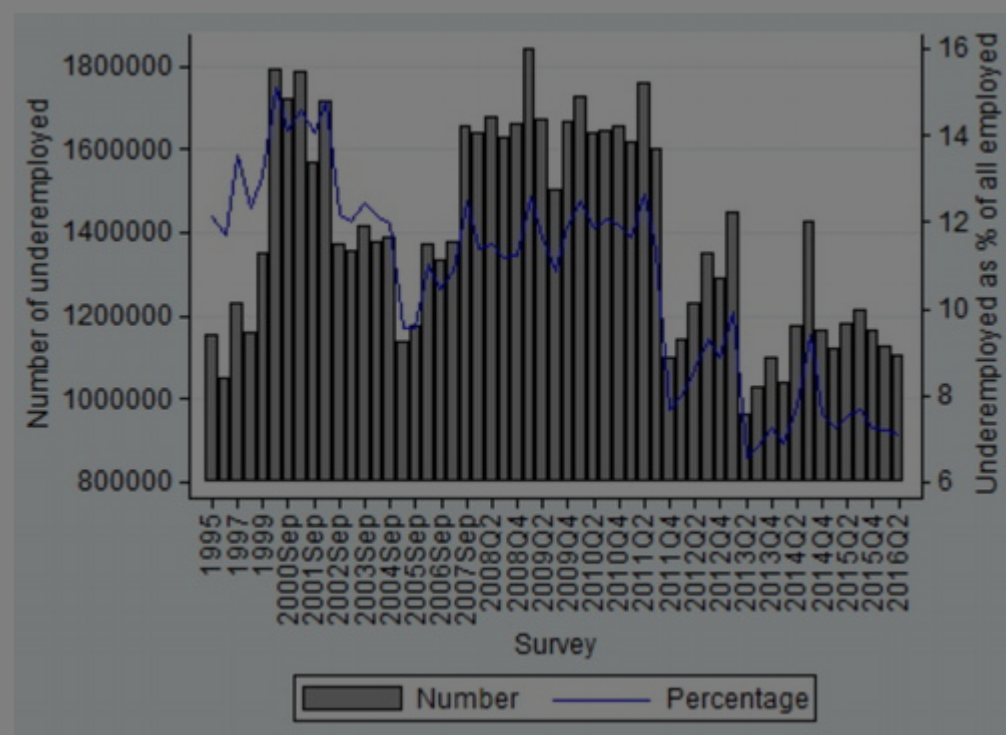
unchanged over the years (see Figure 4, black and coloured lines). This is due to the general increase in the number of people with a degree, which has risen from 1.1 million in 1995 to 4.3 million in 2016. The proportion of people with a degree has risen from 10% to 15% of the population.

The data for the second approach (this second approach) is more difficult to discern. The proportion of underemployed people has risen from 4.3% in 1995 to 6.5% in 2016. The proportion of underemployed people has risen from 4.3% in 1995 to 6.5% in 2016.

over the years (see Figure 4, black and coloured lines). This is due to the general increase in the number of people with a degree, which has risen from 1.1 million in 1995 to 4.3 million in 2016. The proportion of people with a degree has risen from 10% to 15% of the population.

one using this second approach there is no discernible trend in the number of underemployed people. The proportion of underemployed people has risen from 4.3% in 1995 to 6.5% in 2016.

Figure 4. Underemployment derived from the over-qualification approach (years of education exceed one standard deviation of the mean years of education of the relevant occupation category), 1995–2016. Source: Authors' own calculations using OHS 1995–1999, LFS 2000–2007 and QLFS 2008–2016 data.



Display full size

For the remainder of this study, under-employed using this second over-qualification approach along with the time-based unemployed would be the focus of the remaining empirical analysis (from the 1995–2016 period). A significant portion of the underemployed...

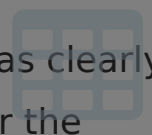


3.3. Pro

Table 1
2015
underem
and Gro
two afor

er-employed
ring 1995-
e
08 and
roup (2)
n approach;
ed in the

Table
empl



For all three groups, the majority of underemployed were blacks. This share was clearly the lowest (just above 60%) in both years for Group (2). The white share under the over-qualification definition was significantly higher and increased from 25.91% to 29.24%. Males accounted for a significantly lower share of underemployment at approximately 40% for Group (1). This finding implies that females are more willing to work extra hours, because they are highly associated with involuntary part-time work. The gender share of underemployed was more equitable in Group (2). In Group (3), the female share was significantly lower (41.31 and 42.88%) than the male share in both years when compared with Group (1).

The majority of employed in all three groups were aged 24 to 44 years at the time of the surveys, and there was no significant difference in the mean age across the few groups, except that the 15 to 24 age cohort's share was significantly higher for Group (1) versus Group (2). Across both underemployment definitions, the majority of the underemployed resided in Gauteng, Kwa-Zulu Natal and Western Cape. The people in Group (2) were significantly more educated (14 years on average), compared with 8.5 years for Group (1).

Table 2 presents the work characteristics of the three groups. On average, Group (1) only worked approximately 20 hours per week, but the mean work hours were significantly higher for Group (2) and Group (3) respectively. The mean tenure (mean 3

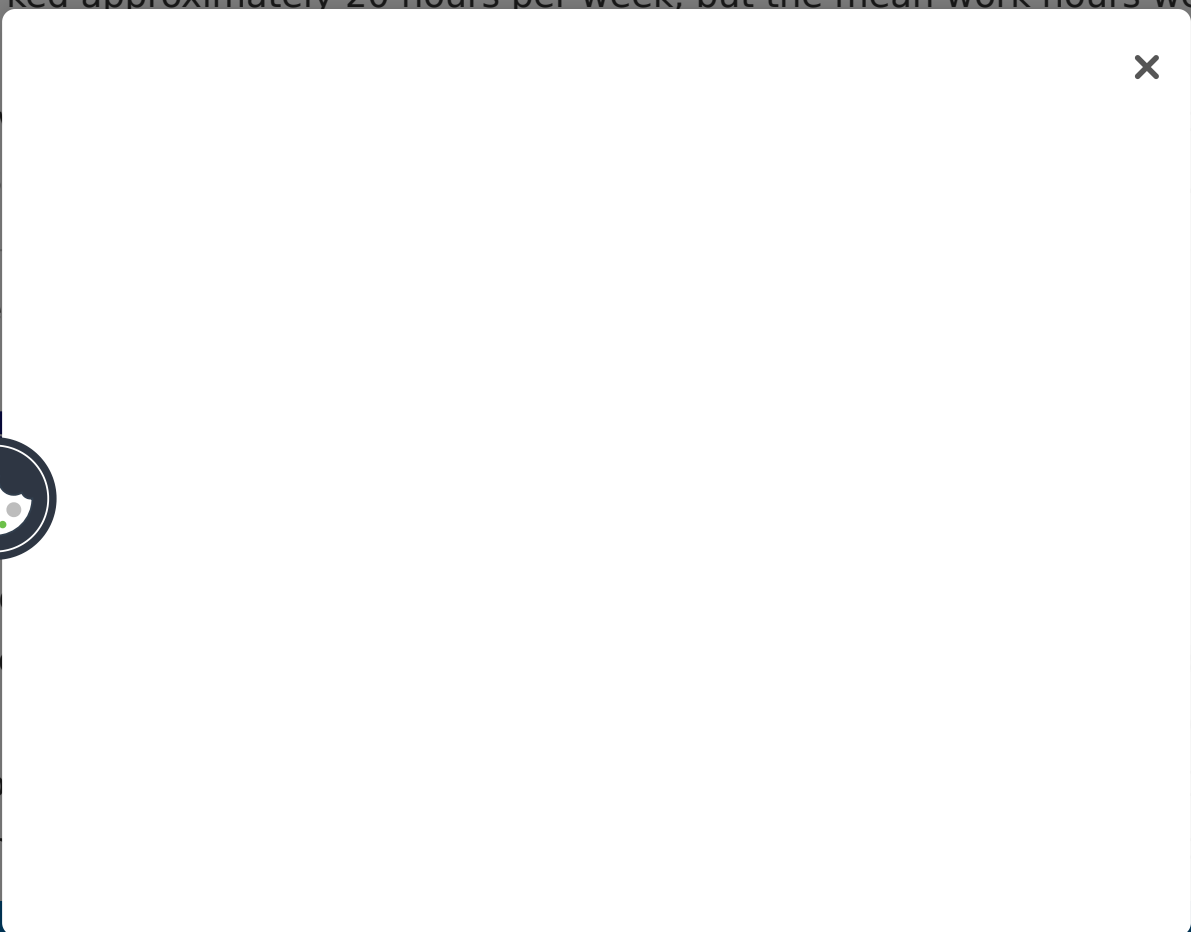


Table
2008

Download



The majority of employed in all three groups were aged 24 to 44 years at the time of the surveys, and there was no significant difference in the mean age across the few groups, except that the 15 to 24 age cohort's share was significantly higher for Group (1) versus Group (2). Across both underemployment definitions, the majority of the underemployed resided in Gauteng, Kwa-Zulu Natal and Western Cape. The people in Group (2) were significantly more educated (14 years on average), compared with 8.5 years for Group (1).

Table 2 shows that a significantly higher proportion of Group (2) worked as employees (86%), while a significantly lower proportion worked in the private sector (77 to 78%), compared with Group (1). Only about 20% of underemployed in Group (2) worked in the informal sector, but this proportion was much higher for Group (1) (73% in 2008 and 62% in 2015). These findings confirm what was found by the studies reviewed in Section 2.3; that is, the time-based underemployed were more heavily involved in informal-sector work. Finally, Group (1) was associated with inferior working conditions when compared with Group (2), because a significantly lower proportion in the former group were entitled to pension funds, paid leave, medical aid, written permanent employment and unemployment insurance fund (UIF) contributions by employers.

Table 3 presents the field of study of the employed with post-Matric qualifications.⁶ For both Groups (1) and (2), the majority of underemployed studied in the fields of 'education, training, development', 'business, commerce, management', 'engineering' and 'health care' at universities/technikons/colleges. This finding is consistent with the 2005 Moleke study that underemployed was prevalent amongst the Economic and Management Sciences, and Humanities and Arts graduates.

Table 3. Field of study of underemployed, 2013–2015.

Download CSV

Display Table



×



Table 4. Underemployment rates and unemployment rates in 2015.

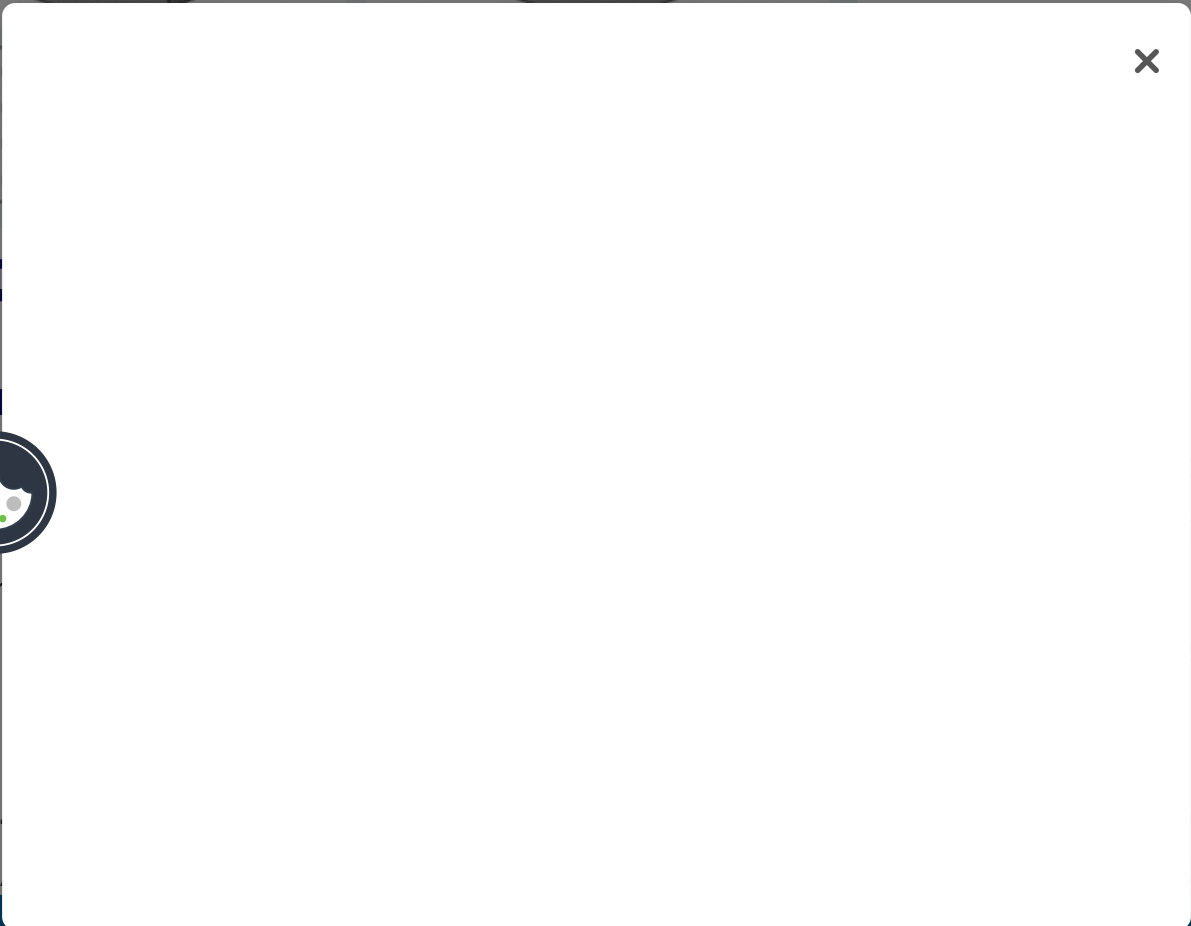
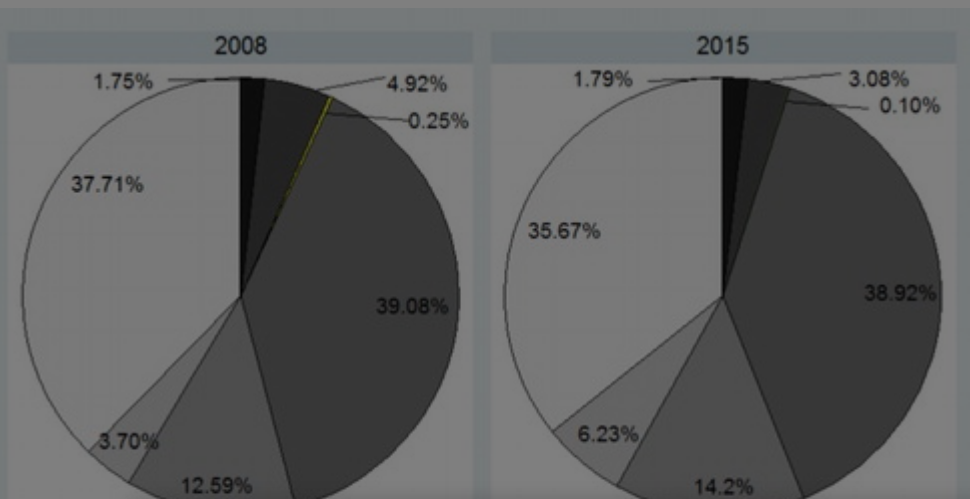
Download CSV

Display Table



Figure 5 differs slightly from Table 4 by showing the composition of the working-age population (i.e. discouraged workseekers and inactive are included) in 2008 and 2015, and the results were similar in both years: slightly above one-third were inactive, nearly 40% were not underemployed while 5 to 6% were underemployed.

Figure 5. Composition of working-age population, 2008 and 2015. Source: Authors' own calculations using QLFS 2008 and 2015 fourth quarter data.

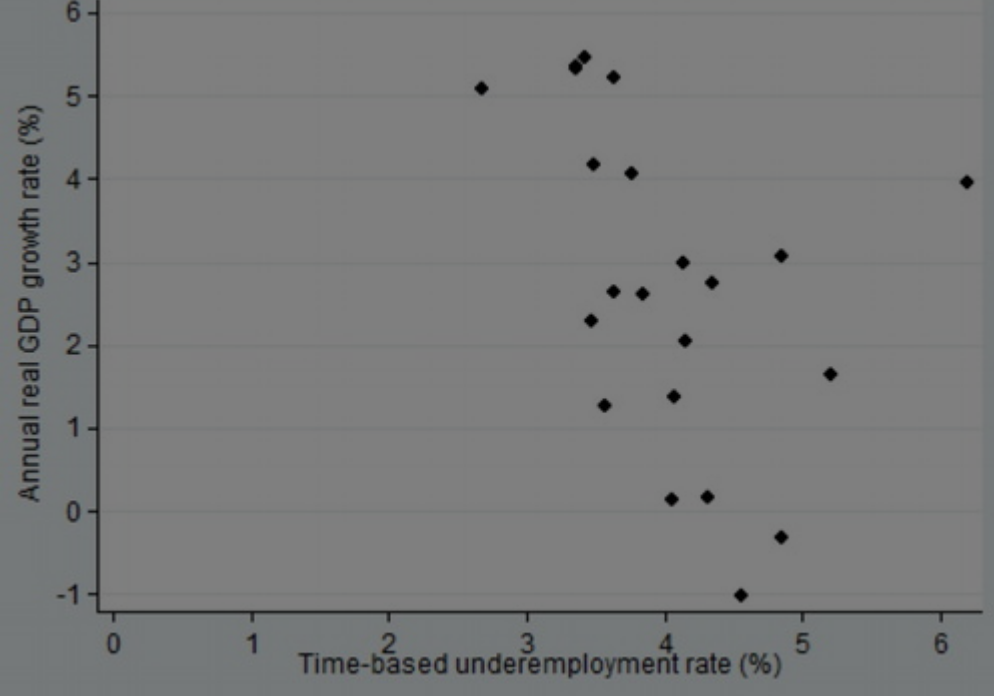


Display full

Finally, T
betw
grow
underem
the findi
recessio

Figure 6
Source:

ship (if any)
ct (GDP)
ased
s confirms
during
th rates.
LFS 2008-



[Display full size](#)

Table 5. Correlation coefficients: underemployment, unemployment and economic growth.



[Download CSV](#)

[Display Table](#)

3.4. Econometric analysis on the likelihood of being underemployed

Probit regression analysis was used to influence the work qualifications (gender, working experience, employee

potential of whether over-demographics series and employee or

The regression results show that a 1% greater controlling variable is likely to be 6.86% in underem

with about parts after ntly less points from to be



relationship between age in years and underemployment probability, meaning as one got to be a middle-aged worker, there was a greater likelihood to be underemployed.

Table 6. Probit regressions on likelihood of being underemployed, 2008 and 2015.

[Download CSV](#)

[Display Table](#)



Accounting for place of residence, in 2008 the employed residing in the Northern Cape, Free State, Mpumalanga and KwaZulu-Natal provinces were more likely to be underemployed relative to those staying in the Western Cape. The marginal fixed effect was greatest for KwaZulu-Natal. Those residing in Limpopo and Gauteng province were significantly less likely to be underemployed relative to those staying in the Western Cape. For the other provinces the results were insignificant. In 2015, only the employed staying in the Limpopo province were significantly less likely to be underemployed than those in the Western Cape province.

In both surveys, there was a significantly convex relationship between years of experience and the likelihood of underemployment. This suggests that those employed with very fewer years of experience could be reluctantly underemployed (e.g. youth), while those with longer years of experience may be the more elderly workers who work shorter hours.

Accounting for industry, in 2008 the employed in the manufacturing, wholesaling and retail trade sectors were significantly more likely to be underemployed in the manufacturing and retail trade sectors than those in the other sectors. In 2015, the employed in the manufacturing and retail trade sectors were significantly more likely to be underemployed. In 2008, the employed with fewer years of experience (the youth) were significantly more likely to be underemployed, while those with longer years of experience (the elderly) were significantly less likely to be underemployed.



4. Conclusions

Since 1994, the South African government has made huge investments and policy changes to improve labour productivity and efficiency in the operation of the labour market. However, after two decades, the economy still shows a great slack in production and a failure to fully assimilate all available labour. Using the human capital theory as a point of reference, this study has discussed the nature, level and trends of underemployment in South Africa, as well as the relationship between underemployment, unemployment and economic growth.

The snapshot of the time-based approach shows that 3 to 6% of the employed were underemployed, whilst for the inadequate employment approach between 6 and 15% of workers are underemployed. The prevalence of underemployment was greater for individuals who were blacks, females and working in elementary occupations or private households and the informal sector. It was also found that economic recession was negatively associated with the time-based underemployment rate.

To conclude, this is the first South African study to thoroughly examine the underemployed by adopting both time-related and inadequate employment approaches. More in-depth research could still be conducted on underemployment in future, such as total income foregone due to underemployment, the econometric relationship between underemployment and the business cycle indicators, the likelihood of the underemployed being fully employed over time (this would require panel data).

Disclo

No pote

Add

Fundin

The auth

Southern



1 It will be explained later that time-based underemployment could also be estimated for the 1995–2007 labour surveys.

2 The use of this one standard deviation method is being used more frequently even though arguments exist which state that measures based on occupation mode instead of mean are more likely to be desired (Wilkins & Wooden, [2011](#):25).

3 In South Africa, the information on the required educational level in each broad occupation category can be obtained from the South African Standard Classification of Occupations.

4 This discussion implies that visible underemployment and quantitative underemployment in essence are strongly associated with time-based underemployment, while invisible underemployment and qualitative underemployment are similar to underemployment according to the inadequate employment situations approach.

5 In the LFSs, the respondents could choose from one of these categories: (1) yes; (2) no; (3) don't know. In contrast, the respondent could choose from one of these categories in the QLFSs: (1) yes, in the current job; (2) yes, in taking an additional job; (3) yes, in another job with more hours; (4) no; (5) don't know.

6 This question was only asked in the QLFS since the 2012 third quarter. Because the same question was asked in the first quarter of 2015, the results are shown in Table 3.

Refer

1. Altman, J. (2010). The process of underemployment in Johannesburg. *Journal of Human Development and Capabilities*, 11(1), 1-15. [Google Scholar](#)
2. Altman, J. (2011). Human

3. Altman, M, 2009. The state of youth: Labour market status and policy challenges. HSRC (Human Sciences Research Council) Press, Cape Town.

4. Ansah, JW, 2012. Our jobs, our survival: A review of the national employment policy of Ghana. International Journal of Sociology and Anthropology 5(4), 107-15.

5. Banerjee, A, Galiani, S, Levinsohn, J, McLaren, Z & Woolard, I, 2008. Why has unemployment risen in the New South Africa? Economics of Transition Journal 16(4), 715-40. doi: 10.1111/j.1468-0351.2008.00340.x

6. Barker, F, 2007. The South African labour market: Theory and practice. 5th edn. Van Schaik Publishers, Pretoria.

7. Bauer, T, 2002. Educational mismatch and wages: A panel analysis. Economics of Educa

8. Bell, D Peterson
Institu Institute for
Intern

9. Bhorants.
Confe World Bank
Confe

10. Bhoras for



[Google Scholar](#)

1. Bonnal, M, Lira, C & Addy, SN, 2009. Underemployment and local employment dynamics: New evidence. *The Review of Regional Studies* 39(3), 317-35.

 | [Google Scholar](#)

2. Cam, S, 2014. The underemployed: Evidence from the UK labour force survey. Cardiff School of Social Sciences Working Paper Series No.152. School of Social Sciences, Cardiff.

[Google Scholar](#)

3. Clogg, CC, Sullivan, TA & Mutchler, JE, 1986. Measuring underemployment and inequality in the work force. *Social Indicators Research* 18(4), 375-93. doi: 10.1007/BF00300489

 | [Web of Science ®](#) | [Google Scholar](#)

4. Denu, B, Tekeste, A & Van der Deijl, H, 2005. Characteristics of youth unemployment, underemployment and inadequate employment in Ethiopia. *Employment Strategy Papers. Employment Strategy Paper 2005/07*. International Labour Organisation, Geneva

[Goog](#)

5. Felste... ation and
skills r

[Goog](#)

6. Fle... analysis on
over... 1123-38.

doi: 10

7. Glyde... onomic
Issues



8. Golub, S & Hayat, F, 2014. Employment, unemployment, and underemployment in Africa. WIDER Working Paper 2014/014. World Institute for Development Economics Research (WIDER), Helsinki.

[Google Scholar](#)

9. Greenwood, MA, 1999. International definitions and prospects of underemployment statistics. Proceedings for the Seminario sobre Subempleo, 8-12 November, Bogota.

[Google Scholar](#)

10. Groot, W, 1996. The incidence of, and returns to overeducation in the UK. Applied Economics 28(10), 1345-50. doi: 10.1080/000368496327895

[Web of Science ®](#) | [Google Scholar](#)

11. Groot, W & Van den Brink, H, 2000. Skills mismatches in the Dutch labor market. International Journal of Manpower 21(8), 584-95. doi: 10.1108/01437720010379493

[Web of Science ®](#) | [Google Scholar](#)

12. Kazan, M, 2012. Underemployment: Implications for organizations. Economic Research Institute, Redmond.

[Google Scholar](#)

13. Kingd... of the
beast... 10.005

14. Mathe... n South
Africa

15. McGu... nomic
Survey

16. McKee



27. Moleke, P, 2005. Finding work: Employment experiences of South African graduates. HSRC (Human Sciences Research Council) Press, Cape Town.

[Google Scholar](#)

28. Mosca, I & Wright, RE, 2011. Is graduate under-employment persistent? Evidence from the United Kingdom. The Institute for the Study of Labour (IZA) Discussion Paper Series No. 6177. Bonn, Institute for the Study of Labour.

[Google Scholar](#)

29. OECD (Organization for Economic Cooperation and Development), 2014. Preventing unemployment and underemployment from becoming structural. Unpublished report prepared for the G20 Labour and Employment Ministerial Meeting, 10-11 September, Melbourne.

[Google Scholar](#)

30. Reynolds, L, 2012. The incidence and persistence of youth underemployment: The Canadian context. Public Policy and Governance Review 4(1), 5-18.

[Goog](#)

31. Ruiz-C... during the
early c... man
Resou... man

[Goog](#)



32. Sch... stence of
macro... ic and
Manag...

33. Senge

[Google Scholar](#)

34. Slack, T & Jensen, L, 2002. Race, ethnicity, and underemployment in nonmetropolitan America: A 30-year profile. *Journal of Rural Sociology* 67(2), 208–33. doi: 10.1111/j.1549-0831.2002.tb00101.x

[Web of Science ®](#) | [Google Scholar](#)

35. SARB (South African Reserve Bank), 2016. Online statistical query. [Online]. <http://www.resbank.co.za/Publications/QuarterlyBulletins/Pages/QBOnlinestatsquery.aspx>

Accessed 24 August 2016.

[Google Scholar](#)

36. Stats SA (Statistics South Africa), 2008. South African Standard Classification of Occupations (SASCO). Statistics South Africa, Pretoria.

[Google Scholar](#)

37. Tam, H, 2010. Characteristics of the underemployed and the overemployed in the UK. *Economic and Labour Market Review* 4(7), 8–20. doi: 10.1057/elmr.2010.92

38. Wallin, J and La Cour, M. Economic

39. Wilken, J. Employment.

40. Wilkin, J. employment. Economic and

social

Goog

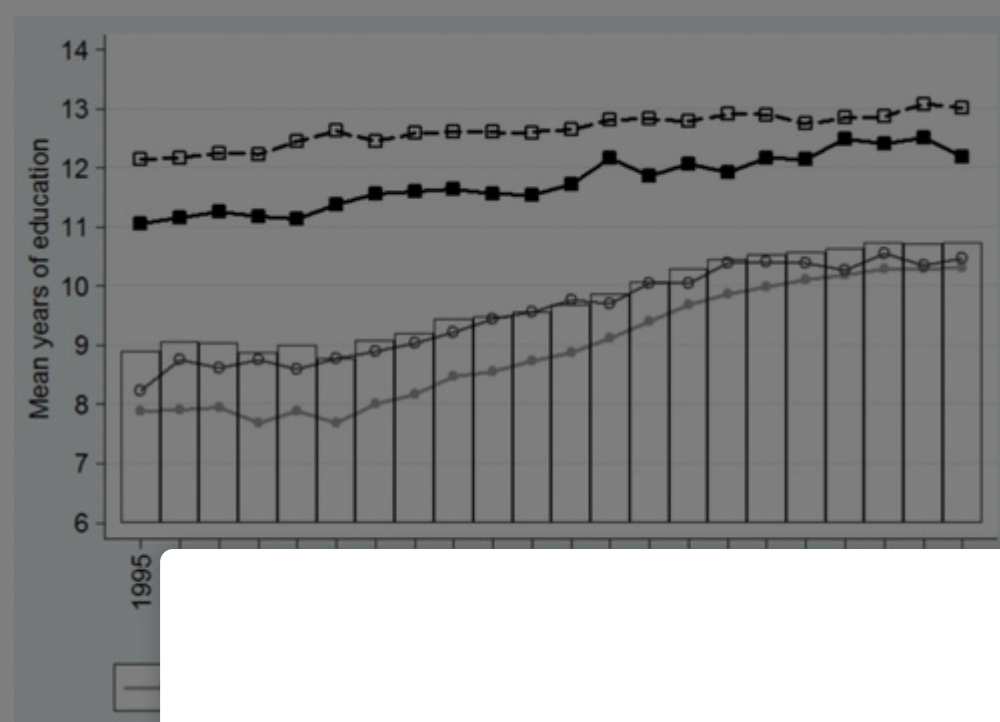


1. Yu, D, 2009. The comparability of Labour Force Survey (LFS) and Quarterly Labour Force Survey (QLFS). Stellenbosch Economic Working Papers 08/09. Stellenbosch University, Stellenbosch.

[Google Scholar](#)

Appendix 1

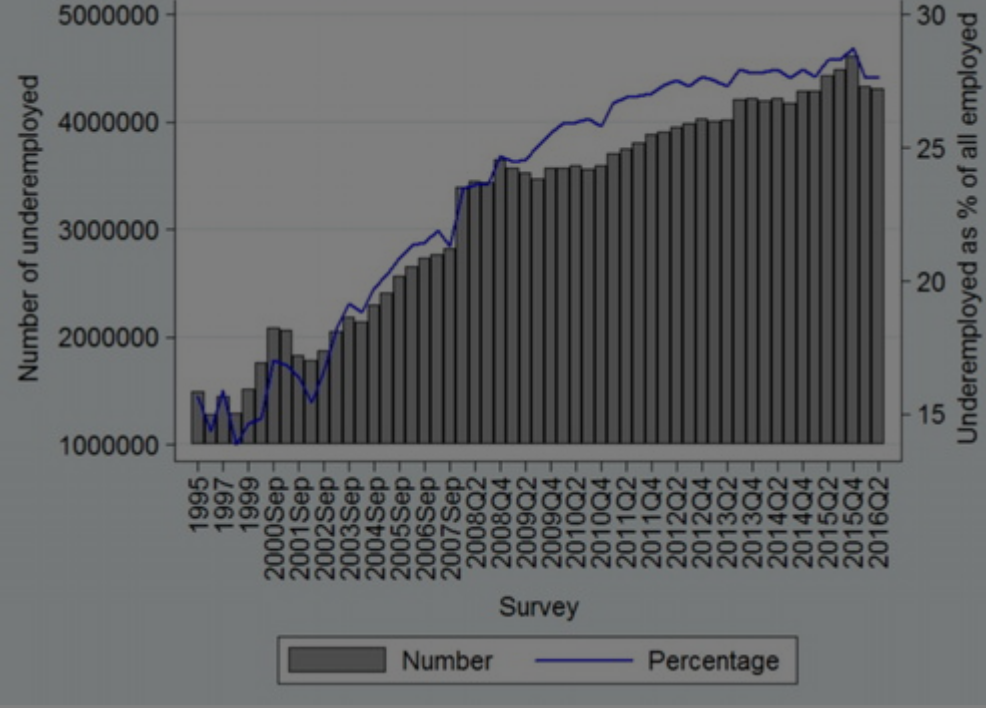
Figure A1. Mean years of education of the employed in all race groups, 1995-2016. Source: Authors' own calculations using OHS 1995-1999, LFS 2000-2007 September, QLFS 2008-2015 fourth quarter and QLFS 2016 second quarter data.



Display full

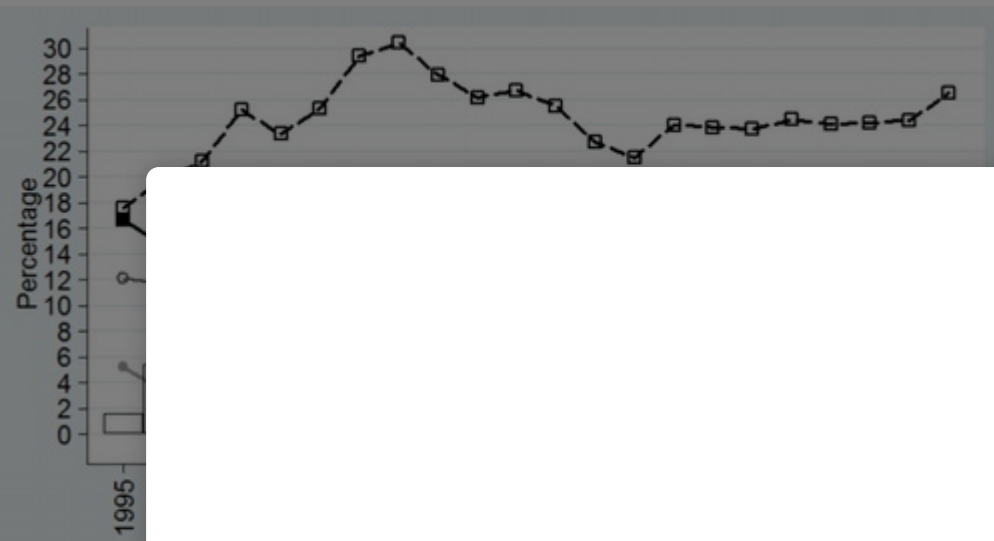
Figure A1. Mean years of education of the employed in all race groups, 1995-2016. Source: Authors' own calculations using OHS 1995-1999, LFS 2000-2007 September, QLFS 2008-2015 fourth quarter and QLFS 2016 second quarter data.






Display full size

Figure A3. Underemployment, unemployment and real GDP growth rates, 1995-2016. Source: Authors' own calculations using OHS 1995-1999, LFS 2000-2007, QLFS 2008-2016 and SARB data.



✕



Display full

Table quality



Table A2. Number of underemployed ($\times 1\ 000$), 1995–2016.

Download CSV

Display Table



Download PDF

Related research

People also read

Recommended articles

Cited by
14



Information for

- Authors
- R&D professionals
- Editors
- Librarians
- Societies

Opportunities

- Reprints and e-prints
- Advertising solutions
- Accelerated publication
- Corporate access solutions

Keep up to date

Register to receive personalised research and resources by email

 Sign me up



Open access

- Overview
- Open journals
- Open Select
- Dove Medical Press
- F1000Research

Help and information

- Help and contact
- Newsroom
- All journals
- Books



Copyright

Accessib

Registered
5 Howick Pl

or & Francis Group
orma business

