



**NINTH ANNUAL CONFERENCE ON
ECONOMETRIC MODELLING FOR AFRICA**

**30 June
to
2 July 2004**

**Why are People not Working? Job Search and Evidence
of Supply-Side Constraints**

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Abstract

The greatest challenges facing South Africa after 10 years of democracy are (1) how to accommodate HIV/Aids into the economy and (2) how to get people back to work. This paper focuses on the latter issue. Whilst much has been written as to the extent of unemployment in South Africa and whether there has been jobless growth or not in the past decade the area of geographical mobility and job search radius has received relatively little attention. This paper aims to address this research gap and provide evidence that is consistent with clear policies that will improve the geographical mobility of labour in the South African labour market. The aim of this paper is not to contribute to the heated debate on labour mobility and flexibility within the labour market¹. Instead the paper investigates the role public transport plays in whether individuals are members of the searching or non-searching unemployed. Highlighting that public transport locality is important in determining whether the unemployed are searching or not provides clear implications for public transport policy. The unemployed are further investigated with regard to why they do not work. Anecdotal evidence presented reveals that both a perceived skill shortage and location of work/salary/working conditions dominates the individual's explanation for being unemployed. However further analysis is required using different data sources to understand if a lack of geographical mobility (e.g. provincial flexibility) hinders the supply-side of the labour market.

Introduction

Context

With a narrow unemployment rate of approximately 30 per cent and a broad unemployment rate of over 40 per cent, South Africa is facing a crisis in the labour market². The government's response to this crisis has been to promise 1 million more jobs in a public works programme. The details of who will benefit from these jobs are as yet not in the public domain. However the jobs will largely be casual/temporary in nature with an implicit hope that on-the-job training will enable these workers to re-enter the labour market with a view to attaining more permanent jobs. The majority of these unemployed workers are from historically and globally disadvantaged groups. The young, females and Blacks in South Africa have borne the brunt of the increasing unemployment rate as illustrated by Table 1, and 2.

¹ Whilst this debate is currently topical it suffers from a polarisation of views depending on whether the economic agent is sympathetic to labour or to employers. Frequently the debate is confused since the two parties are talking about very different things.

² The debate over which definition of unemployment to use has been recently addressed by the work of Kingdon and Knight (2001). They find evidence that the non-seeking unemployed (excluded from the narrow/official definition of unemployment) are as happy/unhappy as the seeking unemployed, and that the local non-seeking unemployed and local seeking unemployed are considered by employers when setting wage levels. As well as confirming Oswald and Blanchard's Wage Curve the authors argue that there is no difference in terms of the labour market between the searching and non-searching unemployed.

Table 1: Broad Unemployment Rate in South Africa by Gender and Racial Group, 1995-2002

	1995	1999	2000	2001	2002
	Unemployment %	Unemployment %	Unemployment %	Unemployment %	Unemployment %
All	29	36	35.92	41.59	41.85
Male	23	30	30.85	35.20	35.65
Female	38	43	41.09	48.07	48.22
African	37	44	41.91	49.09	49.29
Colour	23	24	27.56	31.17	29.28
Asian	13	20	20.17	23.05	24.80
White	5	7	8.34	8.77	8.97

Note: Authors computations from October Household Surveys, and September Labour Force Surveys

Table 2: Broad Unemployment Rate in South Africa by Working Age Group, 1995-2002

Age Group	1995	1999	2000	2001	2002
	Unemployment %	Unemployment %	Unemployment %	Unemployment %	Unemployment %
15-24	51	58	60.12	68.46	68.81
25-34	33	40	41.28	46.30	46.09
35-44	21	27	25.44	29.32	30.03
45-54	18	20	19.52	23.53	25.21
55-65	13	15	13.42	18.26	18.51

Note: Authors computations from October Household Surveys, and September Labour Force Surveys

Evidence from Borhat (2001) indicates that a shift away from unskilled and semi-skilled labour towards skilled and high-skilled labour has occurred in the previous 10 years. Further evidence from Edwards (2001), Birdie et al (2001), Feddercke et al (2000) and ***** indicates that both trade policy and increasing switching from traditional labour intensive to more capital intensive production methods are causing this shift. Hence the majority of South African unemployment is structural in nature. Whilst improvements in quality, quantity and accessibility to education and training/re-training programmes are required these represent long-term supply-side policies that are necessary to address the historical legacy of apartheid.

Other labour supply-side constraints have not received as much attention in the recent academic literature even though they can offer clear policy implications. This paper focuses in particular on geographical constraints and transport constraints both of which can effect labour mobility and in particular the mobility of the unemployed. Due to data restrictions we cannot formally test whether geographical immobility (by which we mean inter and intra provincial immobility) is a problem in South Africa. Even if it were a problem there are cultural issues to consider in workers moving between or

within provinces³ that are hard to quantify. The aim of the paper is to reveal whether access to public transport (1) decreases the likelihood of unemployment, (2) decreases the likelihood of being 'non-searching' unemployed. A simple probit model is adopted to test these two hypotheses. The paper will also provide very anecdotal evidence from the same data source as to why the unemployed did not work and relating this to public transport locality.

Why do people think they are unemployed and how do the unemployed survive?

Tables 1 and 2 indicate the particularly vulnerable groups of South African society who are affected most by unemployment. However there are other characteristics of the unemployed that have received less attention. Firstly as alluded to by Kingdon and Knight (2001) many of the unemployed in South Africa have never worked before. They estimate that in 1994, 50% of all unemployed persons aged 34-64 had never worked before, with this figure being dominated by females. In 1999 the comparable figure is 53% with females representing 2/3rd of this group. The reason why younger age workers are excluded from these figures is because they form the vast majority of the unemployed. When they are included a staggering 70% of the unemployed have never previously worked. The next question to consider is how these unemployed persons support themselves. In 1999 it is found that 95% of the unemployed are supported by either persons in their household or persons not in their household. This indicates that friends and family are the most important source of support, with a welfare state having yet to emerge in South Africa. Age appears not to effect this finding. There is evidence that the younger unemployed are more reliant on family and friends than the older unemployed, but 90% of the latter group still receive the majority of their support from these two sources.

Who are the non-economically active?

The vast majority of the non-economically active are between the ages of 15 and 24 and confirms the composition of the economically active and unemployed group. Of these people 53% were attending school/college or university, 9% were retired and just over 14% categorised themselves as full-time homemakers/housewives. The debate this unearths then is whether housewives/homemakers should be categorised as non-economically active. The literature on this regards such work as being inherently productive and can result in increasing the rate of economic activity amongst other household members since more time is generated for them to use productively. Future research will focus on the role having a housewife or homemaker in the household plays in employment likelihood and job search.

³ This area of research is taken from the recent findings of Oswald (1997) that high-income nations with highly developed and large renting housing markets have significantly lower levels of unemployment than countries with a larger proportion of home-owners. The reasoning for this finding is based on moving costs being higher for home-owners than for renters, thus reducing mobility in finding work. Other explanations are also provided in the paper.

Methodology

As with standard estimations of employment models, a probit model is adopted in order to determine the likelihood of being employed/unemployed. The probit model has just two outcomes 0 and 1, representing the unemployed and employed. Based on the normal distribution the probit model is represented by,

$$\Pr ob(Y = employed) = \int_{-\infty}^{\mathbf{b}'x} \mathbf{f}(t) dt .$$

$$= \Phi(\mathbf{b}'x) .$$

The probit model is used instead of the logit model for purely practical reasons based on previous work in this area. For the job search model a logit model. This is represented by,

$$\Pr ob(Y = searching \quad unemployed) = e^{\mathbf{b}'x} / 1 + e^{\mathbf{b}'x} .$$

$$= \Lambda(\mathbf{b}'x) .$$

The variables controlled for in the model include human capital, age, gender, racial group, province, rural-urban location, marital status and number of children and elderly in the household. Since we are concerned with the issue of geographical mobility and job search we control for whether the dwelling unit is owned or not, distance from public transport (train, bus, minibus taxi), car-ownership and whether near a post box or not. The likelihood model of being searching unemployed also controls for the impact of never having worked before following the findings of Kingdon and Knight (2000) in 1993.

Results

Initial results indicates that being at least 1 kilometre (of 15 minutes walk away) from any form of public transport, *ceteris paribus*, *increases* the likelihood of being employed. This is exactly contradictory to a priori expectations since it would be expected that distance from public transport would decrease the likelihood of employment since the individual would be more isolated. This requires further analysis.

When the job-search model is run, with the dependent variable being '1' if searching unemployed and '0' if non-searching unemployed then the results follow a priori expectations. Those individuals living at least 1 kilometre from any form of public transport are *less* likely to be *actively* searching for work than *not actively* searching for work at the 10% level of significance. This is the case even when controlling for rural-urban location. The rural-urban location of the unemployed plays a massive role in searching for work, with Urban located unemployed significantly more likely to actively search for work and is contrary to the finding of Kingdon and Knight (2000) who found

thus term to be insignificant⁴. This indicates the massive difference in mobility of the unemployed in rural areas and in urban areas. When the urban dummy is dropped from the analysis the public transport locality dummy increases in both size and significance. Having never previously been employed predictably has a large and significant negative impact on actively seeking for work. This confirms that discouragement in job search is evident amongst the unemployed in South Africa. The higher the education level the greater the likelihood of searching for work, a finding confirming that of Kingdon and Knight (2000) using 1993 data. Age too has a significant and positive effect on the likelihood of active job-search with this diminishing with age. Provincial location plays an important part in the likelihood of actively seeking work, with the unemployed in the Eastern Cape, Northern Cape, Free-State, North-West, Gauteng and Mpumalanga all significantly less likely to actively seek work. Finally the number of children and marital status impacts negatively on job search illustrating the constraints these factors can have on the unemployed.

When separate models were run for males and females many of the variables, including the public transport locality, became insignificant. The most interesting finding was that being married negatively and significantly affected the likelihood of females seeking work, whilst for males this term was insignificant. This illustrates the patriarchal nature of job search in households of South Africa.

It is acknowledged that the model is not exhaustive in terms of the number of variables that can be included. However, when a dummy variable was included as to whether the dwelling the worker resides in was rented or not there was no significant effect found. Similarly, it was initially thought that including a dummy for 'cannot find suitable work due to location of work' could be included in the model but upon closer inspection the data did not allow this. Such a variable could approximate for remoteness of the unemployed person, however the term 'location of work' is possibly too vague to include making any interpretation problematic.

⁴ The model adopted in this paper differs in terms of variables included to that of the Kingdon and Knight (2000) model. They are able to include a local unemployment rate in the equation which significantly decreases the likelihood of active job searching as well as several other variables that are not controlled for in our model.

Table 3: Binary Logit of Job Search among the Broad Unemployed, 1999

	All Races		African		Males		Females				
	Coefficient	t-value	Coefficient	t-value	Coefficient	t-value	Coefficient	t-value			
Never Worked	-0.525*	-10.98	Never Worked	-0.540*	-10.56	Never Worked	-0.570*	-7.56	Never Worked	-0.475*	-7.62
Age	0.031**	2.31	Age	0.025***	1.73	Age	0.027	1.36	Age	0.045**	2.47
Agesq	-0.001*	-3.00	Agesq	0.000**	-2.29	Agesq	-0.001***	-1.82	Agesq	-0.001*	-3.06
Female	-0.259*	-6.28	Female	-0.232*	-5.33	African	-0.064	-0.24	African	-0.308	-1.33
African	-0.183	-1.04	All public transport over 1km away	-0.116	-1.43	Asian	0.378	0.94	Asian	-0.102	-0.28
Asian	0.128	0.48	Urban	0.547*	10.24	Colour	-0.245	-0.83	Colour	-0.655**	-2.62
Colour	-0.462**	-2.42	Household own a motor vehicle	0.059	0.87	All public transport over 1km away	-0.169	-1.37	All public transport over 1km away	-0.120	-1.24
All public transport over 1km away	-0.131***	-1.72	Post box more than 2km away	-0.062	-1.38	Urban	0.529*	6.55	Urban	0.486*	7.27
Urban	0.510*	9.94	Eastern Cape	-0.466*	-3.25	Household own a motor vehicle	0.062	0.63	Household own a motor vehicle	0.008	0.10
Household own a motor vehicle	0.033	0.53	Northern Cape	-0.740*	-3.68	Post box more than 2km away	-0.082	-1.22	Post box more than 2km away	-0.101***	-1.82
Post box more than 2km away	-0.089**	-2.09	Free State	-0.311**	-2.10	Eastern Cape	-0.359**	-2.08	Eastern Cape	-0.481*	-3.50
Eastern Cape	-0.419*	-3.91	Kwazulu-Natal	-0.136	-0.95	Northern Cape	-0.562**	-2.59	Northern Cape	-0.342**	-2.04
Northern Cape	-0.435*	-3.28	North-West	-0.703*	-4.87	Free State	-0.161	-0.83	Free State	-0.347**	-2.35
Free State	-0.271**	-2.32	Gauteng	-0.657*	-4.75	Kwazulu-Natal	-0.113	-0.63	Kwazulu-Natal	-0.059	-0.41

Kwazulu-Natal	-0.081	-0.73	Mpumalanga	-0.313**	-2.14	North-West	-0.620*	-3.40	North-West	-0.690*	-4.79
North-West	-0.660*	-5.84	Northern Province	-0.076	-0.51	Gauteng	-0.715*	-4.17	Gauteng	-0.474*	-3.54
Gauteng	-0.580*	-5.49	Elderly	-0.014	-0.33	Mpumalanga	-0.506**	-2.74	Mpumalanga	-0.035	-0.24
Mpumalanga	-0.240**	-2.09	Children	-0.021**	-1.97	Northern Province	-0.019	-0.10	Northern Province	-0.043	-0.29
Northern Province	-0.038	-0.32	Married	-0.152**	-2.80	Elderly	-0.118**	-1.99	Elderly	0.070	1.24
Elderly	-0.024	-0.59	Primary Education	0.222***	1.87	Children	-0.027***	-1.66	Children	-0.019	-1.40
Children	-0.021**	-1.98	Secondary Education	0.398*	4.68	Married	0.031	0.31	Married	-0.183**	-2.94
Married	-0.107**	-2.07	Further Education	1.084*	6.93	Primary Education	0.332***	1.92	Primary Education	0.102	0.64
Primary Education	0.215***	1.86	Higher Education	1.069*	3.65	Secondary Education	0.493*	3.72	Secondary Education	0.346*	3.25
Secondary Education	0.409*	4.93	Constant	0.191	0.65	Further Education	1.274*	4.87	Further Education	0.953*	5.34
Further Education	1.071*	7.29				Higher Education	0.957**	2.48	Higher Education	0.695***	1.82
Higher Education	0.831*	3.06				Constant	0.170	0.36	Constant	-0.049	-0.12
Constant	0.262	0.84									
Raised sample	5,450,640		Raised sample	4,869,177		Raised sample	2,373,974		Raised sample	3,076,666	
F-test	22.60		F-test	22.33		F-test	10.14		F-test	13.03	

Notes: The base category for education is no education; base category for racial group is Whites; base category for provincial location is Western Cape.

Conclusions

The evidence presented in this paper supports the need for greater research into the issue of accessibility to public transport amongst the unemployed. It is clear that even taking into account rural-urban location far greater public transport is required to increase the likelihood of active job-searching efforts. However further data sources are required in order to give a more accurate picture of public transport. Future research will focus attention on the waiting time for public transport in both rural and urban areas, and the travel time for different routes. This will be done by collecting primary data on these routes. Other factors that effect the likelihood of job seeking activities include human capital and some household composition variables (e.g. number of dependants). Those unemployed who have never had a job far outweighed the unemployed who had previously held a job with this characteristic contributing massively to the likelihood of not searching for work. The discouragement of these unemployed workers confirms a priori expectations and indicates where unemployment relief should be targeted in order to increase the motivation of these workers. (HOW DO THESE WORKERS SURVIVE, Q3.38).

Literature Review

References

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