

Job and Worker Flows in South Africa

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A unique source of administrative data allows novel labour market analysis in South Africa

A new and highly valuable source of administrative data-anonymised tax certificates - has been made available through a project involving collaboration between SARS, the National Treasury and UNU WIDER. These data can be used for a variety of important projects.

In this project the data was used to track workers' movements between companies over time and give a sense of how much of this movement there is. Lots of movement is one sign that the labour market is not rigid.

Some definitions:

$$\text{Job Flows}_{it} = \text{employment}_{it} - \text{employment}_{it-1}$$

$$= \text{Hires}_{it} - \text{Separations}_{it}$$

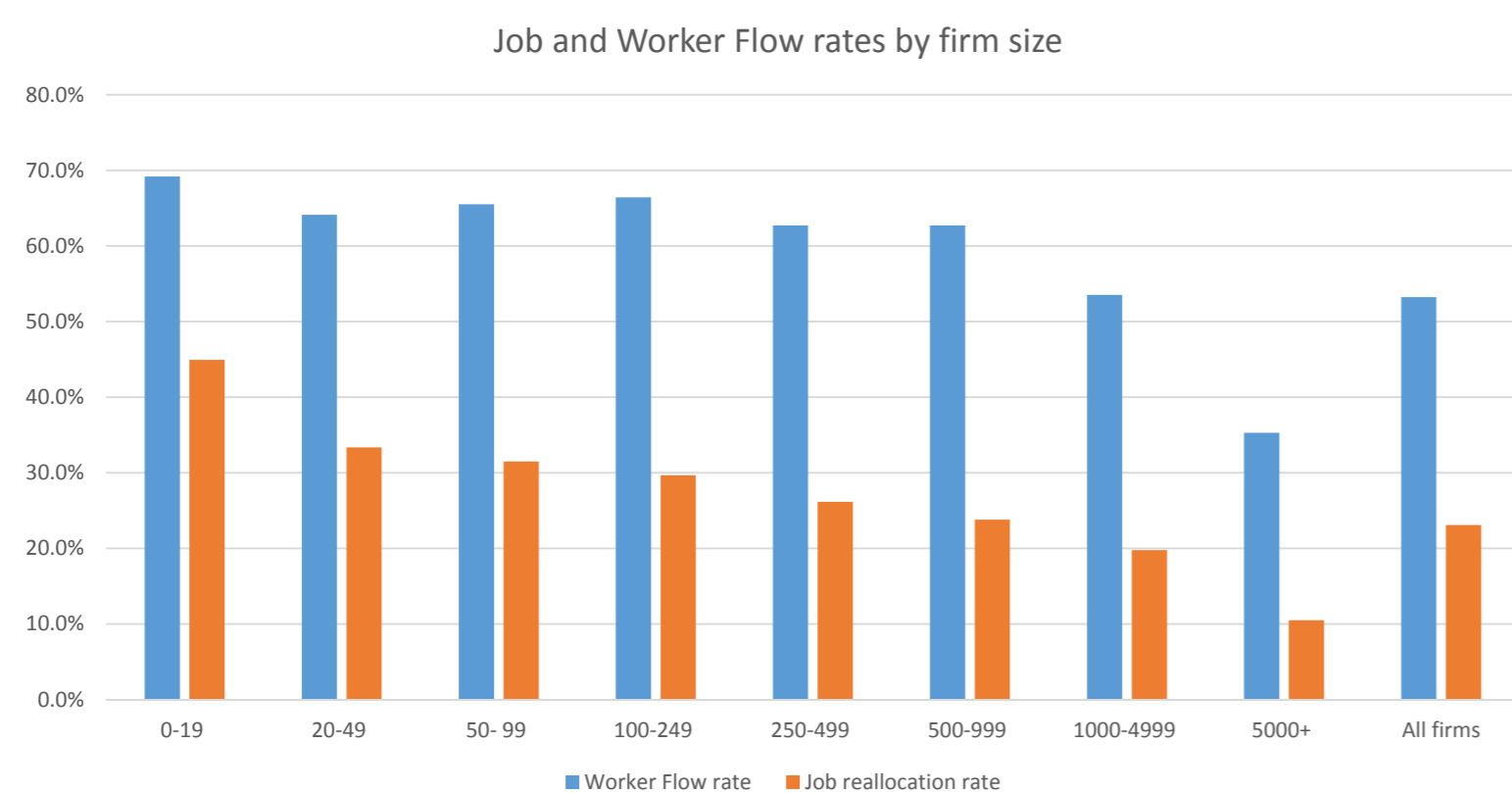
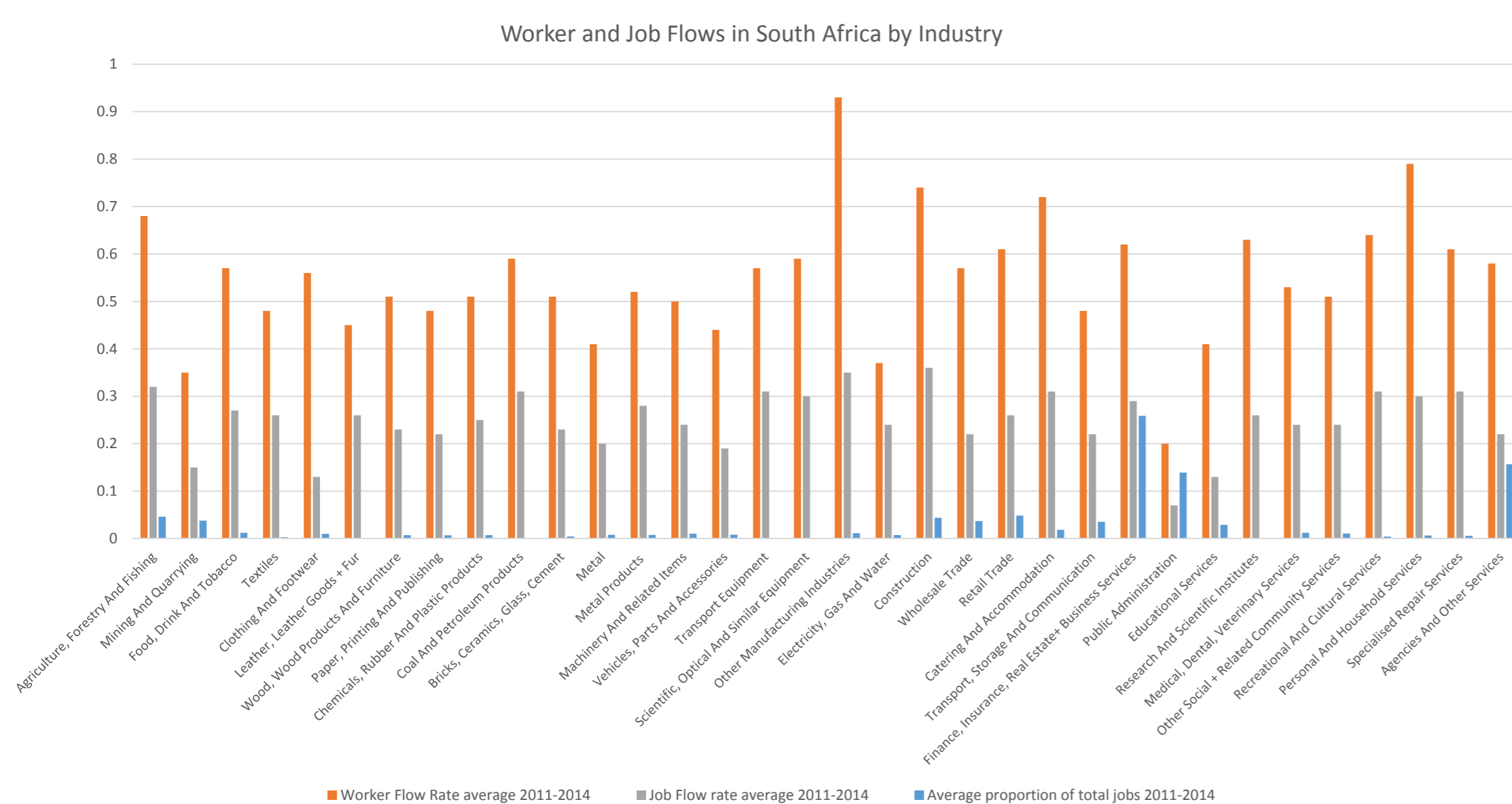
$$\text{Job Reallocation}_{it} = | \text{Job Flows}_{it} |$$

$$\text{Worker flows}_{it} = \text{Hires}_{it} + \text{Separations}_{it}$$

The data contain information on 12.2 million individuals and 293 thousand companies over 4 tax years. Average firm size is around 40 employees, median firm size is 6 employees.

Worker and Job Flows by Industry and Firm Size

The graphs below show worker and job flows by industry and firm size.



International Comparisons of Job and Worker flow rates

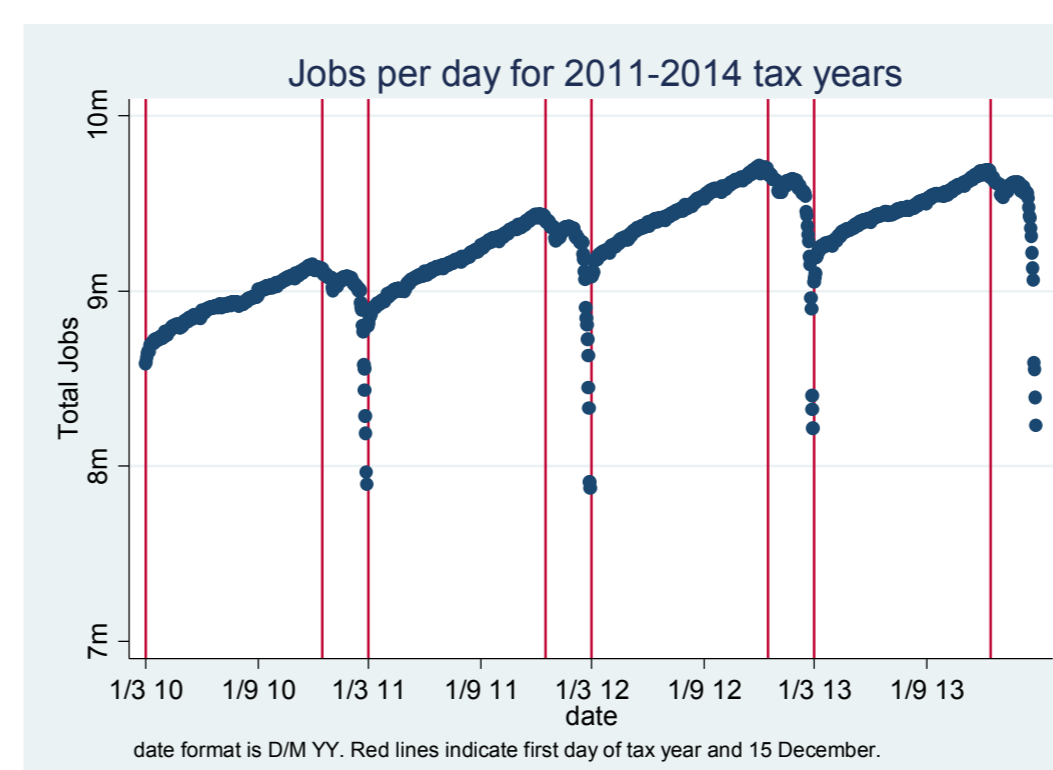


The graphs above suggest that worker flows in South Africa are higher than all countries in the sample except Iceland. This is one indication that the South African labour market is less rigid in terms of adjustment of employment than has previously been thought.

Job flows in South Africa, however, are only slightly above the average for European countries.

Measurement error in dates employed

To obtain measures of job and worker flow information on the date employed from and to is used - this information is supplied on the IRP5 tax certificate. The graph below shows that there is some error in measuring dates employed- there is a large drop off in total employment at the end of each tax year. However because this pattern is consistent we do not think it is generating the large worker flow numbers.



The sources for the international job and worker flow rates are Bassanini, Andrea, Andrea Garnero, Pascal Marianna and Sebastien Martin, 2010. Institutional Determinants of Worker Flows A Cross-Country/Cross industry Approach. *OECD Social, Employment And Migration Papers*, No. 107 and David Martin-Barroso, Juan Andres Nunez-Serrano, Jaime Turrión and Francisco J. Velazquez, 2011. The European Map of Job Flows. MPRA Paper 33602

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Full Paper: <https://www.wider.unu.edu/publication/job-flows-worker-flows-and-churning-south-africa>

