

A STUDY OF THE LABOUR MARKET IN SOUTH AFRICA

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ABSTRACT

This is a study of the labour market in South Africa. The study aims to highlight the existing conditions of labour in South Africa as well as the impact of labour-related conditions and legislation in South Africa on the South African economy. The South African job market is characterized by inflexible labour laws, lack of technical and artisan skills, and high levels of unemployment. Those unemployed are mostly unskilled and often have low level of formal education and artisan skills that are required for securing employment opportunities. The South African labour law seems to be restrictive and inflexible in the eyes of potential employers. Although labour market policies that were introduced after April 1994 have managed to change the structure of the South African labour market, unemployment rates have not been reduced to date. The rate at which the economy has grown since April 1994 has been significantly smaller than the rate at which jobs had to be created in order to absorb the unemployed into the economy. This paper investigates factors that affect the duration of employment and job mobility in the South African labour market by using the South African Labour Force Survey data set of 2007. The study shows that union membership and ownership of pension funds are negatively associated with job mobility. The study has found that workers (*ceteris paribus*) workers who belong to pension funds are, on average, twice as likely to stay on their jobs. The results for union members are similar. The study shows that job mobility is significantly influenced by age, race, level of skills training, level of household income and province of residence. The results show that the Province of Mpumalanga was most significantly affected by job mobility. The provinces that were least affected by job mobility were the Western Cape, Gauteng and Limpopo in a decreasing order. The study provides an exploratory analysis of the labour market in South Africa, and proposes remedial actions to policy makers and planners.

Keywords: South Africa, Labour law, Unemployment, Skills, Job market, Probit regression.

JEL classification: J21, J60

INTRODUCTION

Since April 1994, various studies have shown that the South African labour market is not conducive for attracting foreign direct investment. With very high unemployment rates, job tenure and mobility have not been the focus of many studies in South Africa. Instead researchers have put much emphasis on patterns of segmentation of the labour market, the relationship between unemployment and earnings and race differentials in labour market outcomes (Heintz and Posel, 2008; Kingdon, G. and J. Knight, 2002, 2004, 2006;

Fassler et al, 2001; Maciej and Tyrowicz, 2009). Policies in South Africa have been geared towards redressing the economic, social, cultural, political power and resources disparity created by Apartheid¹. This has resulted in more opportunities to non-Whites although some of the research work mentioned above indicates that labour market inequity still persists with a racial wage gap of 30%-55% (Maciej and Tyrowicz, 2009). Research work that examined job tenure do suggest that in the US there has been some decrease in tenure (albeit modest) amongst White males Blacks and young adults who had previously had long tenure (Neumark *et al*, 1999). Similarly, the UK has seen some fall in average male tenure (Gregg and Wadsworth, 1995 and 1998), especially amongst the lower paid (Burgess and Rees, 1996). The classic study by Becker (1981) has shown that there is an inverse relationship between job mobility and investment in job-specific skills, which include both experience and education (Becker, 1981). The higher the job tenure, the more workers specialize in their field of training the higher becomes their earning potential in their job, and thus reduces the risk of job mobility. Thus if firm-specific skills are an important determinant of earnings, changing jobs may result in wage losses. In addition, acquisitions of transferable skills determine the wage impact of changing jobs. Empirical analysis related to job tenure and mobility is limited due to the unavailability of data required for such type of analysis. Often available data set have limited demographic information, household characteristics and job-related information in addition to measures of individual tenure and reasons for mobility. Availability of longitudinal data for such analyses would be ideal not only for assessing the validity of the theoretical models but also in identifying the determinant of tenure and mobility and potential causes and effects of socio-economic conditions.

The design of the study is descriptive and cross-sectional. The data sets used in the study are obtained from Statistics South Africa. The study is based on a household survey conducted by Statistics South Africa in an attempt to assess and evaluate socioeconomic factors that are known to affect the labour market. The article is organised as follows. Section 2 presents a review of the literature on job mobility. Section 3 describes the data set and explains the variables used in the study. Section 4 provides a descriptive analysis of the job market situation, job tenure and mobility in South Africa. Section 5 presents the results; and Section 6 presents conclusions.

LITERATURE REVIEW AND CONCEPTUAL FRAMEWORK

Changes in the distribution of job tenure have been studied in the US by Newmark et al (1999) and in the UK by Burgess and Rees (1996). Mumford and Smith (2002) did a comparative study of Australia and the UK. All of these studies have shown that a decrease in job tenure. Furthermore, these studies have shown that job tenure is shorter among non-Whites and female workers. In this paper we propose to conduct an analysis similar to the one conducted in Australia and the UK by using South African data. In South Africa, jobs are less long lasting among Whites who had relatively very long tenure as the White work force is aging and shrinking. In the process, many specialized

¹ Post Apartheid reforms include affirmative action policies that were legislated in the form of various Acts: Public Services Act, the Employment Equity Act, the Skills Development Act and the Skills Development Levy Act

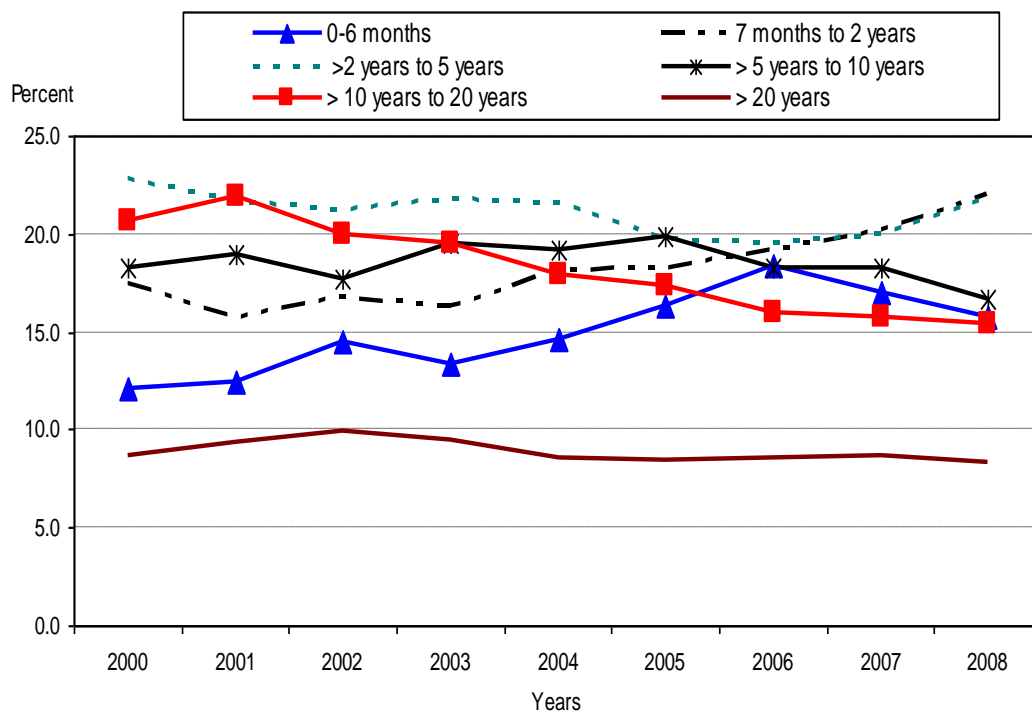
skills are being lost to the economy. In the past the Apartheid system created motivation for White workers to stay longer on the job with job reservation for those who wished to work immediately after matriculation with incentives such as on the job training and greater social benefits. The African work force is relatively younger. The study investigates the impact of demographic, human capital and job characteristics on job tenure.

Descriptive statistics on job mobility in South Africa

Figure 1 shows the proportion of workers by the length of time in the current job from 2000 to 2008. The figure shows a reduction in job tenure over the period 2000-2008. The proportion of people in the same job for 10-20 years has fallen from 22% in 2001 to 15% in 2008. The proportion of people employed for 7 months to 2 years has moved in the opposite direction. The most common length of tenure for most years remains 2-5 years whereas 20 years and more is the least common period of tenure.

Figure 1: Proportion of employed by length of time in job

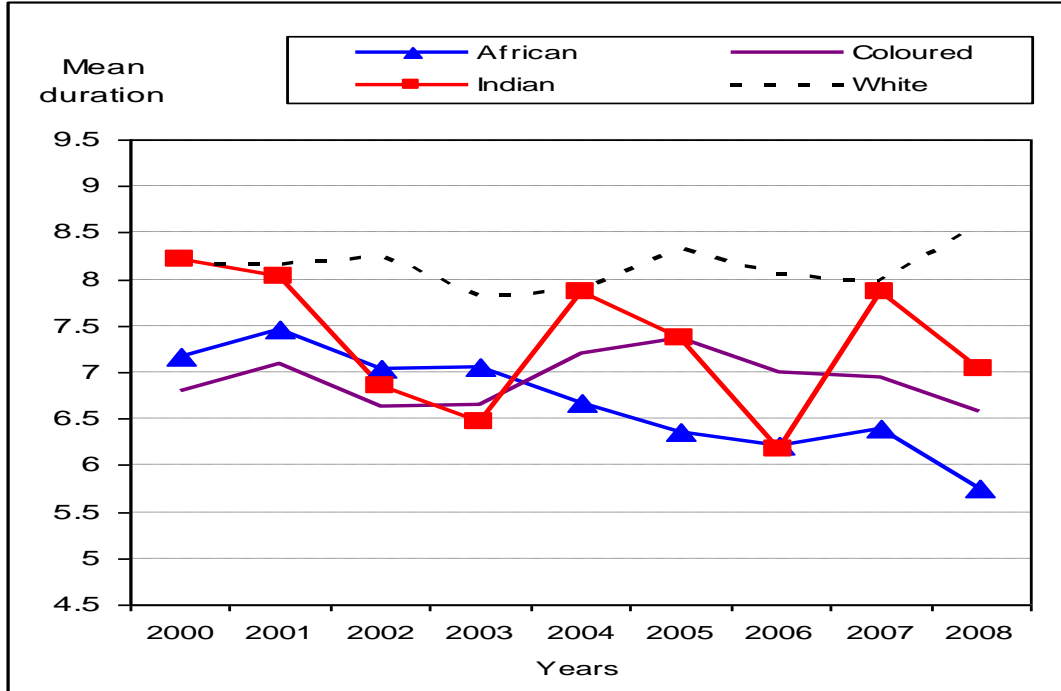
Source: Statistics South Africa (2008)



Figures 2a and 2b present the average duration of tenure by population group and gender. Whites have the highest length of tenure compared to the other population groups. Africans have the shortest average length of tenure. However the lengths of tenure seem on the decline for all population groups except for Whites. Figure 2b presents the gender split. Females have the shorter tenure compared to males and compared to the total average. A separate analysis of the job tenure by gender and population group also shows White females having the highest average length of tenure compared to their other counterparts and African females having consistently shorter tenure. This can be

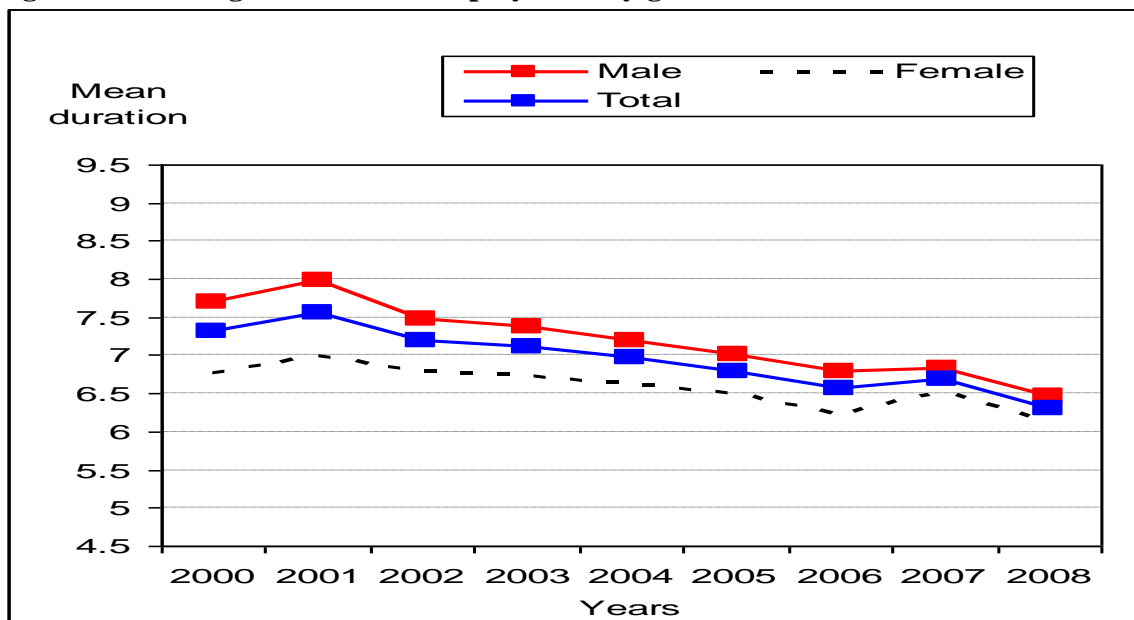
explained by the type of jobs available to these women which are often unskilled and in the informal sector.

Figure 2a: Average duration of employment by population group and gender
(a) Comparison of duration of employment by population group



Source: Statistics South Africa (2008)

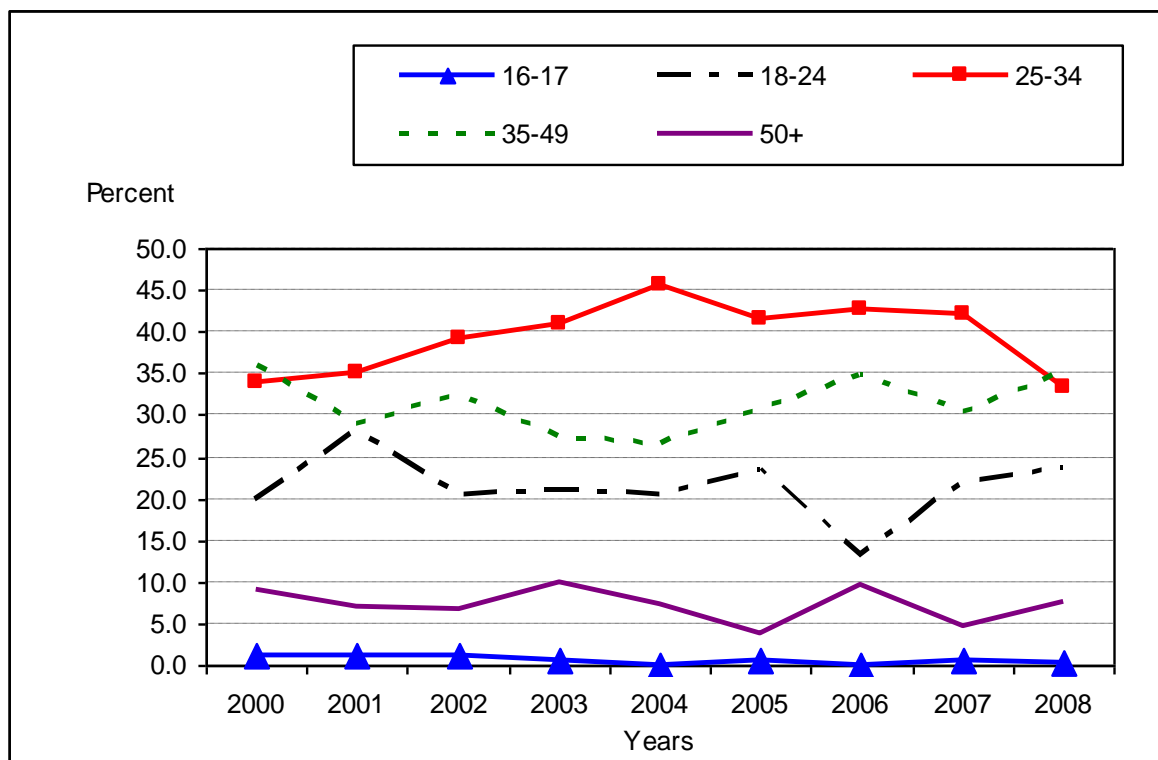
Figure 2b: Average duration of employment by gender



Source: Statistics South Africa (2008)

Figure 3 shows the job mobility pattern by age group. Job mobility decreases with age. Our data is in line with this expectation. The youngest age group (16 to 17 years) has the smallest proportion, followed by the oldest age group (50 years and older). The reason why the percentage in the 16-17 age groups is low is because it is more likely that they just entered the labour market and thus it is less likely that they have been employed in the same job for more than a year. Old employees (50 years and older) are also less likely to change jobs as it is more difficult for this age group to find new jobs. Besides, it is less likely that people change jobs when they are approaching the end of their career. The highest mobility is observed among those aged 25-34 followed by those aged 35-49. These age groups constitute the bulk of the labour force in South Africa. These are people who may have settled in a career, but would move from job-to-job to improve their earnings. Labour turnover is a big concern in South Africa, especially in the public sector. Frequent occurrences of job openings generate higher rates of job mobility.

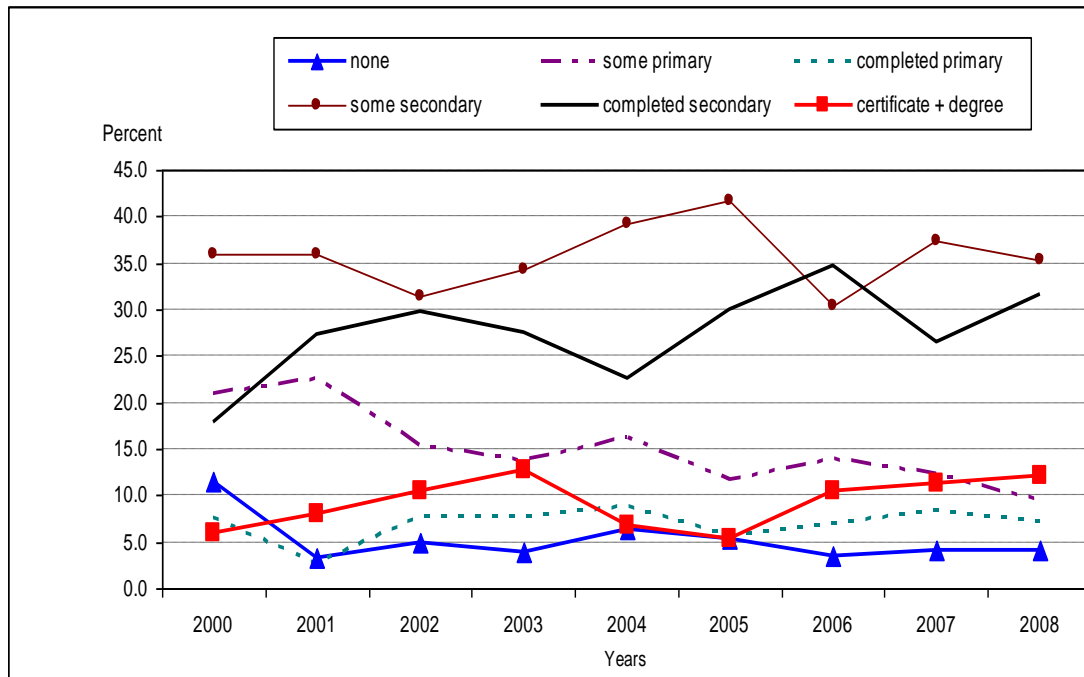
Figure 3: Proportion of employed in the same job for the past 12 months by age group



Source: Statistics South Africa (2008)

The level of education has an impact on job mobility. The literature suggests that the higher educated workers are the most mobile workers. In South Africa, however, the majority of mobile workers are those with some secondary education whereas the least mobile are those with no education at all (Figure 4). Those who have some primary education are less mobile than those who completed secondary education but more mobile than those who completed primary education. The higher educated are less mobile compared to those who only completed high school. Long tenure encourages firms to invest in the skills of their employees.

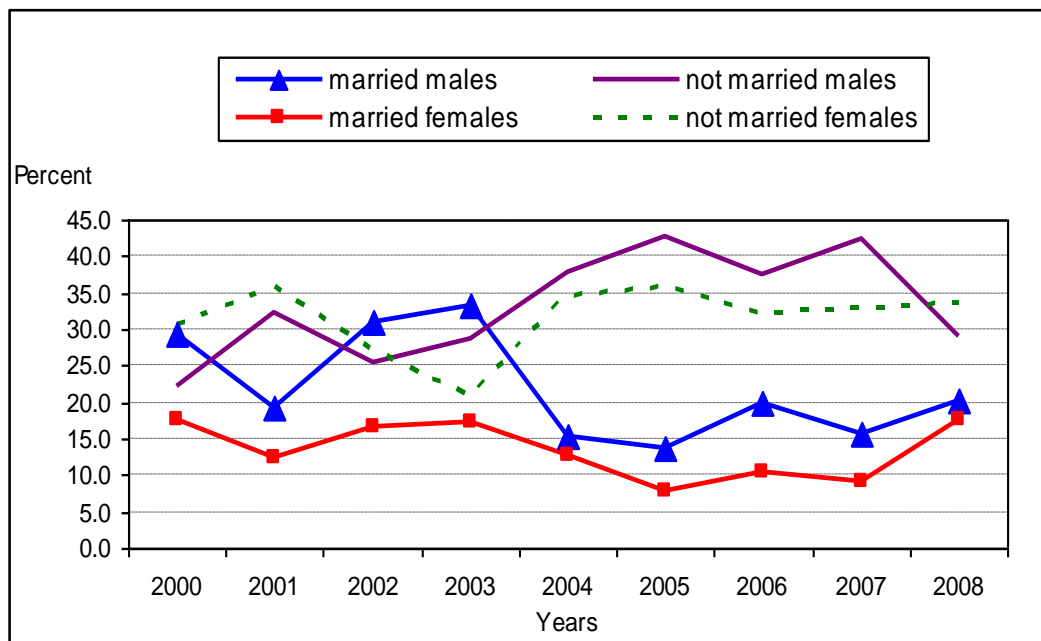
Figure 4: Proportion of employed in the same job for the past 12 months by education level



Source: Statistics South Africa (2008)

Personal characteristics have an important effect on individual movement in the labour market. Married people or those living as a couple are less likely to be mobile. In Figure 5 there is a clear pattern that emerges after 2003 where it appears that there is a distinction in mobility behaviour between unmarried and married workers. As of 2003 the most mobile are unmarried males followed by unmarried females whereas the least mobile are married females followed by married men.

Figure 5: Proportion of employed in the same job for the past 12 months by marital status



Source: Statistics South Africa (2008)

Sample size of study, data collection and variables of study

Analysis was performed on the South African Labour Force Survey data set of 2007 (LFS 2007). The sample size of study was equal to 20, 219, and was collected from 34, 364 households. Multistage cluster sampling was used for data collection. The sample represents all 9 provinces and 53 district councils in South Africa. The target population is all South African households as well as residents living in workers' hostels and convents/monasteries. Although the LFS is designed to measure individual labour market outcomes, it is not designed specifically to examine labour mobility and job tenure. So the data we have is not ideal for such studies but we try to make the best use of what is available. Along with the labour market data, information on the demographic characteristics and education data is collected on everyone aged 15-64 and living in a household for four nights on average per week during the last four weeks prior to the survey. Data is also available on everyone else living in the household. Data collection was conducted by conducting face-to-face interviews. Population group² by self-classification into African, Coloured, Indian and White is our key variable of interest together with education and labour market status.

In the LFS, the schooling information is collected as the current highest completed educational level. We aggregated the education variable into six groups. First, 'no schooling' includes those with no schooling, grade R or grade 0. Second, those with Grades 1 to 7 (or SubA to Standard 5) are classified as 'some primary'. Third, those with grade 8 are classified as 'completed primary'. Fourth those with grades 9 to 11 (or Standard 7 to 9) including NTCl, NTCII and NTCIII are classified as 'some secondary school'. Fifth, those with Grades 12 (or Standard 10 or Matric, which is also known as the Senior Certificate in South Africa) are classified as 'high school'. Sixth, those with Diploma, Certificate or degree classified as 'tertiary'³. Our classification thus distinguishes those who completed high school from those who dropped out from high school. In addition, we include a variable that measure individual literacy level- - ability to read - to distinguish between those with no formal training but can read in at least one of the official languages and those with formal training. The marital status variable only distinguishes between those married or living as a couple to those that are widows/widowers, divorced, separated or never married. We include a variable on whether the worker lives with his or her partner. Age is collected in completed years. We only include individuals aged 15 to 60 in our analysis. This leaves us a data set of 20, 219 workers.

We only have limited information on work history as much of the labour market content reflects the current situation. We include a variable that shows training in skills and vocational training because of the increased recognition of the importance of this sort of training for getting a better paying job or for starting a business. Job tenure is calculated as the difference between the survey reference period (September 2007) and year and month the worker commenced working at the current job. We also include a variable that describes current tenure as a proportion of potential working life, as suggested by Mumford and Smith

² Population group is classified using old Apartheid classification. The enumerator is instructed not to make any conclusions, which may be influenced by his observation or using people's names during the interview. This question is considered to be very sensitive to some respondents especially in this post apartheid era, but government still find it important to find out the composition of the South African population.

³ Grade R stands for Reception year is also referred to as Grade 0, NTC stands for National Technical Certificate, NTCl is equivalent to Grade 8, NTCII is equivalent to Grade 9 and NTCIII is equivalent to Grade 10. Grades used to be referred to as Standards in the old school system.

(2003), to control for effects of shorter tenure and the effects of age on tenure since, as stated earlier, we do not have a full tenure spell for workers. We also identify mobile and potentially mobile individuals aged 30-45 among those who have completed secondary education by taking those with tenure duration of less than 3 years. The reason we constrain this variable to only those aged 30-45 is because we consider that these individuals could have entered the labour market and had the opportunity to establish themselves for more than 15 years.

We distinguish between formal sector employment where the employer is registered for value added tax and informal sector employment where the employer is not registered for value added tax. We include domestic sector employment for work that occurs in private households. We further distinguish between private sector employment (private businesses, self-employment or private households), public sector employment (national, provincial, local government and government enterprise employment) and other employment (club, community organization, welfare organization, NGO, church or self-help association, etc.). In addition, we include occupational dummies and standard occupational classifications. We include a range of variables that measure the benefits of the job: employer's contributions to any pension/retirement fund; employer's contributions towards membership of a medical aid fund or health insurance; availability of paid leave and availability of a written employment contract. We also include a dummy for union membership. Income is divided into 13 groups. Nine provincial dummies define region and one dummy distinguishes the 6 metropolitan areas⁴. We also include current regional unemployment rates for all the years. Means and standard deviations of the variables discussed above are presented Table A1 in the Appendix.

The most notable of feature of our sample is that we have workers nearing middle age (on the average) whereas their overall average tenure is close to 7 years. This shows very high job turnover. Our sample contains more male workers whereas the population distribution of the workers is similar to the demographic distribution of the country. Fifty percent of the workers claimed they are married or cohabiting whereas only 42% indicated that their spouses live in the same households as themselves. Eighteen percent of the workers live in a metropolitan area with the biggest provinces (Western Cape, KwaZulu-Natal, Gauteng) sharing the bulk (60%) of the total workers. The majority of the workers (32%) only have some secondary education and 10% have some sort of tertiary qualification. Although 22% reported that they have less than primary school, 91% are literate. Close to eight out of 10 workers belong to the formal sector with 76% working for a private company. In addition, 70% indicated that they have a written contract. However, most of the workers have very low monthly income with 22% reporting an income bracket of R501-R1000 and 17% reporting income levels between R1501 to R2500. This is expected because close to 17% work as domestic workers or in the informal sector earning close to minimum wages or lower. In terms of benefits, less than half (only 46%) reported having pension, 55% reported having paid leave, and only 7% reported having medical aid.

Table 1 presents the distribution of duration of employment by various characteristics. Looking at total duration, 35% of workers stayed more than 7 years in the same job whereas 23% had started a new job within 12 months of the survey. Close to 47% of married workers

⁴ Cape Town - City of Cape Town; Durban – Ethekewini municipality; East Rand – Ekurhuleni Metropolitan municipality; Johannesburg - City of Johannesburg Metropolitan municipality; Port Elizabeth - Nelson Mandela municipality; Pretoria – City of Tshwane Metropolitan municipality

or those living as a couple have stayed more than 7 years in their jobs. Although the majority of workers are men, there is not much gender difference in the distribution of their length of employment. The same observation applies to proximity to urban area. Among those aged 31 to 50, close to 29% started a new job while 73% have stayed for 7 years or more in the same job. Most workers work for the private sector, and close to 40% have 2 or less years of tenure at their jobs whereas among the public servants, 55% have 7 years or more of tenure at their current jobs. In terms of education, 47% of those with tertiary qualifications have been in their current jobs for 7 years or longer.

Table 1: Distribution of the duration of employment

Duration in the same job (in years)	Married/lives as a couple	Female	African	Aged 31-50	Metro	Public company	Tertiary	Total duration
0.0-1.0	16.3	23.4	20.5	17.8	20.3	11.3	14.2	23.1
1.1-2.0	9.9	14.0	11.1	10.9	14.4	10.1	11.3	13.3
2.1-3.0	6.9	8.9	7.8	7.4	9.3	6.3	7.6	8.5
3.1-5.0	10.5	11.4	11.0	10.9	11.7	9.5	11.2	11.4
5.1-7.0	9.6	8.8	10.1	10.0	10.0	7.5	8.8	8.7
7+	46.9	33.6	39.5	43.0	34.2	55.3	47.0	35.1
	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: Statistics South Africa (2008)

Estimates obtained from regression analysis

Table 2 presents regression estimates obtained from OLS (Ordinary Least Squares) procedures. Except for regions most of the explanatory variables are significant. However, living in a metropolitan area has a negative significant effect on job tenure. Population group, age and being married have a positive effect whereas being a female has a negative effect. Higher educational attainments have negative effects on job tenure. The effect is much stronger among those with tertiary qualifications. The lower educated groups have longer tenures which is consistent with findings in the UK by Mumford and Smith (2003). In addition those who received skills training have a lower tenure. Labour market conditions such as having written contracts, pension benefits and paid leave have positive impacts on job tenure. However, having medical aid benefit has shorter tenure results. Lower level of income has small but negative effect on job tenure.

Table 2: OLS estimates of determinants of job tenure

Job tenure	Coefficient	Std. Err.	t-value
<i>Demographic</i>			
Age	1.230	0.019	65.90
Age squared	-0.017	0.000	-68.03
Female	-0.192	0.056	-3.43
Coloured	0.613	0.087	7.04
Indian	0.203	0.167	1.22
White	0.425	0.107	3.97
Married/lives as a couple	0.395	0.069	5.73
Spouse lives in the household	0.006	0.065	0.10
<i>Geography</i>			

Metro	-0.358	0.077	-4.64
Western Cape	-0.016	0.104	-0.15
Eastern Cape	0.067	0.098	0.69
Northern Cape	-0.578	0.114	-5.07
Free State	0.062	0.106	0.58
North West	-0.110	0.108	-1.02
Gauteng	-0.039	0.095	-0.41
Mpumalanga	-0.076	0.106	-0.72
Limpopo	-0.327	0.114	-2.86
<i>Education and training</i>			
No schooling	0.491	0.178	2.76
Some primary	0.628	0.082	7.67
Completed primary	0.475	0.104	4.58
Completed secondary	-0.255	0.068	-3.73
Tertiary	-0.382	0.098	-3.91
Has received skills training	-0.649	0.079	-8.26
Able to read	-0.292	0.149	-1.96
<i>Labour market</i>			
Has pension	0.689	0.077	8.91
Has paid leave	0.530	0.071	7.42
Has medical aid benefit	-0.381	0.105	-3.62
Has a written contract	0.265	0.069	3.85
Belongs to a union	0.903	0.070	12.86
Current tenure as a proportion of potential working life	9.866	0.049	202.04
Informal sector employment	0.222	0.102	2.19
Domestic sector employment	0.315	0.100	3.14
Public company	0.314	0.076	4.11
Other company	0.059	0.144	0.41
<i>Income</i>			
R1 – R200	-0.275	0.196	-1.40
R201 – R500	-0.345	0.111	-3.11
R1 001 – R1 500	-0.169	0.088	-1.93
R1 501 – R2 500	-0.103	0.089	-1.16
R2 501 – R3 500	-0.072	0.110	-0.65
R3 501 – R4 500	0.332	0.127	2.61
R4 501 – R6 000	0.442	0.132	3.35
R6 001 – R8 000	0.874	0.144	6.06
R8 001 – R11 000	1.358	0.153	8.88
R11 001 – R16 000	1.444	0.184	7.87
R16 001 – R30 000	0.406	0.242	1.68
R30 001 or more	1.019	0.369	2.76
<i>Parameters of the model</i>			
Constant	-18.847	0.373	-50.53
Number of observations			20219
F(46,20172)			1758.06
R-squared			0.800
Adj R-squared			0.800

Source: Statistics South Africa (2008)

Table 3 presents results obtained from the probit regression (Hosmer and Lemeshow, 2002) of determinants of job change. The marginal effect of age is positive and highly significant implying an additional year of age is associated with 100 percentage point increase in the probability of changing jobs. The negative effect of age square shows that the older the age, the bigger the positive effect age has on probability of changing jobs. Here age and its square give proxy measure for experience. Workers who are married are less likely to change jobs. On the other hand, marriage also does not constraint women from changing jobs; and couples living together with their partners also have a high probability of changing jobs. Coloureds are less likely to change jobs although the effect is not significant.

Workers who have received skills training have a higher probability of changing jobs. Having benefits such as pension, paid leave and medical aid has negative effect on mobility. However, the effect of having pension is much stronger and significant whereas the other two are insignificant. Belonging to a union, working in the informal sector and working in the domestic sector are all negative and significant implying that workers with the characteristics are less likely to change their jobs. Proximity to an urban area or living in a rich province has no effect on mobility. However, workers living in Mpumalanga, North West and Free State are more likely to change their jobs. The effect of earnings is mixed. It seems as if workers will keep on changing their jobs until a certain earning threshold is reached beyond which mobility is less likely to occur.

We had to re-run the model by excluding all variables that may be potentially endogeneous, keeping population group and regional dummies only. We also included a regional unemployment rate for the period for which workers changed their jobs. Due to limitation of the data, we could not find regional values for earlier years, so we used national estimates. Our results show almost all coefficients to be significant and positive implying for example, as a worker accumulates experience, he would be more marketable. In turn, frequent arrivals of job offers, would generate higher rates of mobility. Although unemployment rates have persistently remained high in South Africa, skilled workers have potentially higher rates of employment as compared to others.

Table 3: Probit estimates of job change

Mobility	Std.			Std.		
	Coefficient	Err.	z-values	Coefficient	Err.	z-values
<i>Demographic</i>						
Age	1.061	0.05	20.49	0.992	0.05	20.04
Age squared	-0.015	0.00	-20.39	-0.014	0.00	-20.08
Female*married	0.172	0.05	3.15			
Coloured	-0.075	0.07	-1.15	-0.075	0.06	-1.19
Indian	0.284	0.11	2.65	0.231	0.10	2.26
White	0.282	0.07	3.80	0.195	0.06	3.07
Married	-0.424	0.08	-5.06			
Spouse lives in the household	0.223	0.08	2.76			
<i>Education and training</i>						
Had received skills training	0.311	0.05	6.60			
Able to read	1.022	0.17	6.01			
<i>Labour market</i>						

Has pension	-0.144	0.05	-2.69			
Has paid leave	-0.023	0.05	-0.46			
Has medical aid benefit	-0.035	0.08	-0.44			
Has a written contract	0.026	0.05	0.52			
Belongs to a union	-0.126	0.05	-2.58			
Informal sector employment	-0.181	0.08	-2.23			
Domestic sector employment	-0.348	0.08	-4.21			
Public company	0.031	0.05	0.58			
Other company	-0.069	0.10	-0.67			
<i>Income</i>						
R1 – R500	0.119	0.09	1.37			
R1 001 – R1 500	0.218	0.07	3.34			
R1 501 – R2 500	0.308	0.06	4.79			
R2 501 – R3 500	0.174	0.08	2.16			
R3 501 – R6 000	0.269	0.08	3.50			
R6 001 – R11 000	-0.233	0.09	-2.48			
R11 001 – R16 000	-0.174	0.14	-1.21			
R16 001 or more	-0.411	0.18	-2.25			
Metro	0.079	0.05	1.47	0.106	0.05	2.02
Western Cape	-0.019	0.08	-0.24	0.312	0.09	3.48
Eastern Cape	0.103	0.07	1.42	0.102	0.07	1.44
Free State	0.176	0.08	2.29	0.200	0.08	2.36
North West	0.155	0.08	1.95	0.230	0.08	3.04
Gauteng	0.095	0.07	1.4	0.177	0.08	2.30
Mpumalanga	0.241	0.08	3.17	0.246	0.07	3.49
Limpopo	0.121	0.08	1.43	0.296	0.08	3.90
Current regional unemployment rate				0.029	0.00	6.03
<i>Parameters of the model</i>						
Constant	-21.129	0.93	-22.67	-19.622	0.89	-22.11
Number of observations			20219.00			20219.00
LR chi2(36)			1565.53			1289.04
						-2927.88
Log likelihood			-2789.64			
Pseudo R2			0.2191			0.1804

Source: Statistics South Africa (2008)

Endogeneity and sample selection

Many of the explanatory variables used in the above analysis are potentially endogenous, including marital status, belonging to a union, and sector type. Endogeneity refers to the fact that an independent variable included in the model is potentially a choice variable, correlated with unobservables relegated to the error term. The dependent variable, however, is observed for all observations in the data. Here marital status may be endogenous if the decision to marry or remain single is correlated with unobservables that affect mobility. For instance, if

married workers are more likely to remain in the same job *ceteris paribus*, then failure to control for this correlation will yield an estimated marital status effect on mobility that is biased upward. To correct for this problem one need to apply instrumental variable estimation. Thus we require a variable that is correlated with the endogenous variable, uncorrelated with the error term, and does not affect the outcome of interest. Our interest here is to estimate the effect of various workers' characteristics such as marital status (whether the spouses live in the same household), and whether the worker had received skills training, has pension, belongs to a union, works in informal sector employment, or works in a domestic sector employment. To fit this model, one would start by estimating a probit model explaining the decision of moving or not or not moving. That is, a probit regression of job mobility needs to be performed on a set of predictor variables that are known to affect job mobility. This was done by generating the IMR variable. In addition, the variable marital status was used as a dummy variable in a second-stage regression in which instrumentation was done for the variable marital status assuming that it is an endogenous variable. In real life, it is actually difficult to find instruments for these variables. We firstly used current regional unemployment rate as the instrument for having a pension and secondly for belonging to a union. Since unemployment rate has no direct effect on mobility we assume this is a good instrument for having a pension and belonging to a union. The results are presented in Table 4.

Table 4: Instrumental estimates of job change based on probit regression

Variable	Coefficient	P-value	95% C. I.
Age	0.061	0.000	[0.959, 1.162]
Female married	0.171	0.002	[0.065, 0.269]
Coloured	-0.075	0.252	[-0.203, 0.053]
Indian	0.284	0.008	[0.074, 0.494]
White	0.282	0.000	[0.137, 0.427]
Married	-0.424	0.000	[-0.589, -0.260]
Spouse	0.223	0.006	[0.065, 0.382]
Skills training	0.311	0.000	[0.219, 0.404]
Reading	1.022	0.000	[0.688, 1.355]
Pension	-0.144	0.007	[-0.249, -0.039]
Leave	-0.023	0.647	[-0.121, 0.076]
Medical	-0.035	0.660	[-0.192, 0.121]
Contract	0.026	0.601	[-0.072, 0.125]
Union	-0.126	0.010	[-0.222, -0.030]
Informal	-0.181	0.026	[-0.340, -0.022]
Domestic	-0.348	0.000	[-0.511, -0.186]
Public	0.031	0.565	[-0.074, 0.135]
Income 1	0.119	0.169	[-0.050, 0.288]
Income 3	0.218	0.001	[0.090, 0.347]
Income 4	0.308	0.000	[0.182, 0.434]
Income 5	0.174	0.031	[0.016, 0.332]
Income 6	0.269	0.000	[0.118, 0.419]
Income 7	-0.233	0.013	[-0.417, -0.049]
Income 8	-0.174	0.226	[-0.455, 0.107]
Income 9	-0.411	0.024	[-0.768, -0.053]
Metro	0.079	0.143	[-0.027, 0.186]
Western Cape	-0.019	0.808	[-0.170, 0.132]

Eastern Cape	0.103	0.157	[-0.039, 0.246]
Northern Cape	0.133	0.124	[-0.037, 0.303]
Free State	0.176	0.022	[0.026, 0.327]
North West	0.155	0.051	[-0.001, 0.310]
Gauteng Province	0.095	0.161	[-0.038, 0.228]
Mpumalanga	0.241	0.002	[0.092, 0.390]
Limpopo	0.121	0.152	[-0.045, 0.287]

Source: Statistics South Africa (2008)

Table 4 shows that both belonging to a union and a pension fund have very strong negative effects on job mobility. It indicates *ceteris paribus* that workers who belong to a pension fund are on average twice likely to stay on their job. Our results for union membership are similar. It can also be seen from the table that job mobility is significantly influenced by age, race, level of skills training, level of household income and province of residence. The results show that the Province of Mpumalanga was most significantly affected by job mobility. The provinces that were least affected by job mobility were the Western Cape, Gauteng and Limpopo in a decreasing order.

CONCLUSION

This paper discusses determinants of current job tenure and job mobility in South Africa using the Labour Force Survey (September 2007). In terms of factors that affect job tenure, our findings indicate that workers with lower levels of education tend to have longer durations of employment whereas those with tertiary qualifications tend to have shorter durations. Benefits such as medical aid have negative impact on duration but union membership has a strong positive impact on duration in the same employment. The study has found that job mobility is significantly influenced by age, race, level of skills training, level of household income and province of residence. The results show that the Province of Mpumalanga was most significantly affected by job mobility. The provinces that were least affected by job mobility were the Western Cape, Gauteng and Limpopo in a decreasing order.

REFERENCES

- Becker, G. (1991). *A Treatise on the Family*, Cambridge, MA: Harvard University Press.
- Fassler, M., Kingdon, G., & Knight, J. (2001). *Transitions from unemployment to employment in South Africa*, Mimeo, Department of Economics, University of Oxford.
- Heintz, J., & Posel D. (2008). Revisiting informal employment and segmentation in the South African labour market. *South African Journal of Economics*, 76(1), 26-27.
- Hosmer, D. W., & Lemeshow, S. (2002). *Applied Logistic Regression Analysis*, 2nd edn., New York: John Wiley & Sons.
- Kingdon, G., & Knight, J. (2006). The measurement of unemployment when unemployment is high. *Labour Economics*, 13(3), 291-315.
- Kingdon, G., & Knight, J. (2004). Unemployment in South Africa: the nature of the beast. *World Development*, 32(3): 101-109.
- Kingdon, G., & Knight, J. (2004). Race and the incidence of unemployment in South Africa. *Review of Development Economics*, 8(3), 44-52.
- Mumford, K., & Smith, P. N. (2003). Determinants of current job tenure: a cross-country comparison. *The Australian Journal of Labour Economics*, 6(4), 597-608.

- Szelewicki, M., & Tyrowicz, J. (2009). Labour Market Racial Discrimination in South Africa Revisited, Working Paper. Available at: <http://EconPapers.repec.org/RePEc:pra:mprapa:16440> (accessed 24 January 2014).
- Worku, S. (2008). Results of analysis of the South African Labour Force Survey of 2007. Pretoria: Statistics South Africa.

Appendix: Table of means and standard deviations of variables of study

Table A1: Means and standard deviations of socioeconomic variables

Variables	Means	Standard deviations
<i>Demographic</i>		
Age	37.31	10.56
Male	0.56	0.50
Female	0.44	0.50
African	0.70	0.46
Coloured	0.19	0.39
Indian	0.03	0.16
White	0.08	0.28
Married	0.50	0.50
Spouse lives in the household	0.42	0.49
<i>Geography</i>		
Metro	0.18	0.39
Western Cape	0.16	0.37
Eastern Cape	0.11	0.31
Northern Cape	0.08	0.28
Free State	0.08	0.27
KwaZulu-Natal	0.20	0.40
North West	0.08	0.26
Gauteng	0.14	0.35
Mpumalanga	0.08	0.27
Limpopo	0.07	0.25
<i>Education and training</i>		
No schooling	0.06	0.24
Some primary	0.16	0.37
Completed primary	0.07	0.26
Some secondary	0.32	0.47
Completed secondary	0.23	0.42
Tertiary	0.10	0.31
Had received skills training	0.12	0.33
Able to read	0.91	0.28
<i>Labour market</i>		
Has pension	0.46	0.50
Has paid leave	0.55	0.50
Has medical aid benefit	0.07	0.25
Has a written contract	0.70	0.46
Belongs to a union	0.32	0.47
Duration in current employment	6.98	7.91
Current tenure as a proportion of	0.41	0.73

potential working life		
Mobility	0.04	0.20
Formal sector employment	0.82	0.39
Informal sector employment	0.08	0.27
Domestic sector employment	0.10	0.30
Public company	0.21	0.41
Other company	0.03	0.18
Private company	0.76	0.43
Current regional unemployment rate	24.02	5.10
<i>Income</i>		
R1 - R500	0.09	0.28
R501 – R1 000	0.22	0.41
R1 001 - R1 500	0.14	0.35
R1 501 - R2 500	0.17	0.38
R2 501 - R3 500	0.10	0.29
R3 501 - R6 000	0.14	0.34
R6 001 - R11 000	0.10	0.31
R11 001 - R16 000	0.03	0.16
R16 001 or more	0.02	0.13
Total number of observations	20219	

Source: Statistics South Africa (2008)