Home Ownership and Unemployment: Does the Oswald Thesis Hold for Australian Regions?

Paul Flatau, Matt Forbes and Gavin Wood  
*Murdoch University*

Patric H. Hendershott  
*Aberdeen University*

Lisel O’Dwyer  
*Flinders University*

ISSN: 1440-5059  
ISBN: 0-869058290

December 2002

This publication is copyright. Except as permitted by the Copyright Act no part of it may in any form or by any electronic, mechanical, photocopying, recording or any other means be reproduced, stored in a retrieval system or be broadcast or transmitted without the prior written permission of the publisher.

Journal of Economic Literature Classifications: J61, J64, R21.

Contact point: Paul Flatau  
Tel: 61 8 9360 2836  
Fax: 61 8 9310 7725  
Email: plta@central.murdoch.edu.au

Paper requests:  
Working papers numbered 158 onwards, are available in full on-site.

Previous working papers are available by contacting:  
Meg Jadlowkier, Economics, Murdoch University, Murdoch, WA 6150, Australia.  
Email: jadlow@central.murdoch.edu.au

Papers are AUD$5.00, (plus AUD$5.00/order outside Australia).  
Limited stock available. No cost to reciprocal providers of working papers.
ABSTRACT

In a series of papers in the late 1990s, Andrew Oswald explored the relationship between unemployment and home ownership. Oswald’s conclusion was that a statistically significant positive relationship exists between changes in home ownership and the rate of unemployment. As a rough approximation, Oswald concludes that a 5-percentage point increase in the rate of home ownership is associated with a one percentage point higher unemployment rate. Oswald’s principal explanation for this result is that homeowners are less willing than private renters to move when they become unemployed as a result of high transaction costs. In this paper, we test the Oswald Hypothesis for Australian sub-regions using Australian Bureau of Statistics Census data for the period 1986 to 2001.

1. Introduction

In a series of recent unpublished papers, Andrew Oswald has argued that an important explanation for the secular rise in unemployment in OECD countries over the last 30 years is the increase in the rate of home ownership (Oswald, 1996, 1997, 1999, and Gardner, Pierre, and Oswald, 2001). His key conclusion is striking: A 5-percentage point increase in the rate of home ownership results in a one-percentage point higher unemployment rate.

Oswald’s unemployment home ownership empirical analyses included (a) a simple one variable OLS model of home ownership and unemployment rates for a cross-section of OECD countries in the 1960s and the 1990s and a cross-section of regions in France, Sweden, and Italy in the 1990s; (b) a simple one variable OLS model of changes in unemployment and home ownership rates between the 1970s and the 1990s for OECD countries, US states, and UK regions; and, (c) fixed effects panel models for US states (1986-1995) for unemployment rates (against home ownership rates) and for UK regions (1973-1994) for unemployment rates (against private rental rates).

Not surprisingly, Oswald’s claim about the size and direction of the relationship between unemployment and home ownership has attracted attention among both housing and labour economists. Utilising both individual-level data as well as the regional and country-level data on which Oswald based his hypothesis; these studies fail to support the strong positive relationship posited by Oswald (Pehkonen, 1997; van Leuvensteijn and Koning, 2000; Green and Hendershott, 2001a, 2001b; and Coulson and Fisher, 2002). Indeed, several studies find

* This paper is part of a larger AHURI project: What Drives Housing Outcomes in Australia? Understanding the Role of Aspirations, Household Formation, Economic Incentives and Labour Market Interactions. The authors wish to acknowledge the financial support provided to the project by AHURI.
evidence for the opposite effect, i.e., homeownership is associated with lower, not higher, rate of unemployment.

In drawing the connection between housing and labour markets, Oswald’s thesis links into an older tradition in the housing economics literature concerned with themes of geographical mobility, unemployment and search behaviour and housing tenure patterns. The work of Engleman (1977), Hughes and McCormick (1981), (1985) (1987) and McCormick (1983), typify this tradition. These authors focus primarily on adverse mobility and labour market incentive effects of public housing policies and structures in the UK in the 1970s and early 1980s. McCormick also argues that outright owners face much reduced liquidity constraints and have greater wealth holdings than mortgagees in a similar cash income position. As a consequence, they may be expected to take longer to search for new jobs than their mortgagee counterparts. This may lead to higher unemployment rates than would be expected for this housing tenure group.

The purpose of the present paper is to test Oswald’s thesis for Australia, and in particular, for Australian sub-regions. More generally, however, we are concerned with increasing our understanding of labour markets in Australia by accounting for the interplay between housing and labour markets and taking into account regional/spatial perspectives. Our analysis follows Oswald’s lead (and also the work of Green and Hendershott, 2001b) in testing his thesis using regional Australian data for the period 1986 to 1996.

The regional data set constructed for this study has three important attributes. First, the dataset is structured so that Oswald’s thesis can be tested at various levels of geographical aggregation. Three spatial units of analysis are used in this paper: (1) the Collection District (CD), the most disaggregated spatial unit available in the Census geographical structure, (2) the Local Government Area (LGA), the basic government-level unit in Australia, and (3) the Statistical Local Area (SLA) unit. The use of a variety of regional categories allows us to determine the robustness of any conclusions drawn from testing Oswald’s thesis.

Second, we include important controls (such as the age composition of the region and the educational qualification profile of the region) that micro-based research on unemployment emphasizes as being important to explaining unemployment differentials between individuals (see, Le and Miller, 2000). This means that our final estimates of the effect of homeownership on unemployment will be derived on a standard controlled basis.

Third, five housing tenure types are distinguished: (1) private rental, (2) public rental, (3) rent-other (the latter influenced by employer-provided rental accommodation) (4) outright owners and (5) mortgagees. The distinction between the five main tenure types is made in this study because the impacts from housing to labour markets (and vice versa) potentially differ markedly between the five forms.

In section 2, we describe the key ways in which housing tenure may impact on labour markets (and how labour market outcomes may, in turn, influence housing tenure outcomes). Section 3 describes the data and sets out our models for estimation. Section 4 presents and evaluates the results while Section 5 presents some concluding comments and notes avenues for future research.

2. Housing and labour markets
Oswald’s key explanation for the positive relationship between unemployment and homeownership is that homeowners face higher transaction costs than renters (selling and buying housing) when they consider a move to a new location to accept a job offer. These costs may also mean that homeowners will be more likely to stay put and commute longer distances to gain and maintain employment than might renters. With higher commuting rates, transport congestion increases leading to higher costs in the economy. The incentive to work is also reduced. A further consequence of high transaction costs is that some homeowner job seekers accept jobs for which they are not fully suited. This mismatch reduces the efficiency of the economy. Jobs get destroyed.

While a transaction cost framework provides the basic grounding for the positive link between home ownership and unemployment, a number of further potential links between homeownership and unemployment exist. First, unemployed renters may face difficulties in obtaining work in regions with better job opportunities if there is a scarcity of available rental accommodation and a financial borrowing constraint restricts their opportunity to mortgage finance a housing purchase. Second, areas with high homeownership may deter entrepreneurs from developing new industries. Homeowners may, through local councils, enforce restrictive planning and land development laws. Third, outright owners, but much less so those with high mortgage repayments, face relatively low wealth/liquidity constraints. Those with a reduced liquidity constraint and greater wealth could be expected to take longer to search for new jobs.

Our overview of the microfoundations for the Oswald thesis link have so far only referred to ‘natural rate’ type explanations for the relationship between homeownership and unemployment. There are, in addition, links to and from the housing market to the business cycle to consider. A rise in unemployment may weaken housing demand pressures. This in turn causes house prices to fall resulting in negative equity problems for newly unemployed homeowners with pre-existing high loan-to-value ratios. Housing lock-in effects, in turn, reduce labour mobility (see Henley, 1998 for significant ‘lock-in’ effects from negative equity problems in the UK housing market). Moreover, the proximate cause of the recession may be a tight monetary policy regime. Those mortgages on relatively low fixed interest rates may face the possibility of much higher interest rates if they make a decision to sell and move in order to gain employment (Green and Hendershott, 2001). These forces will only have short-term impacts when the economy moves out of recession. However, negative equity effects may continue longer if the economy remains stuck in an underemployment equilibrium position. Likewise, when the downturn has a particular regional focus, lock-in effects may last for long periods in the worse affected regions as they may interact with transaction cost factors.

One interesting lock-in effect evident in the UK market is that of ‘stay-put’ clauses in the contracts of public housing tenants who bought their former council houses (Henley, 1998). Such a lock-in effect is not evident in the Australian public housing sector. The concern is more over whether low-cost public housing accommodation, linked to receipt of an income support payment, may result in poverty-trap effects. High marginal effective tax rate effects may reduce the incentive to engage in the labour market among those in public housing. Public housing tenants may be reluctant in these circumstances to relocate and give up public housing unless a job is well paid.

A serious difficulty in assessing evidence on the relationship between housing tenure patterns and unemployment is the difficulty of isolating cause from effect. Public housing in the Australian context can only be accessed if an applicant is in an established disadvantaged
position. This means that low rates of labour market participation and high rates of unemployment among working-age public housing renters is largely pre-determined. We would, therefore, not expect to see anything other than high unemployment outcomes in this housing tenure category. What is of interest to policy makers, however, is whether State government public housing allocation mechanisms and rent setting methods impede or contribute to the mobility, adaptability and employability of existing public housing tenants and their future participation in the labour market.

Significant reverse causation factors also influence the interpretation of the remaining housing tenure states. For example, in a number of regions of Australia, such as the Pilbara of Western Australia, high levels of employer-provided housing are evident. A good labour market state (rather than a poor one) is now the trigger for a particular housing tenure position (employer-provided housing).

Likewise, in terms of home purchasers, a stable employment profile coupled with the meeting of a downpayment constraint is required before a housing loan will be forthcoming. The entry into home ownership is, therefore, associated with labour market success. Once in the home, the maintenance of a job is a fundamental pre-requisite for most home purchasers to ensure non-default on their loan commitments. This may result in strong positive (rather than negative) labour market incentives for owners with mortgages. Finally, the same personal attributes and family circumstances that allow the outright homeowner to extinguish a home loan are at work in terms of success in the labour market (stability, commitment, organization, ability etc.). As such, long duration home ownership tenures which eventually result in outright ownership, will, all other things being equal, be positively correlated with labour market success and lower unemployment.

A priori, we may expect that these positive association stories should overshadow the negative association stories that form the foundation to Oswald’s thesis. The fact that Oswald finds the reverse creates the interest.

3. Data and method

Our test of the Oswald thesis is undertaken at three separate geographical levels. These are the Collection District (CD), the Statistical Local Area (SLA), and the Local Government Area (LGA).

At the base of the Australian Bureau of Statistics’ (ABS) geographical classification structure, is the Collection District (CD). The CD is an area designed for ‘efficient data collection at census times’ (ABS, 2002 p. 4). In terms of population characteristics, the CD is the most homogeneous area unit (conversely, the most heterogeneous area is, of course, the whole country). The greater homogeneity within CDs results in sharper distinctions between units, which tend to become more blurred as the geographic unit of analysis increases in size. Labour force data for 2001 at the CD level were not released at the time of writing this paper and we have focused on the 1996 Census CD data in this paper.

Statistical Local Areas (SLAs) are formed by aggregating CDs and are the smallest geographical region used by the ABS in non-Census applications. From the SLA level, regions in the Australian Standard Geographical Classification (ASGC) structure aggregate on political-legal lines to Local Government Areas (LGAs) and then to States and Territories.
Census-based time series profiles between 1986 and 1996 are available from the ABS for both LGAs and SLAs. These comparisons are, however, problematic in terms of the 1986 to 1991 period for SLAs and we have chosen to focus only on LGAs for the full 1986 to 1996 period. We shall also present ‘experimental’ results for 2001 SLAs and LGAs using the Department of Employment and Workplace Relations small area labour market data.

In Oswald’s empirical models, all homeowners are grouped together and a rate of homeownership derived for a region or country and compared and modelled against the unemployment rate (the dependent variable). The alternative approach Oswald takes is to use a private rental rate. In both cases, he does not differentiate between other housing tenure forms.

For the purposes of the current research exercise, however, we have differentiated between outright homeowners and home purchasers. Likewise, in addition to private renters, we have also incorporated separate tenure rates for housing authority renters and other non-private renters. The latter group includes a variety of rental categories but the most important from our perspective are those who are living in employer-provided accommodation. Housing tenure and unemployment rates are derived for each spatial unit.

In addition to housing tenure controls, our estimated model of the unemployment rate includes a set of controls for State/Territory effects and for key socio-demographic forces thought to influence unemployment rates. These controls are established for each spatial unit:

- Aged 65 and Over (proportion)
- Australian Born (proportion)
- Language other than English (proportion)
- Married (proportion)
- Degree (proportion)
- Inner Band Locality (>75 and <250kms) (Distance from the Central Business District of a capital city, dummy.)
- Middle Band Locality (>250 and <500kms) (dummy)
- Outer Band Locality (>500kms) (dummy)

The most important of the above variables is Degree, which represents the proportion of a spatial unit who hold a degree or higher level educational qualification. We would anticipate a strong inverse relationship between the Degree attainment rate in a spatial unit and the rate of unemployment. English language proficiency can also be seen as a component of human capital and also typically shows up as an important determinant of labour market success in studies using the individual as the unit of analysis. We have also included a control for the proportion of a spatial unit that is Australian born.

Family circumstances impact on the incidence and duration of unemployment and we have included a variable representing the proportion of the spatial unit who are married to control for these influences. This is an area for some investigation in the paper and we are currently experimenting with a range of additional controls reflecting family type effects such as family type variables such as lone parent and single person. The same process is occurring with respect to age composition effects and the educational attainment effects. A variable for the proportion of individuals aged over 65 in a spatial area has also been included to take account of age composition effects.

4. Results
We take as a starting point for our analysis, Oswald’s simple OLS model of the unemployment rate regressed on the home ownership rate. The home ownership rate is the combined outright owner and purchaser rates. This model is applied by Oswald to a cross-section of OECD countries and for regions within selected countries. Oswald finds a significant positive relationship between the two variables for each of his estimated models and summarised in the statement that a 5-percentage point increase in the rate of home ownership results in a one-percentage point higher unemployment rate.

The simple OLS model is replicated, in the present case, for CDs (1996), SLAs (1991, and 1996) and LGAs (1986, 1991, and 1996). Results are presented as the model (1) estimates in Tables 1 and 2.

In stark contrast to Oswald’s findings of a positive relationship between home ownership and unemployment, we find that the opposite relationship holds: the estimated relationship between the rate of home ownership and the unemployment rate is negative and generally significant.

Take first the case of the 1996 CD data. Here the coefficient estimate is –0.15 with a standard error of 0.002. At the mean home ownership rate across CDs in 1996, a 5 percentage point increase in the home ownership rate reduces the unemployment rate by 0.72 percentage points. In the case of SLAs (see Table 1), the association between home ownership and unemployment is considerably smaller – a 5 percentage point increase in the home ownership rate in 1996 reduces the unemployment rate by 0.28 percentage points. The effect is a little larger in 1991 where a similar rise in the home ownership rate reduces the unemployment rate by 0.42 percentage points. For LGAs (see Table 2), the effect for 1986 is similar to that for the CD data, but the effect is much lower for 1991 and no significant relationship between unemployment and home ownership is evident in 1996.

We now turn to an examination of the model 2 and model 3 effects, which in turn introduce different housing tenure forms (model 2) and control for other possible determinants of unemployment (model 3). The default housing tenure rate is now the private rental rate in a region.

For CDs in 1996, a negative relationship continues to be found between both outright and purchaser homeownership rates on the one hand and the unemployment rate on the other. However, the effect is now much reduced by a third (home purchaser) to two-thirds (outright owners) relative to that of the simple OLS model. At the mean outright home ownership rate across CDs in 1996, a 5 percentage point increase in the outright home ownership rate reduces the unemployment rate by 0.27 percentage points, while a similar rise in the home purchaser rate reduces the unemployment rate by 0.56 percentage points. A second important feature is that the size of the purchaser home ownership effect is double that for the outright homeownership effect in absolute value terms.

Notice also that a highly significant positive relationship is found for public housing: A 5 percentage point rise in the public housing rate in a CD from the mean level (which effectively doubles the mean public housing rate) is associated with a 1 percentage point rise in unemployment. In other words, our public housing effect is equal in size and direction to Oswald’s home ownership effect. The very different outcome for public housing from the other housing tenure forms emphasizes the need to clearly differentiate between various rental
housing forms in an examination of the relationship between housing tenures and unemployment.

The model 3 results from Table 1 reveal that the control variables have significant effects on the unemployment rate. The results largely conform to those evident in previous individual unit of analysis results on unemployment in Australia. In terms of regional effects, significant state-based differences in unemployment rates are evident and the unemployment rate is higher as we move from the capital city of each state and into regional areas. As anticipated, as the proportion of residents in a region holding a degree increases the unemployment rate declines. The effect is large. At the mean rate of degree attainment across CDs in 1996, a 5 percentage point increase in the proportion of a spatial area holding a degree reduces the unemployment rate by 0.85 percentage points. The positive impact of the Degree variable on reducing the unemployment rate is two to three times greater in the case of the SLA and LGA results (compare Table 1 results with those for Tables 2 and 3).

The unemployment rate falls as both the proportion of residents who are Australian born and who are married rises. It rises as the proportion of residents whose language spoken at home is other than English rises. Notice also the positive impact on the unemployment rate of an increase in the proportion of residents who are over 65. We included the age variable to control for very sharp age-housing tenure effects (the outright ownership rate is very high among those over 65) but on reflection the age effect found may indicate a number of influences which require further investigation including the fact that particular localities may be chosen as a retirement area for its amenity value rather than its employment opportunity value or that the locality is suffering long-term decline with older residents staying put but younger residents leaving to take up opportunities elsewhere.

We now turn to the results for SLAs and LGAs in Tables 1 and 2. When we differentiate among housing tenure types but do not control for other determinants of unemployment, we find (a) generally a negative relationship existing between the proportion of residents who are purchasers in a region and the unemployment rate and (b) either a positive or insignificant relationship for outright homeowners. However, the pattern changes again when we include control variables.

In the case of the 1986 LGA results (Table 2) no significant relationship between home ownership and unemployment is found. When we turn to the 1991 LGA results, a very weak positive purchaser effect on unemployment, consistent with the Oswald thesis, is found. In the case of the corresponding 1991 SLA results, the same very weak positive relationship is evident but now both outright owners and home purchasers exhibit this effect. The effects though are very small relative to those found by Oswald. A five percentage point rise in the home ownership rate is only expected to increase the unemployment rate by around 0.1 percentage points.

In the case of the 1996 SLA and LGA full control model (model 3 results in Tables 1 and 2), no significant relationship between outright home ownership and unemployment is evident. However, a positive but relatively small effect can be seen for home purchasers. The same result applies for both the SLA and LGA full models in 1996. A five percentage point rise in the home purchaser rate is only expected to increase the unemployment rate by around 0.2 to 0.3 percentage points. This represents a fifth of the effect posited by Oswald.
Our previous results have revealed a positive significant relationship between public housing rates and the unemployment rate of a locality. The size of the impact is reduced but remains relatively large in the case of the SLA and LGA models when we introduce human capital and regional controls. Interestingly, however, early experimentation with a wider set of control variables for family circumstance (e.g., the inclusion of a lone parent rate for a region) begins to reduce the size even of this effect.

Table 2 includes what we describe as ‘experimental’ results for LGAs in 2001 utilising the small area labour force data for 2001 from DEWR. We have also used as a proxy for the Degree variable (unavailable for 2001 at the present time), home computer use. A fairly strong positive relationship between the home purchaser rate and the unemployment rate is evident in the experimental 2001 LGA results. A five percentage point rise in the home purchaser rate is expected to increase the unemployment rate by around 1 percentage point. This represents a half of the effect posited by Oswald. However, we have used a proxy for educational attainment, computer usage at home, and it is unclear whether the effect found will remain once we have included this variable.

Our examination of Oswald’s thesis has, to this point, involved a series of cross-section analyses. Evidence from these analyses does not corroborate Oswald’s strong cross-sectional findings. To complete a test of Oswald’s thesis for Australia using regional data, we turn to a brief examination of rates of change in unemployment and home ownership.

One of the attributes of the LGA and SLA datasets that we have constructed is that they span a full business cycle. The 1986 Census was conducted some four years after the onset of the 1982 recession when the labour market had largely recovered. In contrast, the 1991 Census was conducted in the midst of the worst recession Australia had experienced in labour market outcome terms since the Great Depression. By 1996, the labour market had recovered to be at almost exactly the same point it was at in 1986.

This period then affords the opportunity to work through the slide into recession and the recovery from it for regions with varying home ownership rates. The two research questions we pose are: Did regions with high rates of home ownership in 1986 experience a smaller or larger increase in the unemployment rate by 1991 than regions with a lower rate of home ownership? In terms of the recovery from the 1991 recession, did regions with higher rates of home ownership in 1991 recover quicker or slower in terms of the decrease in the unemployment rate experienced in the region by 1996?
Table 1 1996 Collection Districts and 1991 and 1996 Statistical Local Areas (SLAs), Housing Tenures and Unemployment

<table>
<thead>
<tr>
<th>Collection Districts</th>
<th>Statistical Local Areas</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(1)</td>
</tr>
<tr>
<td>Constant</td>
<td>0.20</td>
</tr>
<tr>
<td>Homeownership Rate</td>
<td>-0.15</td>
</tr>
<tr>
<td>Outright Homeownership Rate</td>
<td>-0.05</td>
</tr>
<tr>
<td>Housing Authority Rental Rate</td>
<td>0.20</td>
</tr>
<tr>
<td>Other Non-Private Rental Rate</td>
<td>-0.02</td>
</tr>
<tr>
<td>VIC</td>
<td>0.02</td>
</tr>
<tr>
<td>SA</td>
<td>0.02</td>
</tr>
<tr>
<td>QLD</td>
<td>0.02</td>
</tr>
<tr>
<td>WA</td>
<td>0.00</td>
</tr>
<tr>
<td>TAS</td>
<td>0.03</td>
</tr>
<tr>
<td>NT</td>
<td>-0.03</td>
</tr>
<tr>
<td>ACT</td>
<td>0.02</td>
</tr>
<tr>
<td>Aged 65 and Over</td>
<td>0.03</td>
</tr>
<tr>
<td>Australian Born</td>
<td>-0.07</td>
</tr>
<tr>
<td>Language other than English</td>
<td>0.06</td>
</tr>
<tr>
<td>Married</td>
<td>-0.14</td>
</tr>
<tr>
<td>Degree</td>
<td>-0.17</td>
</tr>
<tr>
<td>Inner Band Locality (&gt;75 and &lt;250kms)</td>
<td>0.03</td>
</tr>
<tr>
<td>Middle Band Locality (&gt;250 and &lt;500kms)</td>
<td>0.04</td>
</tr>
<tr>
<td>Outer Band Locality (&gt;500kms)</td>
<td>0.01</td>
</tr>
<tr>
<td>Adjusted R squared</td>
<td>0.18</td>
</tr>
<tr>
<td>CDs/SLAs</td>
<td>31763</td>
</tr>
<tr>
<td>Homeownership rate (mean)</td>
<td>0.68</td>
</tr>
<tr>
<td>Unemployment rate (mean)</td>
<td>0.10</td>
</tr>
</tbody>
</table>

Weighted Least Squares using CD/SLA population weights

Note: In model (1), the default tenure category is non-home owners.
In models (2) and (3), the default tenure category is private renters.
Source: Authors’ estimates based on Australian Bureau of Statistics Basic Community Profiles.
## Table 2 1986 - 1996 Census Local Government Areas, Housing Tenures and Unemployment

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(1)</td>
<td>(2)</td>
<td>(3)</td>
<td>(1)</td>
</tr>
<tr>
<td>Constant</td>
<td>0.18</td>
<td>19.14</td>
<td>0.13</td>
<td>8.41</td>
</tr>
<tr>
<td>Homeownership Rate</td>
<td>-0.14</td>
<td>-9.56</td>
<td>-0.04</td>
<td>-1.67</td>
</tr>
<tr>
<td>Outright Homeownership Rate</td>
<td>0.00</td>
<td>0.22</td>
<td>-0.04</td>
<td>-1.67</td>
</tr>
<tr>
<td>Purchaser Homeownership Rate</td>
<td>-0.15</td>
<td>-7.75</td>
<td>0.00</td>
<td>0.08</td>
</tr>
<tr>
<td>Housing Authority Rental Rate</td>
<td>0.16</td>
<td>4.79</td>
<td>0.16</td>
<td>5.04</td>
</tr>
<tr>
<td>Other Non-Private Rental Rate</td>
<td>-0.07</td>
<td>-1.28</td>
<td>0.09</td>
<td>1.79</td>
</tr>
<tr>
<td>VIC</td>
<td>-0.02</td>
<td>-8.26</td>
<td>0.02</td>
<td>5.95</td>
</tr>
<tr>
<td>SA</td>
<td>-0.02</td>
<td>-3.34</td>
<td>-0.01</td>
<td>-1.90</td>
</tr>
<tr>
<td>QLD</td>
<td>0.01</td>
<td>3.99</td>
<td>0.01</td>
<td>2.52</td>
</tr>
<tr>
<td>WA</td>
<td>-0.02</td>
<td>-3.55</td>
<td>0.01</td>
<td>1.71</td>
</tr>
<tr>
<td>TAS</td>
<td>0.01</td>
<td>1.15</td>
<td>0.03</td>
<td>5.51</td>
</tr>
<tr>
<td>NT</td>
<td>0.00</td>
<td>0.19</td>
<td>0.01</td>
<td>1.20</td>
</tr>
<tr>
<td>ACT</td>
<td>0.02</td>
<td>2.07</td>
<td>0.03</td>
<td>3.24</td>
</tr>
<tr>
<td>Aged 65 and Over</td>
<td>0.48</td>
<td>8.71</td>
<td>0.35</td>
<td>7.01</td>
</tr>
<tr>
<td>Australian Born</td>
<td>-0.17</td>
<td>-5.99</td>
<td>-0.19</td>
<td>-7.53</td>
</tr>
<tr>
<td>Language other than English</td>
<td>-0.01</td>
<td>-0.57</td>
<td>0.01</td>
<td>0.42</td>
</tr>
<tr>
<td>Married</td>
<td>0.02</td>
<td>0.74</td>
<td>-0.11</td>
<td>-3.50</td>
</tr>
<tr>
<td>Degree (86-96)/Computer at home (01)</td>
<td>-0.55</td>
<td>-11.90</td>
<td>-0.51</td>
<td>-15.68</td>
</tr>
<tr>
<td>Inner Band Locality (&gt;75 &amp; &lt;250kms)</td>
<td>0.03</td>
<td>6.13</td>
<td>0.02</td>
<td>5.66</td>
</tr>
<tr>
<td>Middle Band Locality (&gt;250 &amp; &lt;500kms)</td>
<td>0.04</td>
<td>6.36</td>
<td>0.03</td>
<td>6.48</td>
</tr>
<tr>
<td>Outer Band Locality (&gt;500kms)</td>
<td>0.04</td>
<td>6.73</td>
<td>0.02</td>
<td>3.64</td>
</tr>
<tr>
<td>Adjusted R squared</td>
<td>0.133</td>
<td>0.21</td>
<td>0.57</td>
<td>0.02</td>
</tr>
<tr>
<td>LGAs</td>
<td>590</td>
<td>591</td>
<td>591</td>
<td>498</td>
</tr>
<tr>
<td>Homeownership rate (mean)</td>
<td>0.66</td>
<td>0.67</td>
<td>0.67</td>
<td>0.66</td>
</tr>
<tr>
<td>Unemployment rate (mean)</td>
<td>0.09</td>
<td>0.12</td>
<td>0.09</td>
<td>0.07</td>
</tr>
</tbody>
</table>

Note: In model (1), the default tenure category is non-home owners. In models (2) and (3), the default tenure category is private renters.

Source: Authors’ estimates based on Australian Bureau of Statistics Basic Community Profiles.
To examine these questions we undertook a simple scatter plot analysis, which measured the increase in the unemployment rate between 1986 and 1991 for LGAs against the rate of home ownership. The unemployment rate increase averaged around 2.3 per cent. Likewise, we estimated the decrease in the unemployment rate from 1991 to 1996 for LGAs against the rate of home ownership. The unemployment rate decrease averaged around 2.4 per cent.

What this simple scatter plot analysis suggests (results available from the authors on request) is that a positive but relatively flat relationship exists between the rate of homeownership in a region in 1986 and the subsequent increase in unemployment to 1991. Likewise, the higher the home ownership rate in 1991, the smaller is the decline in the unemployment rate to 1996. But now the effect is very slight. These are trends in favour of the Oswald thesis but the evidence is weak compared with that mustered by Oswald.

Our results to this point have been based on variables defined for spatial units but we have yet to properly consider the actual spatial distribution of unemployment and home ownership in Australia. Figure 1 includes SLA-based maps of Australia and reveals that there are regional dimensions to the relationship between home ownership and unemployment, which have not been captured to this point. (We have also produced maps for Sydney and Brisbane which are available from the authors on request.)

For 1991, 1996 and 2001, each SLA in Australia was listed in one of four categories: High home ownership and high unemployment; High home ownership and low unemployment; Low home ownership and high unemployment; and Low home ownership and low unemployment.

Home ownership is here defined in terms of the combined home ownership and home purchaser rate. The designation of ‘high’ and ‘low’ is a purely relative thing. Mean home ownership and unemployment rates are determined and a SLA is designated as high home ownership if the home ownership rate is above the average and low home ownership otherwise. A corresponding process is applied to unemployment.

As is evident in the 1991 SLA figures, most inland SLAs had both low home ownership rates and low unemployment rates, although there are also several clusters of SLAs possessing low home ownership rates and high unemployment rates. In other words, inland SLAs generally experienced very poor labour market outcomes and low home ownership attainment rates. During the 1990s, most of inland Australia continued to experience both (relatively) low home ownership rates and low unemployment rates. In 2001, however, there was an increase in the number of SLAs in the low home ownership, high unemployment group, mainly in the NT, northern WA and far north Queensland.

SLAs with the highest home ownership rates are clustered near the capital cities and, very noticeably, along the eastern seaboard. What is of interest is that SLAs along the eastern seaboard with high home ownership rates also exhibit high unemployment rates. It is these SLAs which provide support for the Oswald thesis. Pockets of such SLAs are also evident in coastal regions north and south of Perth and near Adelaide. The explanation for such a concentration of high unemployment and high home ownership SLAs in the Eastern Seaboard and in some other coastal regions close to capital cities remains a point of interest but may reflect a number of forces including retirement patterns both in the older age categories with high home ownership rates and among younger people with high unemployment rates. Such a simple prognosis, however, requires further investigation.
Between 1996 and 2001 there was a decline in the number of eastern seaboard SLAs in the high home ownership, high unemployment group, with more SLAs in 2001 classified in the high home ownership, low unemployment group. This result, however, is only preliminary as 2001 Census labour force data is unavailable and we have utilised DEWR small area labour market data.

One further aspect of the national spatial distribution needs to be highlighted. This is the very large cluster of high home ownership and low unemployment SLAs in Southern Queensland, inland Victoria and in the agricultural wheat belt areas east of Perth in Western Australia.

5. Conclusion

Our examination of Oswald’s thesis using both cross-sectional analyses and simple plots of changes in unemployment does not corroborate Oswald’s strong findings that home ownership has been an important driving force behind increases in the natural rate of unemployment. Nor, however, can our findings support the alternative conclusion that home ownership is associated with lower rates of unemployment.

We have noticed a high level of parameter instability for the home ownership effects when we moved from Oswald’ simple regression model to that including a full set of controls. This undoubtedly reflects the high degree to which housing tenure effects are mixed in with other determinants of unemployment. The sign and level of significance of other variables such as educational qualifications, state effects, the married rate of a locality, age, and Australian-born and English language rates conforms to prior expectations concerning the relationship between these effects and unemployment. We would, therefore, be concerned with putting weight on simple regression model results that do not include key determinants of unemployment as controls. Moreover, it is clear that housing tenure effects must distinguish between all housing tenure types rather than a simple home ownership non-home ownership dichotomy.

In terms of our regional analysis, we have shown very strong differences between various parts of Australia. Patterns of home ownership and unemployment in the vast centre of WA, QLD and NSW are quite different from those in the mid-agricultural regions of these states and of Victoria. These regions in turn display quite different patterns from those in the Eastern seaboard and other coastal areas close to capital cities. Noticeably the regional patterns we have found cannot be simply captured by distance from capital city variables and are an area for fruitful further research on what determines the spatial distribution of housing and labour market outcomes.

One further area for future analysis is the development LGA panel data set and SLA panel data set which incorporates the soon to be released 2001 Census labour force data. Once this is made available, we shall estimate a fixed effects panel model for Australian regions for the 1986 to 2001 time period.
References


Oswald, A.J. (1999), The housing market and Europe’s unemployment: A non-technical paper, Warwick University.


Waddell, P. (1996), Accessibility and residential location, The interaction of workplace, residential mobility, tenure, and location choice, mimeo, University of Texas.
Relationship Between Home Ownership Rates and Unemployment Rates


Comparison with average for each State
- High home ownership, high unemployment
- High home ownership, low unemployment
- Low home ownership, high unemployment
- Low home ownership, low unemployment
- No data

Based on 2001 Statistical Local Area Boundaries
Source: ABS 2001 Census Basic Community Profile and *DEWR Small Area Labour Markets
Produced by: Lisel O'Dwyer
Flinders University, South Australia