Home-ownership, unemployed's job search behavior and post-unemployment outcomes

Marco Caliendo [a,b,c,d], Anne C. Gielen [e,b], Robert Mahlstedt [b,a,*]

[a] University of Potsdam, Germany
[b] IZA, Germany
[c] DIW, Germany
[d] IAB, Germany
[e] Erasmus University Rotterdam, Netherlands

HIGHLIGHTS

- We examine the effect of home-ownership using detailed survey information on a fresh sample of entries into unemployment.
- Home-ownership does restrict the geographic area in which unemployed search for a new job.
- Homeowners do not compensate this restriction by more intensive or different search behavior.
- Future employment prospects are not negatively affected by home-ownership.
- Home-owning unemployed find better quality re-employment jobs than their renting counterparts.

ARTICLE INFO

ABSTRACT

Using detailed German survey data, we show that home-owners freshly entering unemployment are less geographically mobile than their renting counterparts. However, they do not compensate their restricted mobility by more intensive or different search behavior and do not face negative effects on labor market outcomes one year later.

© 2015 Elsevier B.V. All rights reserved.

1. Introduction

Labor market mobility is a highly debated topic in both academia and politics. In the face of increasing competition due to globalization, increasing labor market flexibility is high on the political agenda, and various countries subsidize mobility as part of their active labor market policies (ALMP). One potential limitation for labor market flexibility could be home-ownership if home-owners are less willing to move due to higher transaction costs of selling and buying their house. This aligns to the well-known finding of a positive relationship between home-ownership rates and aggregate unemployment rates by Oswald (1999).[1] Although home-ownership is often claimed to also have positive externalities for the community (e.g. DiPasquale and Glaeser, 1999; Glaeser and Shapiro, 2003; Coulson and Fisher, 2009), the adverse effects might become very severe in times of economic crises. In

---

* Correspondence to: IZA - Institute for the Study of Labor, Schaumburg-Lippe-Str. 5-9, 53113 Bonn, Germany. Tel.: +49 228 3894 511; fax: +49 228 3894 510.

E-mail addresses: caliendo@uni-potsdam.de (M. Caliendo), gielen@ese.eur.nl (A.C. Gielen), mahlstedt@iza.org (R. Mahlstedt).

---

[1] Note that micro data cannot unanimously confirm this (Green and Hendershott, 2001; Coulson and Fisher, 2002; Munch et al., 2006; Battu et al., 2008; van Vuuren, 2009).

fact, a recent study by Blanchflower and Oswald (2013) has found evidence for negative externalities resulting from lower levels of labor mobility, longer commuting times and fewer new businesses. Furthermore, during the recent economic crisis, housing prices have fallen dramatically in the US, which may have led to a "lock in" effect due to financial constraints faced by those whose housing debt exceeds the market value of their homes, although a recent study by Valetta (2013) did not find evidence for this.

If home-ownership restricts individuals' geographic mobility, and hence limits the area in which they can look for a job, unemployed home-owners may change their search behavior in order to improve the chance of finding a new job. Earlier studies (e.g. Munch et al., 2006; Morescalchi, 2014) have concluded that home-ownership is associated with lower reservation wages, lower search intensity and different search methods. This clearly can have an effect on future re-employment probabilities, as well as the quality of the re-employment job, and additional policies might be needed to address these problems.

In this paper we investigate how home-ownership affects unemployed's job search and future re-employment outcomes, including unemployment duration, as well as re-employment wages and job satisfaction as indicators of the subsequent job quality. This is an important contribution to the literature as we are not aware of any other study directly observing job search characteristics and labor market outcomes simultaneously. Moreover, using the *IZA Evaluation Dataset Survey*, which is specifically designed to shed more light on the transition process from unemployment to employment (see Arni et al., 2014, for details), allows us to control for a large set of individual, household and regional characteristics and therefore reduces the impact of potential selection issues compared to previous studies.

2. Institutional settings and data

Increasing labor market flexibility is high on the political agenda in Germany. In 2007/2008, about 330,000 unemployed individuals received some form of mobility assistance ("*Mobilitätshilfe*", 53, SGB III) from the Federal Employment Agency. This includes e.g. relocation assistance, travel and commuting subsidies and subsidies to start a new household. All these components aim to remove any financial restrictions opposing starting a new job. Although the low home-ownership rate of 44% (compared to a European average of 71% De Graaf et al., 2009) would suggest that the German labor market is relatively flexible compared to other European countries, those individuals owning a house might be more immobile than those in other countries due to the institutions regarding property ownership and property transfer: property prices, on the one hand, have been very stable in Germany (so selling a home does not yield profits to cover moving costs as it does in other countries), and on the other hand do substantial fees for real estate agents (3%–5%) and property transfer taxes (4.3%–4.7%) limit geographical mobility in Germany.

The *IZA Evaluation Dataset* contains survey information on a random sample of monthly unemployment inflows between June 2007 and May 2008. The key feature of the dataset is that initially 17,396 individuals were interviewed shortly (between 7 and 14 weeks) after they became unemployed and were asked a variety of non-standard questions which we will exploit here. Of those, 8,915 individuals were re-interviewed one year after entering unemployment, such that we can study their short-run employment outcomes. Our final estimation sample comprises 6,940 individuals who are still observed during the second interview and who are actively searching for employment in the first wave.[2]

The major advantage of the dataset is that by focusing on a sample of fresh entries into unemployment and investigating how home-ownership status affects their job search behavior and post-unemployment outcomes, the influence of selectivity bias due to different inflow probabilities into unemployment (Heckman and Borjas, 1980; Theodossiou and White, 1994) is reduced. Note that the inflow into unemployment is less likely to depend on home-ownership in Germany, because of the high replacement rate in unemployment insurances which do not give an incentive to avoid a (short) unemployment spell by accepting any random job offer that comes along in order to be able to pay the monthly mortgage payments.

3. Estimation results

Descriptive evidence suggests that home-owners are less likely to apply for distant vacancies, have higher reservation wages and send out less applications compared to other unemployed, but these differences do not seem to translate into different employment probabilities in wave 2. However, as shown in Table 1 home-owners and other unemployed differ in various aspects. Besides having direct consequences for the labor market performance, these differences might affect households preferences for labor market mobility and their likelihood of home-ownership simultaneously.[3] Therefore, we exploit a propensity score matching strategy similar in spirit to the papers by Frölich (2007); Nopo (2008) or Caliendo and Lee (2013). Our aim is to make unemployed home-owners and other unemployed individuals as comparable as possible based on an extensive set of observable variables, including education, socio-economic and household characteristics, labor market histories, regional information and usually not observed personality traits. Based on that, differences in outcome variables among unemployed can more easily be attributed to home-ownership.

First, we estimate the probability of being a home-owner with a logit model. The results indicate that there are significant differences between home-owners and other unemployed.[4] Based on the estimated propensity score we apply a kernel matching procedure for two reasons. First, it achieves a lower variance by using more information to construct the counterfactual outcomes. Second, it allows us to circumvent the problems associated with nearest-neighbor matching (Abadie and Imbens, 2008). To be more specific we use an Epanechnikov kernel with a bandwidth of 0.06.[5]

The matching results presented in Table 2 show that the matching procedure is very successful in balancing the characteristics of both groups.[6] Panel A shows that home-owning unemployed do not differ significantly in terms of search intensity or type of search from their non-home-owning counterparts. They are, however, indeed restricted in their mobility; not only do they report to be less willing to move for a new job, also their actual moving behavior is limited compared to others.[7] Hence, they search for jobs within a

---

[2] Selected summary statistics are shown in Table 1. More information about the data and detailed descriptive statistics can be found in Caliendo et al. (2015).

Detailed information on data collection and analysis of the panel attrition can be found in Arni et al. (2014).

[3] For example, Van Leuvensteijn and Koning (2004) and Munch et al. (2008) have shown that home-owners in general have a lower probability of becoming unemployed, while Winkler (2010) finds that home-ownership has a large negative effect on the probability of moving in response to a labor market shock.

[4] More detailed information on the logit results can be found in Caliendo et al. (2015).

[5] Results are not sensitive to the choice of the kernel, bandwidth or matching algorithm. Sensitivity results are available on request from the authors.

[6] The mean standardized bias (MSB) is below 1% for the first and second panels, and below 3% for the third panel (see Caliendo and Kopeinig, 2008, for details on matching quality criteria).

[7] This corresponds to earlier findings for the UK by Battu et al. (2008).