Contents lists available at ScienceDirect



Labour Economics

journal homepage: www.elsevier.com/locate/labeco

## Home-ownership and the Labour Market: Evidence from Rental Housing Market Deregulation



#### Jani-Petri Laamanen

University of Tampere, FI-33014 University of Tampere, Finland

#### ARTICLE INFO

JEL classification: J64 R31 C26 Keywords: Home-ownership Unemployment Instrumental variables (IV) estimation

### 1. Introduction

The roles of housing markets and household credit in the economy have received increased attention after the onset of the recent economic crisis. It seems that the housing and mortgage markets play a more important role in macroeconomic fluctuations than previously thought (see e.g. the discussion in Mian and Sufi, 2010). However, not much is known about the relationships between the housing and mortgage markets and macroeconomic outcomes. Even less is known about the mechanisms underlying these relationships. One of the earliest and most often observed relationships is the positive correlation between the rate of home-ownership and unemployment. Since Oswald's (1996) influential paper documenting this relationship, several studies have either replicated Oswald's empirical analyses with other data sets or tested the theoretical hypotheses using microeconomic data. Several studies using regional or cross-country data lend at least some support to the claim that a higher regional home-ownership rate leads to a higher rate of unemployment (Blanchflower and Oswald, 2013; Costain and Reiter, 2008; Coulson and Fisher, 2009; Di Tella and MacCulloch, 2005; Green and Hendershott, 2001; Isebaert et al., 2015; Munch et al., 2006; Nickell, 1998; Wolf and Caruana-Galizia, 2015). Oswald (1996) hypothesises that this is caused by lower geographical mobility of home-owners relative to renters. Indeed, Battu et al. (2008) find that homeowners in the United Kingdom are less likely to experience a job change associated with a non-local residential move than renters. Munch et al. (2008) find that Danish homeowners have fewer local and non-local job-to-job changes than renters. The above findings have resulted in a call for policies that discourage home-ownership

#### ABSTRACT

Perhaps the most common finding relating housing to the labour market is that high home-ownership rates are associated with higher unemployment. In contrast, recent micro-evidence suggests that home-owners have relatively favourable labour market outcomes. We explore the effect of home-ownership on unemployment exploiting a rental housing market deregulation reform which created exogenous variation in home-ownership across regions, allowing us to avoid the endogeneity problem in earlier studies. While home-owners are less likely to experience unemployment, an increase in the home-ownership rate causes unemployment to rise. Externalities arising from consumption reductions and increased job competition may explain the conflicting evidence.

© 2017 Published by Elsevier B.V.

and encourage mobility. Recent research has found that the effects of deductability of mortgage interest payments on home-ownership rates are probably small (see e.g. Hilber and Turner, 2014 or Bourassa et al., 2013 and references therein). An extensively studied policy which has the potential to affect mobility is transfer taxation. The evidence on the effects of transfer taxes on housing transactions and mobility, and especially the relevance of these effects from the point of view of labour market is somewhat mixed (see e.g. Slemrod et al., 2017 and references therein).

The evidence on negative mobility effects of home-ownership is in line with Oswald's (1996) hypothesis. However, several studies show that despite being less mobile, homeowners have more favourable labour market outcomes than renters. Owning one's home is found to be associated with a lower unemployment probability (Coulson and Fisher, 2009), smaller risk of becoming unemployed (Leuvensteijn and Koning, 2004; Munch et al., 2008), shorter unemployment durations (Flatau et al., 2003; Munch et al., 2006) and higher wages (Munch et al., 2008). All of the aforementioned individual-level results are obtained when correcting for the presumed endogeneity of housing tenure status. Therefore, the findings of the micro-level studies seem to be in conflict with Oswald's empirical results and the results of the other papers that use aggregate data. Since the labour market outcomes of homeowners are generally more favourable than those of renters, regions with higher home-ownership rates should experience lower unemployment rates. This is generally not true, which means that there might be some other mechanisms at work than those identified by most studies thus far. In particular, the conflicting earlier micro-level and aggregate evidence points to externalities of home-ownership on the labour market.

http://dx.doi.org/10.1016/j.labeco.2017.08.005

0927-5371/© 2017 Published by Elsevier B.V.

E-mail address: jani-petri.laamanen@uta.fi

Received 30 September 2015; Received in revised form 13 June 2017; Accepted 10 August 2017 Available online 12 August 2017

In this paper, we use Finnish individual-level data to study the effects of home-ownership on unemployment experience and, more generally, the labour market. We allow home-ownership to have external labour market effects. More specifically, we allow labour market outcomes of individuals to be affected by the overall home-ownership rate in their region. Tests based on recent research are used to test new hypotheses on the mechanisms through which the externalities may work. To identify the causal effect of regional home-ownership on individual labour market outcomes, we exploit a rental housing market deregulation reform in the early 1990s. The reform produced a natural experiment that provides regional and time variation in home-ownership. Our results show that home-ownership has a significant positive external effect on unemployment experience, whereas, at the same time, homeowners are less likely to experience unemployment than non-owners. Our results are, thus, consistent with both the harmful and the beneficial labour market effects of home-ownership found in the earlier literature. In the light of the additional analyses, it is likely that debt-financed home-ownership hurts the local labour market by causing reductions in consumption demand. Although home-ownership has the potential to boost the labour supply of homeowners, the positive effects may be at least partly offset by displacement effects in the short-run.

The remainder of the paper is organised as follows. Section 2 provides some background information on Finnish housing and labour markets in the early 1990s. Section 3 describes the econometric model and the data, and Section 4 presents the results. Section 5 includes a discussion of the results and robustness checks. Finally, Section 6 concludes.

#### 2. Finnish housing and labour markets in the early 1990s

Over the recent decades, the home-ownership rate in Finland has been close to the average when compared to other European countries. Home-ownership rose during the 1970s and 1980s, reached a peak of about 72 % in 1988, and stayed high for a couple of years. Rent control laws had been effective for many decades (for a history of the rent control laws in Finland, see Lyytikäinen, 2006), probably contributing to increasing home-ownership through less supply of rental housing. In the 1980s, home-ownership rate rose for at least two additional reasons. First, household income increases were large due to strong economic growth. Second, financial liberalisation increased the availability of mortgages. Home purchases were typically financed by variable rate mortgages, and the mortgage interest payments were deductible from taxable income. Scanlon and Whitehead (2004) note that Finnish mortgage loan terms were exceptionally short by international standards in the early 1990s. This means that households, especially those with large mortgages, had high monthly repayment obligations.

There were large changes in the Finnish labour market in the early 1990s. Unemployment had fallen to its low since the late 1970s crisis by the end of 1980s but started rising rapidly in the early 1990s. The unemployment rate had risen from about 3.5 % in 1989 and 1990 to about 13 % in 1992. In the early 1990s, Finland had strong trade unions and high degree of unionisation. Wage rises were determined in centralised negotiations and were universally binding. The 1991 contract still included wage rises but in the 1992 contract, wages were frozen due to increasing unemployment. Based on Böckerman et al. (2010), it seems that the contracts in our period of investigation were at least partly binding. The resulting downward wage rigidity together with the fact that centralised contracts do not take into account regional differences in labour market prospects makes it likely that the effects of home-ownership on unemployment and employment were large and the effects on wages were small.

#### 3. Econometric model and data

Most of the earlier studies on the association between homeownership and unemployment have used either aggregate or individuallevel data. We combine an individual-level data set with region-level information on home-ownership to estimate probit models for whether an individual experienced unemployment during the year:

$$U_{iit}^* = \alpha hor_{jt} + \beta' X_{ijt} + \delta_{jt} + \epsilon_{ijt}, \qquad (1)$$

and

$$U_{ijt} = \begin{cases} 1, & \text{if } U_{ijt}^* > 0. \\ 0, & \text{otherwise.} \end{cases}$$

where  $U_{ijt}$  is the unemployment dummy variable, indicating whether individual *i* residing in county *j* experienced (any number of months of) unemployment during year *t*. Variable *hor* is the regional proportion of home-ownership. Further, we control for various individual characteristics *X*, including a dummy variable for living in an owner-occupied dwelling and a dummy for a mortgage loan to capture the impact of individual housing tenure.<sup>1</sup> We also include year dummies as well as county dummies. The error term of the model has two components:  $\delta_{jt}$  is a region-level error common to all individuals residing in county *j* in year *t*, and  $\epsilon_{ijt}$  is an individual-level error. Conditional on the region-level error, the expectation of the individual-level error is assumed to be zero.

By including regional-level home-ownership in our model, we allow regional home-ownership to have an effect on unemployment spell probability of an individual, given her own housing tenure. Although the origin of this external effect is unclear, there may be several different reasons for it. After first identifying the externality, we discuss the possible interpretations of it and perform analyses that shed light on the mechanisms involved.<sup>2</sup> Since we are interested in the causal effect of regional home-ownership on unemployment experience, we need to take into account possible endogeneity of regional home-ownership. The results in Oswald (1996) come from simple regional-level regressions, and the author argues that his coefficient estimates may understate the positive causal effects. Assuming exogenous regional home-ownership would yield similarly biased estimates in our study as well.

Theoretically, regional home-ownership depends on the supply of and demand for owner-occupied housing. The endogeneity of the homeownership proportion probably arises from the fact that the regional demand for owner-occupied housing depends positively on the employment of individuals residing in the region. Regional labour supply and demand shocks ( $\delta_{it}$ s in our model) are, thus, likely to induce a negative association between home-ownership and unemployment experience. Controlling for labour supply and demand factors would alleviate the endogeneity problem and reduce the downward bias in the coefficient of regional home-ownership. Thus, it is not surprising that many of the earlier studies that include a broad range of regressors in their unemployment equation estimate a positive coefficient on the home-ownership variable (Costain and Reiter, 2008; Di Tella and MacCulloch, 2005; Nickell, 1998). However, as Oswald (1996) points out, instrumental variables are needed to obtain an unbiased estimate of the causal effect. Appropriate instruments for regional home-ownership are rare, and, therefore, it is likely that the earlier literature has been unable to identify the causal effect reliably. To our knowledge, the papers by Coulson and Fisher (2009) and Wolf and Caruana-Galizia (2015) are the only studies that use instrumental variables for regional home-ownership rate. Coulson and Fisher (2009) use both microdata and regional-level data from the United States. Their instrument in regional-level analyses is the state marginal tax rate applied to mortgage interest deduction.<sup>3</sup>

<sup>&</sup>lt;sup>1</sup> Since the data do not include mortgage loan information the mortgage dummy equals one if an individual has claimed mortgage interest deduction and zero otherwise.

<sup>&</sup>lt;sup>2</sup> Attempts to empirically identify externalities have been made in the literature on the effects of education (see e.g. Acemoglu and Angrist, 2000). Externalities in the labour market have been discussed and estimated by Crépon et al., 2013, Lalive et al. (2015), Ferracci et al. (2014), Gautier et al. (fothcoming), and Blundell et al., 2004.

<sup>&</sup>lt;sup>3</sup> In their individual-level analyses, Coulson and Fisher (2009) use the tax rate instrument, the percentage of households in the region living in multifamily housing, and sex composition of the children in the family as instruments for individual-level homeownership.

# دريافت فورى 🛶 متن كامل مقاله

- امکان دانلود نسخه تمام متن مقالات انگلیسی
  امکان دانلود نسخه ترجمه شده مقالات
  پذیرش سفارش ترجمه تخصصی
  امکان جستجو در آرشیو جامعی از صدها موضوع و هزاران مقاله
  امکان دانلود رایگان ۲ صفحه اول هر مقاله
  امکان پرداخت اینترنتی با کلیه کارت های عضو شتاب
  دانلود فوری مقاله پس از پرداخت آنلاین
  پشتیبانی کامل خرید با بهره مندی از سیستم هوشمند رهگیری سفارشات
- ISIArticles مرجع مقالات تخصصی ایران