Changes in the Geographic Dispersion of Urban Employment in Australia

by

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Declaration

This thesis was written while I was studying at the Economics Program, Research School of Social Sciences at the Australian National University. The opinions expressed are my own work, unless otherwise acknowledged in the text.

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I am solely responsible for any errors or shortcomings.

Abstract

This thesis is an empirical investigation of the concentration of employment in Australian cities since 1976. In 1976, Australians shared the same access to employment irrespective of where they lived. However, by 1991 the employment–population ratios varied systematically by socio-economic status. The purpose of this thesis is to use a variety of basic statistical techniques to discern whether it matters where one lives.

A panel of 9384 small urban areas is constructed from the last four censuses to enable us to fully document the increasing spatial employment inequality in urban areas and to analyse the possible causes and effects of this increase. The first two chapters describe the overall changes in employment inequality in the urban panel using several summary indexes. Group averages from deciles ranked by socio-economic status are used to illustrate the nature of the problem.

The more formal analysis of the causes of increasing inequality commences with a shift share analysis of the changes in employment levels. The results show that national changes in industry structure play an important role in determining the intra-urban distribution of employment. The index of sectoral change also varies systematically within Australian cities, with sectoral change being concentrated in low status areas. The apparent importance of industry structure in determining the geographic dispersion of employment points to employment demand being a significant part of the story.

Basic regression techniques and principal component analysis are also used to shed light on several possible inter-related causes and effects of the increasing inequality of employment–population ratios including: increased concentrations of personal characteristics, spatial mismatch, neighbourhood effects and the development of an underclass.

There are three main findings about the causes and effects of neighbourhood employment inequality. Firstly, spatial mismatch within or between Australian cities is not an important explanation of the changes in the geographic dispersion of employment. Outside Sydney the location of workers *vis-à-vis* firms does not influence neighbourhood employment–population ratios. However, even in Sydney, spatial mismatch provides a very limited explanation of neighbourhood inequality.

Secondly, substantial neighbourhood-specific effects on employment–population ratios are apparent in the bottom decile(s) of urban neighbourhoods ranked by socio-economic status. These neighbourhood effects explain between one and two-thirds of the differential between the top and bottom decile. The rest of the differential can be explained by differences in endowments of personal characteristics such as human capital variables.

Finally, there is convincing evidence that class, and perhaps even an Australian underclass, are important determinants of the distribution of employment outcomes. The underclass in Australia, as measured using techniques similar to US studies, is still very small but is increasing at an alarming rate. However, the sensitivity analysis shows that the underclass, so measured, is closely related to a more general concept of class captured in standard socio-economic status indexes.

The scope of this thesis is limited by the regional aggregates supplied in all four censuses. Regional aggregates prevent us from asking subtle questions about who is being affected by the observed changes. The lack of adequate individual-level migration data for neighbourhoods means that it is not possible to directly test any hypothesis about social mobility. This thesis is merely a preliminary analysis of whether the local social environment is important.

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