The popular view that possession of a university degree no longer guarantees success in the job market is simply not true. Over the past fifteen years, the number of degreed graduates in the labour force has more than doubled even as the graduate unemployment rate has fallen. And, even after the financial crisis, graduate unemployment remains at around 5 per cent. These are key findings of a recent research study commissioned by the Centre for Development and Enterprise.

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The Centre for Development and Enterprise is one of South Africa’s leading development think tanks, focussing on vital national development issues and their relationship to economic growth and democratic consolidation. Through examining South African realities and international experience, CDE formulates practical policy proposals for addressing major social and economic challenges. It has a special interest in the role of business and markets in development.

Series editor: Ann Bernstein
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Executive Summary

Despite exceptionally high levels of unemployment in South Africa, there is one area in which public perception of the extent of unemployment is exaggerated. The popular view that the possession of a university degree no longer guarantees success in the job market is simply not true.

Recently, CDE commissioned Professor Servaas van der Berg and Hendrik van Broekhuizen of the Department of Economics of the University of Stellenbosch to analyse the data on graduate unemployment. The results of this original research, along with some policy relevant conclusions, are presented here. This executive summary provides a brief overview of the key findings and policy implications.

Key Findings

• The number of degree holders in the labour market grew from 463 000 in 1995 to 1,1 million in 2011.

• Despite this rapid rise, few people with university degrees are unemployed—just under 5 per cent in 2011. Levels of unemployment this low can generally be ascribed to individuals’ moving between jobs and are, therefore, as close to full employment in this sector as an economy can get. This finding is not surprising as South African employers (public and private) desperately need skilled and educated workers.

• Unemployment increases progressively as one goes down the educational scale. Any post-school qualification increases one’s job prospects:
  • for people with non-degree tertiary education, unemployment is about 16 per cent;
  • for matriculants it is 29 per cent;
  • and for those with fewer than 12 years of schooling, 42 per cent.

• Most of the growth in graduate employment has been in the private sector, with the proportion of graduates working in the public sector falling from 50 per cent in 1995 to about 35 per cent in 2011.

• White students make up a declining share of graduates leaving university each year, and by 2011 made up less than half of the total population of graduates. Black graduates account for half of all graduates in the work force, their number tripling from 200 000 in 1995 to 600 000 in 2011.

• At 6,7 per cent, black graduates are somewhat more likely to be unemployed than white graduates (2 per cent). Younger graduates are also more likely to be unemployed than older graduates (11 per cent of 20 to 29 year olds compared with 2 per cent of 40 to 65 year olds).

• While there is no data available to resolve the question, it is likely that unemployment rates differ for graduates of different universities, due to real and perceived differences in the quality of their degrees.

In the face of these data, the myth that graduates in general, and black graduates in particular, are struggling to find work needs to be put to bed. South Africa’s employers are clearly desperate for skills. These data also suggest that the claim that business is reluctant to hire black graduates needs to be re-examined. Although black graduates are more likely to be unemployed than white graduates, the tripling of the number
of black graduates has been accompanied by a falling rather than a rising level of unemployment. It is very likely that the residual gap in employment can be explained largely by differences—real and perceived—in the quality of degrees offered by historically black institutions.

Policy Implications

The findings have some clear policy implications. Firstly, low graduate unemployment shows that South Africa’s employers are desperate for skilled workers. Given this, there is absolutely no need for South Africa to restrict skilled immigration.

South Africa should do far more to recruit large numbers of skilled people from abroad to meet the country’s skills shortage. Conditions of economic austerity and uncertainty in the UK and EU create real opportunities for South Africa to recruit skilled foreigners.

The recruitment of foreign skills would have a positive impact on economic growth and employment. In addition, expanding the country’s supply of skills would help drive down the premium employers pay for skilled workers, in the process helping to reduce wage inequality. And the recruitment of foreign graduates is necessary if we are to train and educate more and more South Africans.

Secondly, low graduate unemployment illustrates that employers regard a university degree as a significant factor when hiring, so policies should support the expansion of university education. While public universities should be supported to grow and expand where appropriate, they will struggle to meet the demand. In this context, there is much to learn from the Brazilian experience. There, the opening of over 2,000 private tertiary institutions in the past 15 years in order to meet the tripling of demand in that country, illustrates the opportunities that can be unlocked by expanding the role of the private sector in tertiary level education and training.
INTRODUCTION

South Africa’s labour market faces critical challenges:

- Low participation in the labour force despite widespread poverty;
- Exceptionally high unemployment among those who want to work, in particular young, unskilled and inexperienced workers, especially women;
- Few employment opportunities in rural areas, resulting both in very low labour force participation and very high unemployment;
- An increasingly skill-intensive economy despite a scarcity of skills, resulting in low unemployment for skilled workers, but very limited opportunities for the unskilled; and
- Very high levels of inequality because of high levels of unemployment and because skilled workers command a significant premium.

As serious as the unemployment crisis is, there is one area where public perceptions of its extent are exaggerated. This is the claim that graduates face high and/or growing levels of unemployment. Thus, in June 2012, City Press ran a long feature on graduate unemployment, which opened:

University degrees or diplomas no longer hold the promise of jobs for young South Africans as hundreds of thousands of them battle to find work.

Labour market analyst Loane Sharp says that about 600 000 university graduates are languishing at home, unable to put into practice what they have learned.

A growing army of unemployed graduates are now forced to either rely on their families to support them or find jobs as unskilled workers, such as waiters, clerks and office assistants.¹

Both the facts and the argument are wrong. New research commissioned by CDE reveals that the unemployment rate for people with university degrees is below 5 per cent. (We call this group ‘graduates’ throughout this report, and use it to refer exclusively to the holders of a Bachelor’s degree or higher from a university. (See box1, on page 4.) This is all the more impressive in that the number of people holding a university degree has more than doubled since 1994. Because at any time a few people will be between jobs or have only recently entered the job market, unemployment rates below 5 per cent are usually regarded as ‘full employment.’ The two critical points this report makes are easily summarised: (a) South Africa has seen a rapid rise in the number of university graduates since 1994, and (b) nearly all have found work.

The research on which we base these claims was commissioned by CDE from Professor Servaas van der Berg and Hendrik van Broekhuizen of the Department of Economics of the University of Stellenbosch in 2012.² CDE asked them to compile data and analyse overall trends of graduate unemployment, as well as relevant variables including race, gender, age and field of study. The study updates and compares older reports, and analyses data for 2005 to 2011 which have not previously been reported. This report summarises the original research and draws some policy-relevant conclusions.
BOX 1: Defining the terms “graduate” and “diplomate”

In the debate about graduate unemployment, a key source of confusion is the way different people use the word “graduate”. In many official publications and speeches, the word is used to denote anyone who has completed some form of tertiary education. This can be misleading since it obscures significant differences in labour market outcomes for people with different kinds of tertiary qualifications. CDE uses a strict definition of the word “graduate” to refer solely to holders of a bachelor’s or higher degree from a university. Where it is necessary to distinguish graduates from others with tertiary qualifications, we describe non-graduates as “diplomates”.

The importance of this distinction can be seen if we compare CDE’s findings with those of earlier studies that inadequately distinguished graduates from other tertiary-educated individuals or underemphasised the differences in the labour market outcomes faced by the two groups. These studies include:

- A 2006 Development Policy Research Unit report which suggested that unemployment for “graduates” – used to refer to all tertiary-educated individuals – had risen from 6 per cent in 1995 to 9.7 per cent in 2005. The report did acknowledge, however, that this increase was primarily driven by a rise in unemployment among “non-degree tertiary-educated individuals” – who constituted about 82 per cent of all tertiary qualified unemployed individuals.

- A National Treasury discussion paper, Confronting youth unemployment: Policy options for South Africa (2011), which offered a graph that, without providing precise numbers, suggested that over 30 per cent of 18 to 24 year olds with tertiary education were unemployed, with the same being true of over 15 per cent of 25-29 year olds, 10 per cent of 30 to 34 year olds, and 5 per cent of 35 to 64 year olds.

The politics of “graduate unemployment”

There are a number of reasons why it is important to get the facts about unemployment among graduates and diplomates right. The most important of these relate to the different implications for policy, especially in relation to domestic skills development and international migration.

If, for example, one believes that the number of unemployed graduates is higher than it is, one might also believe that skills are not all that scarce, and that claims about skills scarcity are false. The fact that graduate unemployment is very low, however, indicates just how eagerly employers snap up those who have academic qualifications.

Similarly, the claim that graduates are unable to find employment is sometimes used to justify restrictions on the immigration of skilled foreigners. If graduate unemployment is as low as our research indicates, South Africa should do far more to recruit skills from abroad. Finally, our data give the lie to the claim that high graduate unemployment indicates that business has failed to transform itself. This claim is doubly wrong: not only is unemployment among graduates low, an increasing number of graduates emerging from the universities are black and levels of unemployment—
including among black graduates—have fallen. It is, however, possible that perceptions about the
differential quality of the degrees offered by different universities may mean that black graduates—
who likely make up a disproportionate share of graduates coming from universities with weaker
reputations—may struggle more to find employment. Data limitations make it impossible to test this
hypothesis rigorously.

A second set of reasons concerns the implications that alleged high graduate unemployment has for
tertiary education policies. If it were true, for example, that graduates struggle to find work despite
the skills shortage, one could conclude that resources allocated to universities are largely wasted.
The unemployment figures we report here, however, illustrate that employers appear to regard a
university degree as a significant factor when hiring, so policies should support the expansion of
university education. Having said that, our figures can tell us nothing about whether universities are
as efficient and effective as they should be, and certainly do not imply that they produce graduates
who are as skilled as they should (or could) be.

CDE’S RESEARCH FINDINGS

Employment data come from a series of surveys by StatsSA (see box 2, on page 6). These provide
a snapshot of the evolution of the labour market between 1995 and 2011, key points being that:

- The number of working age adults (15-65) has risen by 34 per cent from 24,2 million in 1995\(^5\)
to 32,8 million;\(^6\)
- Participants in the labour force (a figure that includes people who are employed and who
are unemployed but looking for work) have risen from 13,7 million\(^7\) to 20 million\(^8\), which
amounts to an increase in the labour force participation rate from 57 per cent to 61 per cent;
- The number of people who have jobs or who are self-employed has risen by 41 per cent from
9,5 million to 13,4 million, raising the employment rate for working-age adults from 39 per
cent to 41 per cent; and
- The number of unemployed (broadly defined) rose by 60 per cent from 4,2 million to 6,7
million, so that the unemployment rate (broadly defined) rose from 30 per cent to 34 per
cent.
BOX 2: Research methods

The data used in this report are all derived from StatsSA’s October Household Surveys (OHS), Labour Force Surveys (LFS) and Quarterly Labour Force Surveys (QLFS). These cover much of the same ground, but are used for different periods: data from the OHS are used for the period 1995 to 1999, while the LFS is used for 2000 to 2007, and the QLFS for 2007 to 2011. These are the only representative surveys that provide these data and are considered by most experts to be accurate. Like all surveys, however, and despite their relatively large sample sizes (about 30 000 households per quarter), the estimates are subject to a margin of error. So while point estimates are provided about the size of the adult population, the number of people in employment, the number of people with degrees, etc, confidence in their accuracy can only be about 95 per cent, plus/minus a few percentage points. For this reason, this report has generally sought to avoid the mistake of claiming over-exactness in estimates of the absolute size and trends in key variables. Readers interested in the precise point estimates and confidence intervals are invited to read the full report by Prof Servaas van der Berg and Hendrik van Broekhuizen, which is available on request.

The better educated do better

These broad figures convey the scale of the employment crisis. Disaggregated appropriately, they also show a strong relationship between levels of education and the chance of being employed.

Participation in the labour force runs between 46 and 63 per cent for people who did not finish school, but jumps dramatically for those who get matric (76 per cent) or study further (84 to 91 per cent). Importantly, employment rates also rise with education. Thus, while people who have not completed high school have employment rates that range between 26 and 39 per cent, employment rates for matriculants are around 55 per cent, and those with post-matric education are employed at rates ranging from 81 to 89 per cent. Correspondingly, the unemployment rate falls from a high of about 42 per cent (for those with 11 years of schooling) to 29 per cent for matriculants, around 5 per cent for all graduates, and less than 3 per cent for those with a post-graduate degree.
GRADUATE UNEMPLOYMENT IN SOUTH AFRICA: A much exaggerated problem

Figure 1 – Labour force participation, employment and unemployment rates by years of education (2007)

Source: Calculations by Servaas van der Berg and Hendrik van Broekhuizen based on 2007 Community Survey. Notes: Estimates are weighted and are calculated only for the population of working-age (15 – 65 year-olds).

There are a couple of important points to register here. The first is that people with limited education are unlikely to find work and also seem less hopeful of finding work. Indeed, many have stopped looking for work and opted out of the labour market. Conversely, for those who make it through matric, employment rates rise dramatically. Thus, in 2007, while only 61 per cent of those who had 11 years or fewer of education and who were part of the labour force had jobs, the figure for those with matric was 71 per cent. People with even more education did even better: 84 per cent of those with a one-year post-matric qualification who were in the labour force had jobs; the same is true of 94 per cent of those with three-year qualifications and over 96 per cent who had post-graduate degrees.

These figures are all for 2007. Because that was the last year of a period of relatively rapid growth, they may represent a high point for graduate employment rates. As the next section demonstrates, however, graduate unemployment has remained low even as unemployment rates for others have risen since 2008. Before we get to those data, it is important to emphasise an important distinction between labour market outcomes of graduates and diplomates: while the broad unemployment rate for anyone with post-matric qualifications of three or more years was 5 per cent in 2007, the equivalent figure for people with a one year post-matric qualifications was nearly 16 per cent. This is obviously considerably better than the unemployment rate for matriculants (29 per cent) and people with less than 12 years of schooling (39 per cent), but it remains nearly four times higher than the unemployment rate for those with undergraduate and post-graduate qualifications.

Trends in graduate unemployment

Graduate unemployment (defined broadly), like unemployment generally, was highest in about 2001, at which point about 8 per cent of university graduates were unemployed as were just over 18 per cent of diplomates. Economic expansion between 2002 and 2007 reduced these rates of unemployment greatly, and, while unemployment for people with tertiary qualifications
has increased since 2008, it remains low in comparison with rates for people who have only a school education.

**Figure 2** – Broad unemployment rates for ‘diplomates’, graduates and holders of all tertiary qualifications (1995 – 2011)


These figures suggest that university graduates generally have little difficulty finding work. It is important, however, to note that the unemployment rate (even the broad unemployment rate, used here) would understate the challenge faced by graduates if large numbers of them are not in the labour force. But this is not the case: labour force participation for people with post-school education is at 85 per cent, which is considerably higher than for people with only a school education (59 per cent). For graduates, participation rates are even higher – 90 per cent. More importantly, not only is the participation rate high, the absolute number of graduates has grown remarkably since the mid-1990s.

The number of graduates

In 1995, about 557 000 working age adults had degrees, of whom about 463 000 were in the labour force. By 2011, these figures had more than doubled to over 1,2 million and 1,1 million, respectively. Thus the number of graduates in the labour market grew by an average annual rate of 5,6 per cent. With population growth around 1,6 per cent per year, this is a significant achievement. In effect, South Africa went from having around 1 160 graduates of working age per 100 000 of the population, to about 2 130 – an increase of over 80 per cent. Importantly, despite the rapid increase in graduates, employment opportunities for them grew just as quickly.
As these data imply, the number of graduates coming out of the universities has risen rapidly. Another indication of this can be found by comparing the number of first degrees awarded in 2005 and 2010, from the Higher Education Management Information System (HEMIS). The overall number rose by 26 per cent, from about 48 400 to just less than 61 000. Interestingly, growth for black Africans and Coloured graduates (whose numbers increased by nearly 50 per cent) far exceeded that in white and Indian graduates (less than 5 per cent).
The work graduates do

The rapid rise in the number of graduates in the labour force (an annual average of 5,6 per cent between 1995 and 2011) has not resulted in their exceeding employers’ requirements. This is reflected in the fact that graduates have been 20 per cent to 25 per cent more likely to be employed than similar individuals whose highest qualification was a matric. Indeed, employers’ preference for graduates appears to have grown over recent years, as borne out by the widening gap between the chances of graduates’ being employed relative to people with only matric.
It is important to offer a qualification: the available data do not allow us to assess the nature of the work that graduates do. We cannot tell if it matches their qualifications; we do not know what it pays, etc. But we know from other research that real wages of skilled employees rose between 1995 and 2005 even as wages of unskilled and semi-skilled workers more or less stagnated, so new graduates appear to have entered the labour market at a particularly propitious time.


Source: Burger et al., (2007)
The racial profile of graduates

Between 1995 and 2010, the number of black Africans receiving a first degree rose by 50 per cent, from 21 052 to 31 453, leading to a rise in the proportion they made up of all new graduates from 43 per cent to 51 per cent. Over a longer period, the 21 per cent rise in the number of white graduates in the labour force between 2001 and 2011 is considerably lower than the 50 per cent rise in African graduates and 150 per cent rise in Coloured graduates. So while whites still make up the single largest number of graduates in the labour market (just under 500 000) in 2010, they will be soon be overtaken by black African graduates, who already number 432 000.

An important distinction between the experiences of white and black graduates is that the latter are some three times more likely to be unemployed: black graduates’ unemployment rate is 7 per cent compared to under 2 per cent for whites. Indeed, as figure 7 shows, black graduates are more likely to be unemployed than all white adults of all educational levels. Despite this, the unemployment rate for black graduates is only about one sixth of the unemployment rate for all blacks. In addition, the racial gap has been narrowing: black graduates now experience far less unemployment than a decade ago, when unemployment levels were closer to 15 per cent.

Figure 7 – Total narrow unemployment and graduate narrow unemployment rates for blacks and whites (1995 – 2011)


More generally, unemployment for both black and white graduates seems to follow the business cycle, and to rise and fall with overall unemployment. Importantly, however, worsening economic conditions seem to have less of an impact on graduate unemployment than on people without degrees.
Occupation and industry

Though we cannot say what work graduates were doing, we can identify the industries and sectors in which they work, and the occupational terms they use to describe themselves. Thus, 90 per cent of graduates were in professional (34 per cent), technical (29 per cent) or managerial (25 per cent) occupations in 2011. By industry, the social/community sector (which includes the public sector) accounts for 50 per cent of all graduates, business/financial/insurance services account for 25 per cent, retail/wholesale trade for 7 per cent and manufacturing for 8 per cent. These figures confirm general expectations and follow international trends.

Importantly, high graduate employment does not appear to be an artefact of public policy or a growing public service, even though the number of graduates employed by the state has increased – from 224 000 in 1995 to 357 000 in 2011. While the state does employ many graduates (especially as teachers and nurses), it is a declining proportion of the total, falling from around 50 per cent in 1995 to 35 per cent in 2011.

Figure 8 – Percentage of employed graduates that are employed in the public sector (1995 - 2011)

![Graph showing percentage of employed graduates in the public sector from 1995 to 2011. Estimated slope coefficient for linear trend line: -0.790 (0.197).](image)


The age profile of graduates

Not unexpectedly, younger graduates are more likely to be unemployed than older ones. This is partly a reflection of a general problem that employers are more reluctant to hire younger people, who, in addition to being inexperienced, are more of an unknown quantity. This problem may have worsened in recent years, leading to rising unemployment among recent graduates, though sample sizes are too small to be sure that the findings reflect real changes.
**Institutions and field of study**

While we can look at differences in the experience of black and white graduates, as well as those of different ages, available data do not allow us to differentiate between employment experiences of graduates from different universities. We can, however, disaggregate unemployment among graduates on the basis of field of study. The results are somewhat surprising, with commerce graduates the most likely to be unemployed followed by those with some kind of science degree. Methodological difficulties in classifying fields may partly account for this, but even if this is not the case, there is only a modest difference in unemployment rates of graduates with degrees in different fields.

**Unemployment by country of birth**

Among graduates, there is no evidence that foreigners are more likely to be employed than locals, unemployment rates for the former, at 4.7 per cent, being only fractionally lower than those of the latter (4.9 per cent). Given that in 2007 there were only some 109 000 foreign-born graduates in a graduate population of 1 million, the impact of foreigners on employment prospects of South African graduates is negligible.
KEY INSIGHTS AND CONCLUDING REMARKS

Research findings

Despite popular perceptions to the contrary, there is no evidence of high unemployment among graduates. Nor has unemployment been rising quickly among graduates, who have, for the most part, been protected from the worst effects of the global recession. It is true that those with tertiary qualifications that are not degrees are significantly more likely to be unemployed than degreed graduates, but the unemployment rate of the latter group—at around 5 per cent—is as close to full employment as an economy ever achieves. Indeed it is comparable to the level of graduate unemployment in Europe which, in 2009, stood at 4,4 per cent. The fact that these levels of unemployment have persisted despite the very rapid rise in the absolute number of degree-holders among the working population, reflects important facts about the state of South Africa’s labour market. The most critical of these is that the level of an individual’s education plays a very significant role in shaping their performance in the labour market. A number of facts back up this assertion:

- Labour force participation rates rise with education and unemployment decreases with it. Thus, graduates are more than 30 percentage points more likely to participate in the labour market than people without a matric, and are between 20 and 25 per cent more likely to get a job than matriculants. Moreover, this differential is going up every year, suggesting that that the benefit of having a degree is increasing.
- University graduates do considerably better than diplomates, whose rate of unemployment, at 16 per cent, is almost four times that of graduates.
- Encouragingly, South Africa is producing more graduates every year than it used to, with a larger and larger proportion of those graduates being black. And, although unemployment is still higher among black graduates, it has been declining quickly—from 14 per cent in 2000 to 6,8 per cent in 2011.
- While we do not have data on which to base an assessment of the effects on employment of going to different universities, what data we have on the impact of field of study suggests only limited effects.
- Despite the absence of data, it is not unreasonable to think that graduates from historically black universities may struggle to find work more than graduates from universities that served white students because of differences in the perceived quality of their degrees.
- There appears to be little difference in employment rates for graduates who were born in South Africa and those who were born elsewhere.

Policy implications

Our society is undergoing many changes. One of the least noticed is the dramatic rise in the number of people with university degrees and their positive employment prospects. It is, however, important to note that nothing about the rise in graduate numbers detracts from the fact that our school system is failing large numbers of learners.
While an increasing number of black students are finding their way to universities and the racial transformation of the graduate population is under way, it remains abundantly clear that the education system — especially primary and secondary schools — is failing to deliver a decent education to most pupils.

While much needs to be done to improve schooling, the fact that the large increase in the number of people with degrees has not generated rising graduate unemployment tells us a great deal about the extent to which the country suffers from a lack of skills. South Africa needs to increase the capacity to provide tertiary education to as many people as possible. It is clear from the differences in the unemployment rates that employers prefer graduates to diplomates, which suggests (a) that the country should continue to expand access to university education and (b) that resources ought to be invested in narrowing the gap (and perceived gap) between the skills provided to graduates and diplomates.

While expanding capacity (and improving quality) for tertiary education is important, there is space to rethink the way university education is delivered, where public institutions dominate. While these should be allowed to grow and expand—although important considerations about quality need to be borne in mind—it seems likely that it will be hard for the public sector to meet the demand. In this context, much more space can and should be created for private universities to offer degree programmes. Obviously, employers will have to trust the quality of these degrees, which, until sufficient experience of their graduates is acquired, probably means reasonably rigorous standards-setting and monitoring of educational quality. Allowing commercial institutions to offer degree programmes on a level playing field would, however, help to raise the number of people with tertiary qualifications, and increase the employability of people whose qualifications do not currently qualify as degrees.

It is clear from this research that South Africa’s employers are still desperate for skilled workers, as a result of which, the population of graduates faces a very tight labour market and has little trouble finding work. Perhaps the most immediately actionable policy conclusion to draw from this research is that there is absolutely no need for South Africa to restrict the immigration of graduates. In fact, we should be actively recruiting graduates from countries across the world. Because there is no graduate unemployment, all that the resulting increase in the supply of graduates would do is (a) help reduce the skills shortage and (b) reduce the premium graduates command in the market place. Together, these two effects would help the economy grow and reduce wage inequality. There can be no sensible reason to oppose it.
Endnotes


9. All figures for 2007, with unemployment defined as broad unemployment.
