

# The youth unemployment puzzle in South Africa - and promising ways to solve it

*by Matthias Bäuml<sup>‡</sup>*

## **Abstract**

This paper addresses the question why unemployment has reached levels as high as 42.8 percent among young adults in South Africa. On the demand side of labor, the main findings are that particularly bargaining councils are the main driver of youth unemployment. On the supply side of labor, high reservation wages and motivational effects drive youth unemployment. As it turns out, changes in the education system might effectively ease the main drivers of unemployment mentioned above. Paying close attention to youth unemployment is of vital importance as it is highly path dependent and has serious health consequences.

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<sup>‡</sup> [matthias\\_baeuml@hks12.harvard.edu](mailto:matthias_baeuml@hks12.harvard.edu)

## 1. Introduction

This paper critically examines the literature on youth unemployment in South Africa and shows promising ways to deal with the youth unemployment puzzle South Africa. While there is not only little consensus on the actual number of unemployed people in South Africa, there is even less consensus on the causes of its high and persistent unemployment. The CIA (2011) estimates the unemployment rate in South Africa to be around 23.3 percent in 2010, which makes South Africa rank 174th out of 200 countries around the globe. Some authors (e.g. Borat, 2004) blame apartheid for current high levels of unemployment while other authors (e.g. Adcorp, 2011a) emphasize the “inconvenient truth” that current high unemployment is rather a result of current labor market challenges.

The most reliable estimates from the apartheid era suggest an unemployment rate of about 7 percent in the 1970s, 13 percent in the 1990s and 25 percent in the 2000s (Hodge, 2009). The first two estimates are more or less in line with the Yearbook of South Africa from 1986 that documents a 66 percent increase in unemployment from 1968 to 1984. However, Adcorp (2011a) points out that once the current unemployment rate is adjusted for informal sector employment (as left out by official statistics), the actual unemployment rate is currently rather around 8 percent than 25 percent. The recent development in formal sector employment is summarized in figure 1 below.

Most strikingly, the largest portion of unemployed people is the youth: For people with age 15 to 24 (25 to 34), the unemployment rate is about 29.5 (42.8) percent (Statistics South Africa). In addition, the same statistics reveal that the largest group of unemployed is characterized by being new labor market entrants as opposed to have lost a job or things alike.

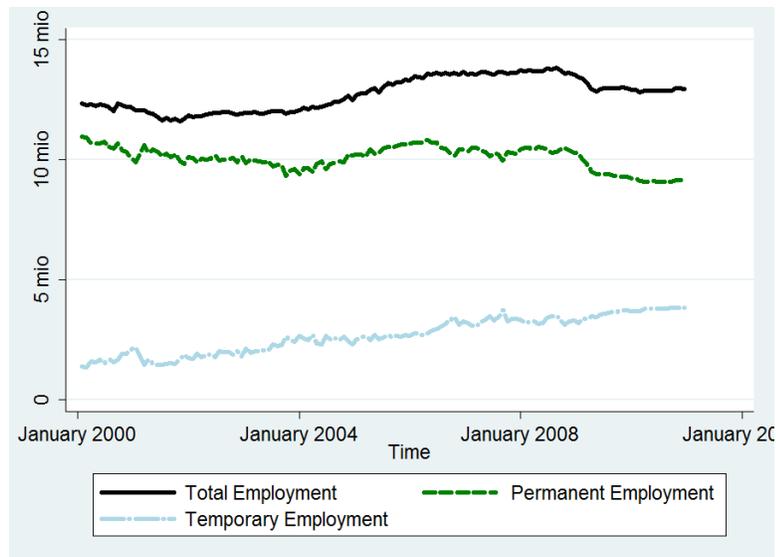


Figure 1: Monthly formal sector employment from January 2000 to May 2011. Source: The underlying data comes from Adcorp (2011a).

Banerjee et al. (2007) find that the rise in unemployment since the transition in 1994 is due to structural changes in the economy which result in a new equilibrium unemployment rate. Borhat (2004) argues that technological changes in the domestic economy exacerbate the effect of structural challenges on unemployment. During the last two decades, South Africa rapidly shifted away from the low-skilled, labor-intensive primary and secondary sector to the skill-intensive tertiary sector (Burns et al., 2010a). The decline in jobs in the agriculture and mining sectors as well as in the labor-intensive manufacturing sector (e.g. textile) has been accompanied by a sharp rise in labor force participation among low-skilled African women and a growing youth population. Adcorp (2011a) capture the trend of substantial growth in high-skilled services and a sharp decline in low-skilled services even in the most recent data. Branson (2006) also demonstrates that the age at which young Africans enter the labor force is constantly declining. In addition, she finds that the increasing supply of labor is not absorbed by employment, thus, leading to a growing pool of unemployed young adults. As a

result, high (youth) unemployment rates are a consequence of increased youth participation in the labor force and not due to a decline in the availability of jobs.

Econ 101 teaches us that when labor supply increases while labor demand is falling, we expect wages to fall to clear the market. Banerjee et al. (2007) find that real wages indeed declined during the worst years of unemployment. However, the nominal decline that would have been necessary to clear the labor market was simply too large to be politically or socially acceptable. As a result, the question becomes why wages have not been adjusting, and still are not adjusting. Therefore, we have to take a closer look on the labor supply and demand side. That said, we do neither have a decline in jobs nor do we have jobless growth in South Africa. Do firms create jobs while the economy grows on average about 3 percent per annum from 1993 to 2009 (Statistics South Africa)? Yes, we do have growth that translates into employment. However, just not enough.

Acting on the youth unemployment problem is important as unemployment is significantly path dependent. The National Planning Commission (2011) recognizes that “This time bomb is the greatest risk to social stability in South Africa.” They estimate that if a young person fails to get a job by the age of 24, he or she is almost never likely to get a formal, full-time employment. Consequently, about 60 percent of an entire generation could live their lives without ever holding a formal job.

Furthermore, Hammarström (1994) finds that there is a greater increase in physical and psychological symptoms as well as smoking habits and use of cannabis among long-term unemployed young people than among those not long-term unemployed. In addition systolic blood pressure, alcohol consumption and crime rates increase more among long-term unemployed boys than among others. These findings not only imply that the quality of living

drops significantly for those members of our society but it does also imply a large burden on our health care system in the future. Obviously, fighting youth unemployment in the first place is the better deal for South Africans.

The rest of the paper is structured as follows: The next section evaluates the labor supply side while the third section scrutinizes the demand side of labor. Section four concludes and gives policy recommendations.

## 2. Labor Supply

This section evaluates potential causes for youth unemployment that relate to the supply side of labor. More specifically, this section shows why people, and particularly the youth, might put only little effort into their job search, or why they might search inefficiently, thus, cause an inefficient allocation of labor which also results in unemployment.

Firstly, one might argue that people have no adequate access to the job search infrastructure such as internet. For example, young (and old) job seekers have no access to online job search engines or job postings in online newspapers, or can neither afford to call potential employers nor to travel to them. The National Household Travel Survey (2003) emphasizes that the youth has no life savings and fully relies on its network.

Although we can observe clusters of unemployed young people in townships (and former homeland areas) which are usually far away to the economic centers such as Cape Town in the Western Cape, this explanation for high youth unemployment seems rather unlikely. For instance, visiting the Imizama Yethu township in the Western Cape reveals that internet is readily available for R 5 per hour, an estimated 80 percent of residents owns a cell phone and a mini-taxi one-way trip to Cape Town costs about R 5 to R 10. In comparison, a beer in the township tavern costs about R 15 which is three times as much as one hour surfing the internet. As a result, I think it is highly unlikely that a lack of access to formal job search facilities can explain the high average unemployment rate of about 57 percent in Imizama Yethu and townships alike (A.D. Smith (2011)). In addition, formal job search facilities are only relevant for a limited group of job seekers as job search in South Africa for low-skilled workers depends on mouth-to-mouth propaganda and wide use of other informal networks such as going from door-to-door. The South African Young Persons Survey (SAYPS) and CAPS reports that three in five

young wage earners have found their jobs through a social network, compared to only 12 percent who found employment through job advertisements (Burns, 2008). Noble et al. (2008) argue that those channels are less effective in finding a job than a formal platform. Thus, a lack in formalized job search might indeed result in higher unemployment.

Secondly, one might argue that people are not willing to supply their labor because of high reservation wages. In other words, people might not be willing to accept a job offer even if currently being unemployed because this very job does not pay off the amount of money they expect.

This explanation for high youth unemployment seems more promising. Visiting the Department of Labor in the Mitchells Plain township where almost two million people reside, and talking to the (only!) career counselor in that area reveals that people frequently do not show up for interviews with potential employers even if previously confirmed multiple times with the career counselor. This behavior might indicate that people's reservation wages are potentially higher than the wage which the potential employer offers. Thus, the question becomes whether the jobseekers demand wages above their marginal productivity (which is supposed to be the fair wage) or whether employers offer only wages below that.

A promising way to answer this question would be the ESSA data base which is owned by the Department for Labor. Unfortunately, no access to that data was granted, yet. However, in favor of this claim - that people demand wages higher than their marginal productivity - are the changes in education and the indoctrination into the youth that their new degrees are highly respected. Namely, the comprehensive promotion of the Metric degree makes young people think that they "earn" significantly higher wages. However, a Metric degree is a highly imperfect signal for the employer and worth only little as the variation in actual intellectual abilities is

extraordinary high. Kingdon and Knight (2001) also document unrealistically high wage aspirations relative to predicted wages (though, this finding should not be interpreted as reflecting unwillingness to work). Thus, job vacancies are not filled and most likely lead to higher levels of unemployment because job seekers demand wages that would not be in line with their marginal productivity, or at least the marginal productivity they are able to signal effectively.

Thirdly, people might become discouraged from taking up a job since unemployment benefit or other financial support is available. However, such effects are ex ante unlikely to explain high unemployment among the youth: Only people who have worked before and paid into the UIF are eligible for UIF payments once they are laid off. In addition, motivational effects might also arise from the perceived probability of finding a job and the probability of being able to effectively apply for jobs.

To test these hypotheses, I use data from the Quarterly Labour Force Survey (Q1 2011). The QLFS is a household-based sample survey conducted by Statistics South Africa. It collects data on the labor market activities of individuals aged 15 years and above. The QLFS surveys about 95,000 individuals in about 27,000 households. A stratified two-stage design is used with probability-proportional-to-size sampling of 3,080 PSUs in the first stage, and sampling of dwelling units in the second stage. The sample is designed to be representative at the provincial level and within provinces at the metro and non-metro level.

As I measure job search activity with a dummy equaling one if the respondent replies with 'yes' to the following question: "In the last four weeks, ....Were you looking for any kind of job?", and zero otherwise, I use a probit model to evaluate the effect of financial support and other individual and regional characteristics on job search activity. Results are reported in table 1 below).

In line with my prediction above, column (4) shows that UIF payments are *not* significantly correlated with job search activity - after controlling for several observable and unobservable individual and regional characteristics. However, people receiving other grants are significantly less active in searching for jobs. These results are mainly driven by people who receive old-age or disability pensions, or child support or foster care grants (due to brevity of this paper, the statistical computations for the latter findings are not reported).

People who gained work experience previously to becoming unemployed are significantly more likely to be active. Work experience increases the probability of being active by about 21 percent (evaluated at the mean). In addition, education is an important factor as people without a Metric degree are about 37 percent less likely to search for a job while being unemployed.

Most strikingly, the youth (age 15-24) is less active than people with age 25-34 or age 35-44. Intuitively, one would have expected exactly the opposite after controlling for marital status, education, work experience and several other important individual characteristics as those are the ones who cannot rely on private savings, unemployment benefits and alike. Thus, the question becomes *why* the youth is less active.

My take on this issue is that the youth becomes discouraged as they cannot effectively signal their intellectual abilities to the employer - given the current education system. For example, the variation in actual abilities of Metric degree holders is simply too large to be of a reliable signal to the employers. As a result, young job-seekers cannot get access to the labor market in the first place to gain exactly the practical experience they so urgently need to be able to effectively signal abilities to potential employers.

To evaluate this hypothesis, we have to use another model, more specifically, the model presented in table 2. My results confirm that it really seems to be of vital importance - especially for the youth - to be able to effectively signal intellectual and professional abilities. Those who can effectively signal their abilities i.e. do have work experience while holding education and all other controls constant, are significantly more active in searching for jobs. Column (1) reveals that young South Africans who bring work experience with them are about 18 percent more likely to search for a job. In addition, young South Africans who do not hold a Metric degree are about 50 percent less likely to be searching for a job.

That having said, my conclusion is that the youth becomes discouraged to search for jobs as they are not able to effectively signal their intellectual and professional abilities when meeting a potential employer. An alternative explanation for my findings would be that a young individual is not searching for a job because jobs are simply not there (i.e. a low probability of success), even if he or she had the chance to effectively signal his or her abilities. However, the statistical significance for the effect of work experience on activity is higher for people with age 15 to 24 than for people with age 25-34. This finding supports my conclusions about the importance of signaling as – in a world with perfect signaling – young people should have it easier to find a job than an older competitor – holding constant all other individual and regional characteristics. Since the estimated coefficient is more significant for the youth, they actually have a harder time to find a job, thus, supporting my conclusions.

	(1)	(2)	(3)	(4)	(5)
	PROBIT	PROBIT	PROBIT	PROBIT	LPM
	active	active	active	active	active
UIF Receiver	0.602*	0.529	0.529	0.453	0.122
	(0.326)	(0.357)	(0.357)	(0.385)	(0.096)
Savings				0.204	0.065
				(0.158)	(0.044)
Other Grant Receiver				-0.155**	-0.054**
				(0.067)	(0.023)
Age15 - 24		0.631***	0.631***	0.629***	0.203***
		(0.098)	(0.098)	(0.109)	(0.034)
Age25 - 34		0.832***	0.832***	0.845***	0.275***
		(0.101)	(0.101)	(0.108)	(0.032)
Age35 - 44		0.636***	0.636***	0.650***	0.211***
		(0.080)	(0.080)	(0.085)	(0.025)
Age45 - 54		0.465***	0.465***	0.468***	0.149***
		(0.100)	(0.100)	(0.106)	(0.034)
Work Experience		0.214***	0.214***	0.211***	0.072**
		(0.074)	(0.074)	(0.074)	(0.025)
No Metric Degree		-0.393***	-0.393***	-0.374***	-0.122***
		(0.064)	(0.064)	(0.064)	(0.028)
Male		0.177***	0.177***	0.125***	0.042**
		(0.023)	(0.023)	(0.039)	(0.013)
Married		-0.144***	-0.144***	-0.146***	-0.049***
		(0.038)	(0.038)	(0.038)	(0.012)
Colored		0.187***	0.187***	0.184***	0.055**
		(0.053)	(0.053)	(0.052)	(0.020)
Indian/Asian		0.106	0.106	0.081	0.043
		(0.166)	(0.166)	(0.171)	(0.059)
White		-0.154	-0.154	-0.200*	-0.060
		(0.116)	(0.116)	(0.113)	(0.037)
Metro Area	0.922***	0.910***	0.910***	0.894***	0.301**
	(0.273)	(0.294)	(0.294)	(0.296)	(0.094)
Eastern Cape	-0.742***	-0.638***	-0.638***	-0.628***	-0.165**
	(0.104)	(0.125)	(0.125)	(0.129)	(0.050)
Northern Cape	-0.282*	-0.250	-0.250	-0.263	-0.020
	(0.153)	(0.172)	(0.172)	(0.173)	(0.069)
Free State	-0.133	-0.017	-0.017	-0.051	0.053
	(0.153)	(0.171)	(0.171)	(0.170)	(0.070)
KwaZulu-Natal	-1.173***	-1.076***	-1.076***	-1.061***	-0.316***
	(0.081)	(0.107)	(0.107)	(0.111)	(0.051)
North West	-0.770***	-0.655***	-0.655***	-0.657***	-0.178**
	(0.153)	(0.178)	(0.178)	(0.181)	(0.073)
Gauteng	-0.642***	-0.507***	-0.507***	-0.507***	-0.113***
	(0.064)	(0.071)	(0.071)	(0.070)	(0.015)
Mpumalanga	-0.578***	-0.426**	-0.426**	-0.433**	-0.092
	(0.153)	(0.174)	(0.174)	(0.176)	(0.071)
Limpopo	-1.162***	-1.055***	-1.055***	-1.041***	-0.313***
	(0.153)	(0.179)	(0.179)	(0.185)	(0.074)
<i>N</i>	11,919	11,846	11,846	11,846	11,846
Pseudo R <sup>2</sup> / Adj. R <sup>2</sup>	0.131	0.154	0.154	0.155	0.194
<i>p</i>	<0.01	<0.01	<0.01	<0.01	<0.01

Table 1: Regression Results. Standard errors clustered at the provincial level are in parentheses below the coefficient. Significance levels are indicated with \*  $p < 0.10$ , \*\*  $p < 0.05$  and \*\*\*  $p < 0.01$ . A constant term is included in all specifications but is not reported. Column (1) to (4) shows probit estimates evaluated at the mean (marginal effects) while column (5) reports LPM estimates. The data comes from the Quarterly Labor Force Survey (Q1 2011). More details upon request.

	(1)	(2)	(3)	(4)	(5)
	Age15-24	Age25-34	Age35-44	Age45-54	Age55+
	Active	active	active	active	active
Work Experience	0.183*** (0.060)	0.235** (0.097)	0.150 (0.132)	0.189 (0.232)	-0.451 (0.479)
No Metric Degree	-0.491*** (0.153)	-0.419*** (0.087)	-0.082 (0.153)	-0.285 (0.187)	-0.225 (0.315)
Other Controls	YES	YES	YES	YES	YES
<i>N</i>	3,897	4,150	2,133	1,269	392
Pseudo $R^2$	0.148	0.155	0.137	0.178	0.238
<i>p</i>	<0.01	<0.01	<0.01	<0.01	<0.01

Table 2: Regression Results. Standard errors clustered at the provincial level are in parentheses below the coefficient. Significance levels are indicated with \*  $p < 0.10$ , \*\*  $p < 0.05$  and \*\*\*  $p < 0.01$ . A constant term and all controls from table 1 are included in all specifications but are not reported. Column (1) to (5) shows probit estimates evaluated at the mean (marginal effects). The data comes from the Quarterly Labor Force Survey (Q1 2011). More details upon request.

Fourthly, I argue that people might have biased perceptions about the return to active job search, that is, only perceive a little benefit of job search while the actual benefits might be large. In other words, there might be a negative ‘social multiplier’ within certain groups or communities. For example, if many people around an individual in a certain social network are unemployed (who have only little access to job search opportunities themselves), there exists a negative externality to that very individual who will be less likely to actively search for a job as it (incorrectly) perceives no benefit to job search activities.

Burns et al. (2010b) show that the information available to employed people versus unemployed people starkly differs. While on average more than 50 percent of other household members are employed for employed people, on average only about 10 percent of household

members are employed for unemployed people. Burns et al. (2010b) find that access to information about job opportunities as well perceptions about the job market depend on social structures and social networks to which labor market participants belong. More specifically, social networks may enhance employment probabilities by an additional 3-12 percent. Moreover, Burns et al. (2010b) also find evidence for the negative 'social multiplier': Social networks reduce worker discouragement by about 1-2 percent.

### 3. Labor Demand

This section investigates the demand side for labor. That is, this section critically reviews whether a distorted demand for labor causes youth unemployment in South Africa.

Firstly, figure 1 in the introductory section shows different employment trends for permanent and temporary employment. While permanent employment declined from 2000 to 2011, temporary employment actually increases over the same period. Figure 2 below emphasizes this pattern as it shows a very strong correlation of about -0.81 between permanent and temporary employment that is highly statistically significant ( $p < 0.001$ ). In other words, months in which permanent employment decreases come along with months in which temporary employment increases, and vice versa, an effect which is constant over time.

This pattern might indicate that firms try to introduce more flexible working conditions: Labor regulations are rigid which forces companies to deviate from their optimal business decisions. As a result, firms try to circumvent these institutional constraints by substituting permanent employment with temporary employment. While temps are usually hired via an agency or labor broker, more and more employers handle 'temp' workers themselves. The Labour Guide (2011) shows that a temporary contract i. can be used as a means by which the employer can illegally evade his statutory (legal) obligations to the worker and ii. allows the employer to employ people at a far less cost than if he employed them on a permanent basis.

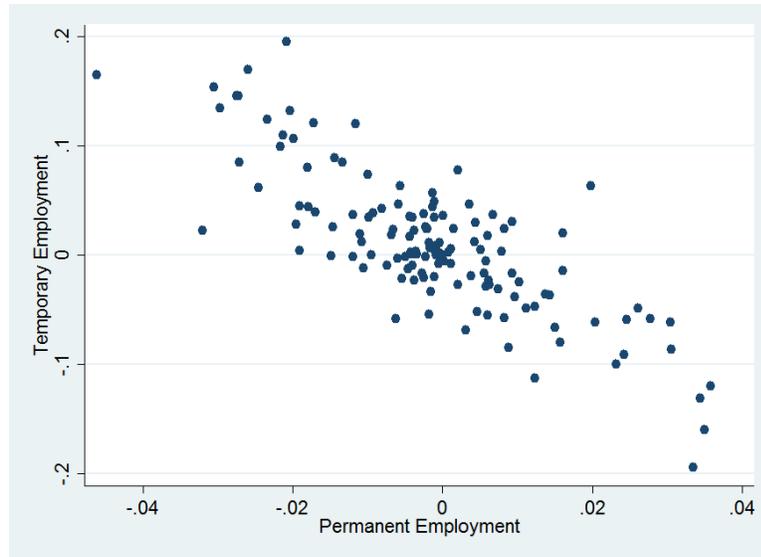


Figure 2: Correlation coefficient of -0.8087 that is statistically significant at the 0.001 percent level. Source: The underlying data comes from Adcorp (2011a).

Moreover, many voices blame particularly firing procedures to be rigid. There are four relevant legal sources for labor market regulations (Bhoola, 2002): The Constitution, legislation (such as the LRA and the BCEA), common law (under which interestingly employment contracts are considered to be a species of leases) and collective agreements. Particularly the LRA is considered to put an enormous cost on the shoulders of the employer because its definition of “fair” dismissals (both procedurally and substantially) is not without significant consequences for firms. For example, Sec. 188 of the LRA classifies dismissals as unfair that are either connected with the employee’s conduct or capacity (e.g. poor work performance).

On the one hand, the actual firing cost - as estimated by the World Bank (2009) – are about 24 weeks of wages which is considered to be rather low compared to countries around the globe. A similar view of the institutional business environment has Miguel Trevor (2011). On the other hand, the World Economic Forum argues that South African’s labor market regulations are the 5th worst in the world (WEF, 2011). For example, FreeTheWorld.com and Adcorp

(2011a) reach similar conclusions. Thus, we cannot yet reach a conclusion on what the relevant labor regulation costs for companies in South Africa really are.

Although access to reliable employment data before 1994 is not readily available, I analyze carefully collected employment data from 1946 to 2007 which is thankfully provided by Hodge (2009). The data is summarized in table 3. I conduct a kind of differences-in-differences approach to analyze the differences in employment growth before and after the introduction of the LRA in 1995. Table 4 reveals in column (1) that the annual change in employment is not different in the pre- and post-LRA period. Although it is tempting to conclude that the introduction of the LRA did not harm businesses and slow down employment growth, this conclusion would be flawed. The reason for this is that several, for yet uncontrolled, factors are correlated with the pre- and post-LRA period, thus, biasing the results in column (1).

As a result, I add the annual growth rate to the model in table 4. Importantly, I also add the interaction between growth and the indicator for the post-LRA era because there is no reason why employment growth should translate into employment in the same way across time. In so doing, I measure the actual differences-in-differences, that is, the difference in employment growth between the pre- and post-LRA period, controlling for the differences in growth rates between the pre- and post-LRA period and its interaction. In addition, I assume that no other observable or unobservable variables show different patterns in the pre- and post-1995 era that are correlated with my post-LRA dummy and growth.

The main results are as follows: While a 1 percent increase in growth before the introduction of the LRA comes along with a 0.43 percent increase in employment, the same increase in the growth comes along with an 80 percent increase in employment in the post-LRA era. As it seems, the introduction of the LRA did not do so much harm to the South African

economy as previously expected. In other words, businesses - *on average* - seem to have improved to translate growth into employment. These findings are also in line with Hodge (2009), but somewhat contradict the findings by Adcorp (2011b). While employment almost perfectly translated into employment in the pre-1976 period, they find opposite trends for the 1976-2000 period. Only after 2000, employment growth is steeper than growth.

Variable	N	Mean	Std. Dev.	Min	Max
Employment Levels	61	6,697,600	1,839,221	3,496,200	10,700,000
Employment Change	61	1.91	1.93	-2.20	7.90
Growth Rate	61	3.51	2.26	-2.20	7.20

Table 3: Summary Statistics. Source: The underlying data comes from Hodge (2009).

	(1) OLS	(2) OLS	(3) OLS
	Employment Change	Employment Change	Employment Change
Post-LRA period	0.836 (0.787)	0.733 (0.695)	-2.195 (1.770)
Growth (%)		0.483*** (0.069)	0.428*** (0.063)
Post-LRA period x Growth (%)			0.800* (0.440)
Constant Term	1.733*** (0.235)	0.060 (0.306)	0.250 (0.293)
<i>N</i>	61	61	61
Adj. R <sup>2</sup>	0.03	0.35	0.41
<i>P</i>	0.29	<0.01	<0.01

Table 4: Regression Results. Heteroskedasticity-robust standard errors are in parentheses below the coefficient. Significance levels are indicated with \*  $p < 0.10$ , \*\*  $p < 0.05$  and \*\*\*  $p < 0.01$ . The equations are estimated using OLS. Source: The underlying data comes from Hodge (2009).

Secondly, it might be that firms incorrectly perceive the productivity of its potential employees. Most current employers grew up in a racially segregated environment which might have disenabled them to recognize latent talents in black job-seekers (Banerjee et al. 2007). It is hard to distinguish between observable characteristics such as race and unobservable attributes

such as the quality of education which are correlated with race and also impact the employment status.

There appears to have been a shift away from “pure discrimination” towards differential returns to education, which is consistent with an increasingly important role for the quality of education in labor market outcomes. However, a recent experiment by van der Merwe and Burns (2008), namely playing dictator games, shows that while black participants do not vary their offers based on the racial identity of their partners, white participants were more generous towards white partners than black partners, exhibiting insider favoritism in their offers (i.e. are 27 percent less generous). A similar game was played by Burns (2006), namely a trust game, which yielded similar results.

That having said, it is still unclear whether the observed biased preferences found in the above experiments apply to the labor market. Although these findings would imply that existing skill shortages and imperfect signaling of abilities would be exacerbated, I do not think that they affect the labor market per se. Instead, it is more likely that high variation in educational outcomes explain the high variation in wage outcomes (even within firms)

Thirdly, we have seen in the introductory section above that wages should have been falling to adjust for changes in the supply for labor. One obvious candidate to explain why this not has happened is collective bargaining, unions and centralized collective bargaining. Bargaining agreements usually differ across industry and area. While certain core rights cannot be altered, some agreements can be made mandatory for non-union members (if majority union is involved). For example, 67 percent of Adcorp’s temporary employees are covered by a bargaining council.

Banerjee et al. (2007) find a persistent union wage differential suggesting that unions keep wages higher for union members. Namely, the authors find a union wage premium of about 15 percent which is increasing over time for unskilled and semi-skilled workers (Banerjee, 2007). While this seems to be good news for employed union members, it is bad news for addressing the unemployment problem. Magruder (2011) argues that exactly the bargaining characteristic from above is one potential contributor to this problem: Large firms and unions can extend arbitration agreements to non-unionized firms, usually smaller, firms, which is raising wages. He also finds that bargaining councils and unionization reduce employment by about 8 to 13 percent with losses concentrated among small firms. Again, this is good news for large firms as it reduces competition, but it is also bad news for small firms and economic development.

What does this finding mean for our youth? The National Treasury (2011) recognizes that high wages particularly for labor market entrants are a risky investment for firms – particularly in light of a lack of the ability to effectively signal intellectual and professional abilities. As a result, a firm’s optimal response to this is employing less labor. The urgent need of reducing entry level wages particularly for the youth with low productivity is emphasized by the fact that the average minimum wage is about 62 percent of the average formal wage in South Africa. In comparison, this number averages about 37 percent in OECD countries.

Additional evidence comes from Kingdon and Knight (1999) who reveal that unionized worker’s wages do not negatively respond to the local unemployment rate at all (as would be predicted by the ‘wage curve’ e.g. Blanchflower and Oswald, 1994). Thus, this is most likely a result of non-local bargaining power. Today’s newspapers vastly document that fact. Adcorp

(2011a) estimates a 22 percent increase in workdays lost this year due to trade union activities (mainly private sector initiatives).

However, Borat et al. (2011) find that minimum wages are not properly enforced in about 45 percent of council-covered workers. This significantly reduces that explanatory power for unemployment in South Africa as the market seems already to find a way around the inefficient institutional constraints that are in place. Still, there remains a large portion of job-seekers who are not able to keep up with artificially created high-entry level wages, thus, remain unemployed.

Fourthly, a lack in firm competition might also harm employment growth. The reason for this is that a lack in firm competition usually comes along with high mark-ups. Aghion et al. (2008) present that high mark-ups in several industries such as manufacturing are significantly higher in South Africa than corresponding industries in other countries around the globe (for example, Fedderke et al. (2007) find mark-ups to be twice as large as mark-ups in the United States). In addition, the authors find a constant mark-up difference across time which leads to low labor productivity and employment growth. Fedderke et al. (2007) also argue that high mark-ups have an adverse effect on employment growth. Fedderke and Hill (2006) additionally document decreases in labor flexibility which also reduces employment growth.

## 4. Conclusion

This paper addresses the question why unemployment has reached levels as high as 42.8 percent among young adults in South Africa. Paying close attention to the development around youth unemployment is crucial since it is highly path dependent and has serious health consequences. In other words, vast youth unemployment now increases the likelihood of less and less formal employment in the future as well as more sick people. As a result, the tax base further decreases and public spending rises. Obviously, this is not a sustainable path for South Africa.

On the demand side of labor, the main findings are that particularly bargaining councils are the main driver of youth unemployment. Thus, in order to reduce unemployment, the government has to remove those constraints. More specifically, particularly small and medium sized businesses are affected. However, Beck et al. (2005) emphasize the vital importance of small and medium firms for economic development and employment growth. To get particularly the small and medium businesses going and literally become an engine for growth in South Africa, the South African government should allow for age-dependent minimum wages. In so doing, young job-seekers can gain the valuable experience they so urgently need to overcome the signaling failures arising from the South African education system. That said, the introduction of wage subsidies for young people with limited or no work experience, that is, cash reimbursements to employers for a two-year period, effectively removes the constraint. However, since this policy intervention is very expensive for the state, it is all but efficient. Why not directly allow minimum wages to differ for entry-level wages in the first place?

On the supply side of labor, high reservation wages and discouragement due to the lack of the ability to signal abilities mainly drive youth unemployment. Thus, the education system

becomes the major determinant of unemployment in South Africa. The education system has to be reformed in a way which makes the achieved degrees more meaningful to the employers. Effective signaling would not only result in less job search discouragement but also allow companies to create more permanent jobs as their currently risky investment in young job seekers would become less risky, that is, the informational asymmetry would be less asymmetric.

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