

Micro-evidence on day labourers and the thickness of labour markets in South Africa



BY

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Introduction



- In South Africa unemployment is remarkably high
- One of most visible forms is day labourers that wait by the side of the road or on street corners for any job that comes their way.
- Explanations of labour market outcomes often focus on the attributes of individuals or the nature of the labour market, but few authors consider the spatial aspects of the labour market.
- This paper argues in favour of the Smith-Marshallian view of agglomeration and the labour market.
- We use survey data to estimate a regression model of the importance of the thickness of the labour market as a predictor of day labour wages, while controlling for individual-specific and location-specific characteristics.

Literature



- The World Development Report 2009 argued that place is the most important correlate of a person's welfare.
- Location matters for economic activity through localisation and urbanisation economies.
- Porter (1998) provides an intuitive explanation of the importance of the clustering of economic activity...
 - Agglomeration economies are the spillovers of cost advantages that stem from the availability of infrastructure, knowledge, diversity of intermediate inputs and a better matching process in the labour market.
 - These are reinforced by density and attenuates with distance.

Literature



- In the labour market, proximity allows for better matching between workers and jobs:
 - Helsley and Strange (1990) showed that a large city allows for a better average match between heterogeneous workers and firms' job requirements and this enhances efficiency.
 - Duranton (1998) argued that a large market allows workers to become more specialised and, therefore, to be more efficient.
- In both cases, the increased efficiency increases workers' wages.
- At the same time, workers find it less risky to be in locations with many possible employers.

Literature



- **In the case of South Africa, there are few studies that examine the spatial aspects of the labour market:**
 - Kingdon and Knight (2004) found that location matters for black unemployment on a national scale.
 - Kingdon and Knight's (2006) estimation of a wage curve across space indicated a negative relationship. The results showed that male, urban and married workers received significantly higher wages than female, rural, unmarried workers.
 - Magruder (2010) examined spatial discontinuities in the enforcement of centralised bargaining agreements and found that having a centralised bargaining agreement in a particular industry in a specific town causes employment to be eight to 15 per cent lower and wages to be ten to 21 per cent higher than in the same industry in an uncovered neighbouring town.

Literature



- Naudé (2008) found that there a spatial mismatch exists between jobs and jobseekers and that distance from the city centre plays a significant role as a predictor of black unemployment.
- Havemann and Kearney (2010) recently argued that where you live matters. Their results show a positive relationship between urbanisation and the probability of being employed. For example, someone in Johannesburg is 1.5 times more likely to be employed than a similar individual in a medium-sized town.
- Finally, Harmse *et al.* (2009) examined inter-regional differences in the day labour market and found clear differences in earnings and skills.

The survey of day labourers



- The SA study was inspired by Valenzuela Jr. *et al.* (2006) who did a nation-wide study in U.S., surveying 2 660 day labourers.
- Survey = the same method as the American study.
- Started with detailed reconnaissance.
- The survey was undertaken from February 2007 to November 2007, reaching 3 830 day labourers in SA.
- Questionnaires were used to undertake structured interviews.

Descriptive statistics

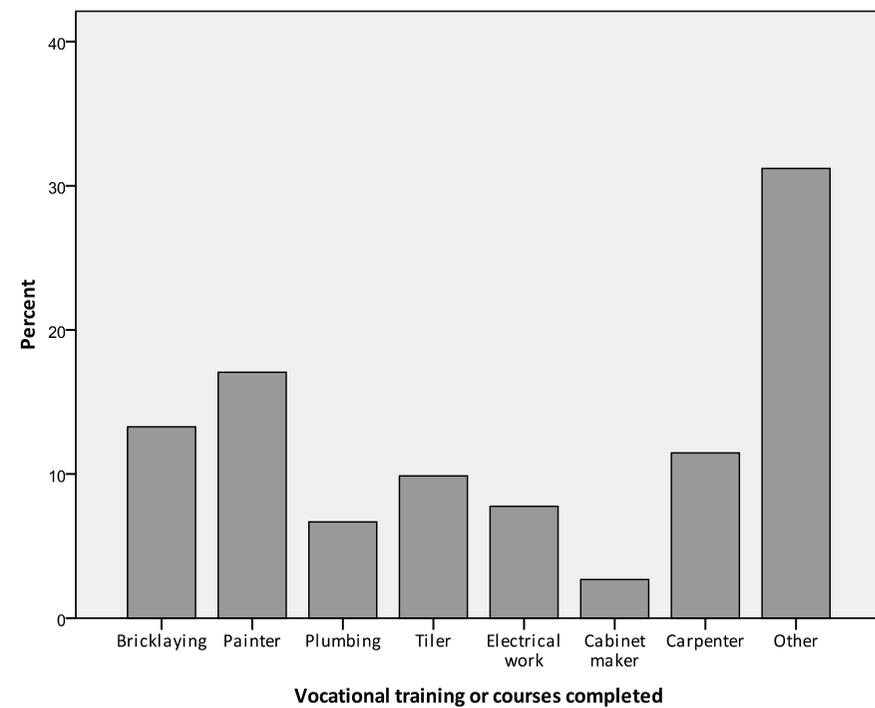
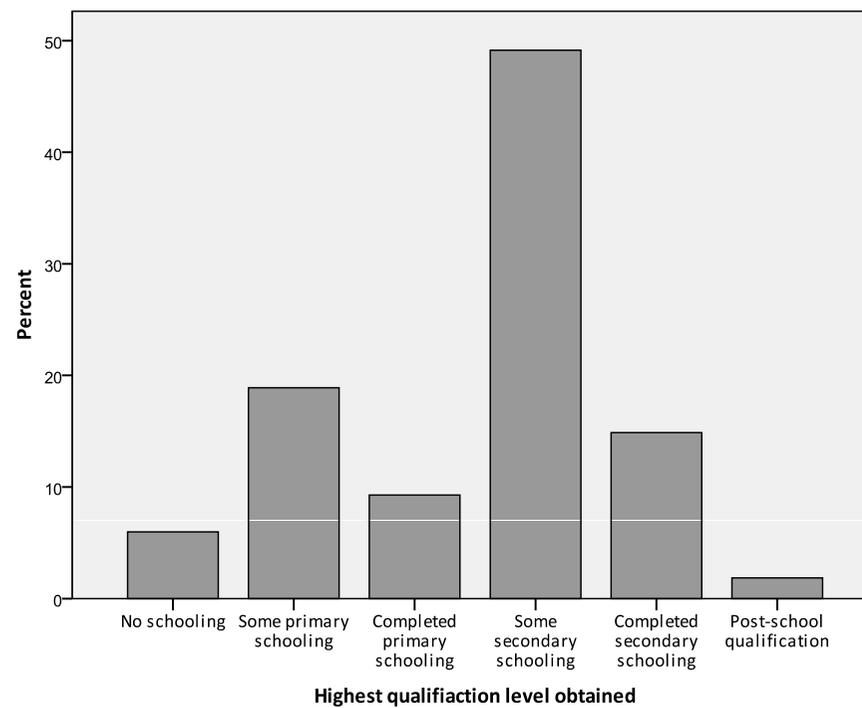


- The majority is male (96%) and Black (92%).
- A quarter of the respondents were found in the Gauteng province, 16 per cent in the Western Cape, 14 per cent in KwaZulu-Natal and 11 per cent in the Eastern Cape Province.
- Most of the day labourers surveyed are between 20 and 40 years of age. Only 2.5 per cent were younger than 20 years and only 4.8 per cent were older than 50 years.
- Of the total group surveyed, 51 per cent indicated that they had at one time held a full-time job.
- Only 15 per cent indicated that they are often hired by the same employer for more than three times.

Descriptive statistics



Education and training:



Descriptive statistics: Types of jobs



	Frequency	Valid Percent	Average earnings	PCA grouping
Digging / shovelling	25	0.7	394	Avg. R 311
Loading and unloading	98	2.6	245	
Construction	111	3	324	
Gardening	96	2.6	352	
Bricklaying assistant	350	9.4	244	
Car wash	258	6.9	467	Avg. R 376
Domestic work	228	6.1	387	
Farming activities	183	4.9	276	
Painter's assistant	616	16.5	295	Avg. R 388
Other jobs	575	15.4	389	
Plumbing	84	2.2	481	

Descriptive statistics: Types of jobs

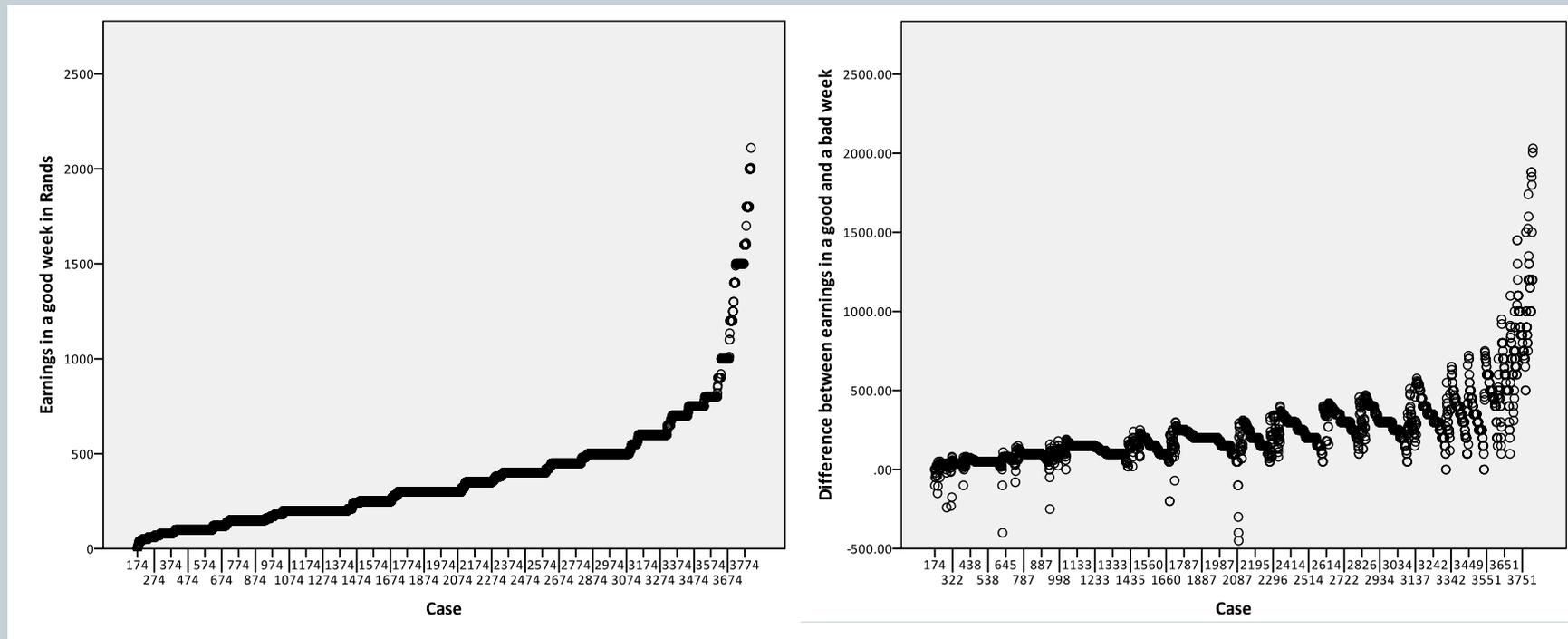


	Frequency	Valid Percent	Average earnings	PCA grouping
Roofing assistant	31	0.8	395	Avg. R 493
Carpentry assistant	77	2.1	466	
Carpentry	31	0.8	631	
Roofing	10	0.3	616	
Plumber's assistant	160	4.3	360	
Electrician	44	1.2	672	Avg. R 544
Electrician's assistant	124	3.3	417	
Painting	251	6.7	573	Avg. R 604
Plastering	300	8	459	
Bricklaying	82	2.2	782	

Descriptive statistics



Earnings in a good week and the difference between earnings in a good and a bad week:



Descriptive statistics



Age	Mean earnings	Province	Mean earnings
Age group: under 20	271	Gauteng	413
Age group: 21-25	373	Mpumalanga	366
Age group: 26-30	397	KwaZulu-Natal	415
Age group: 31-35	410	Eastern Cape	346
Age group: 36-40	390	Limpopo	137
Age group: 41-45	411	North West	318
Age group: 46-50	333	Free State	214
Age group: 51-55	365	Northern Cape	250
Age group: 56-60	288	Western Cape	572
Age group: over 60	382		

Descriptive statistics



Qualification	Mean earnings	Location	Mean earnings
No schooling	379	Metropolitan areas	477
Some primary schooling	314	Everywhere else	371
Completed primary school	367	Frequency of	
Some secondary schooling	362	Hired by same	644
Completed secondary school	543	Hired by same	479
Post-school qualification	547	Hired by same	266
Employment history		Hired by same	366
Have held a full-time job	348	Type work by	
Have never held a full-time job	422	Unskilled	314
		Skilled	485

Empirical analysis



- The estimating equation was set up as follows:
$$\text{earnings} = f(\text{age}, \text{edu}, \text{exper}, \text{freqhire}, \text{typejob}, \text{varietyjob}, \text{fulltimejob}, \text{marketthickness})$$
- Results of models 1-4 in table 3:
 - Earnings in a good week increase with age.
 - Experience is, however, negatively associated with earnings and the coefficient is small and insignificant.
 - Compared to having no education, having completed primary or secondary school is positively associated with earnings.

Empirical analysis



- **Results of models 1-4 continued:**
 - Doing jobs in the skilled cluster is also positively associated with earnings.
 - There is a positive and significant relationship between earnings in a good week and a greater variety of jobs.
 - Having held a full-time job at some stage is also positively and significantly associated with earnings.
 - Compared to those that are never hired by the same employer, day labourers that are often hired by the same employer for more than three days, earn more.

Empirical analysis



- **Results of model 6 in table 4:**
 - Adding the *marketthickness* measures does not change the results model 4, save for experience that is now positively related to earnings.
 - The metro dummy is positive and significant.
 - The coefficient on population density is practically zero.
 - Occupation density is positive and significant.
 - metro*typejob: positive but insignificant
 - metro*varietyjob: negative and significant.
 - metro*occudensity: negative and significant.
 - typejob*occudensity: positive and significant.
 - typejob*varietyjob: negative and significant.

Empirical analysis



- **Results of model 7 in table 4:**
 - Model 7 reports the standardised Beta coefficients for the full specification.
 - The largest positive relationships with earnings in a good week are with:
 - ✦ **working in a metropolitan area, doing skilled work, being hired by the same employer more often and doing a greater variety of jobs.**
 - However, doing a greater variety of jobs is only better for unskilled workers as skilled workers are better off specialising.
 - In this model, working in a metropolitan area and being hired by the same employer more often are more important than education.
 - The largest negative relationship with earnings in a good week is with the competition from other workers in metropolitan areas.

Implications



- **Analyses of employment and unemployment in South Africa often conclude with calls for the development of people, with emphasis on the importance of education and training.**
- **The results here have shown that education, vocational training and the ability to do higher skilled jobs are better leveraged in the thick labour markets offered by urban agglomerations.**
- **This has significant implications for spatial development.**
- **Policymakers should focus on creating and supporting spatially blind institutions and spatially connective infrastructure.**
- **For South Africa this means more rapid urbanisation and a need to facilitate the mobility of people.**