

Home ownership, labour markets and the economic crisis

Sylvain Bouyon*

ECRI Commentary No. 14, 15 June 2015

In recent decades, a growing body of academic literature has focused on the possible negative effects of high levels of home ownership, especially on labour markets. More-than-optimal levels of home ownership may impede the mobility of workers, resulting in higher unemployment rates in some European regions. Against that backdrop, a simple model was devised to test the relationship between home ownership, mobility and unemployment. Recent macroeconomic data published by Eurostat suggest that both the variables of mobility and home ownership have had a significant impact on the dynamics of unemployment rates across the EU28.

Rates of home ownership – their increase or, at least, maintenance, have long been on the political agenda in many member states, because of the numerous benefits often attributed to owning a home. On the one hand, owning a house should trigger a certain number of social benefits, such as better outcomes for children, community engagement and steadier voting behaviour (Andrews et al., 2011). The promotion of home ownership among young households has also been justified to ensure that these households will not be compelled to spend large amounts on rent or mortgage repayments once they become pensioners. Home ownership is often associated with economic advantages such as being a vehicle for asset and wealth accumulation and as a driver of economic growth.¹

Nevertheless, in recent years, a growing body of literature has focused on the possible negative effects of high levels of home ownership, especially on labour markets. More-than-optimal levels of home ownership may impede the mobility of workers, resulting in higher unemployment rates in some European regions. By home ownership, we mean ‘owner

* Sylvain Bouyon is a CEPS-ECRI Research Fellow.

¹ As regards economic growth, in the context of the output approach for the calculation of GDP, higher demand for home ownership is likely to boost the value added of some key economic sectors, such as the construction and banking industries (mortgage loans, consumption loans, etc.). By adopting the expenditure approach of GDP, raising home ownership rates should contribute to boosting gross fixed capital formation (in the case of residential investment) and households’ private consumption. Growth in the latter results from some combination of increases in the homeowner’s perceived wealth and the relaxation of borrowing constraints on the back of improving collateral.

occupied rate' (OOR), namely the share of a country's population that lives in a dwelling they own. OOR and home ownership are used interchangeably in this paper.

In theory, the relationship between home ownership and the labour market can be based on two effects with opposite senses of causality: the 'poverty effect' and the 'mobility effect'. Regarding the former, rising unemployment should plunge more households into financial difficulty. On the one hand, more home owners with a mortgage find it hard to pay off their loans and are more likely to sell their asset. Some newly unemployed people who own a house but do not have a mortgage to pay might also be more prone to convert their asset into cash, due to their loss of income. Against that backdrop, OORs should decrease ('poverty effect').

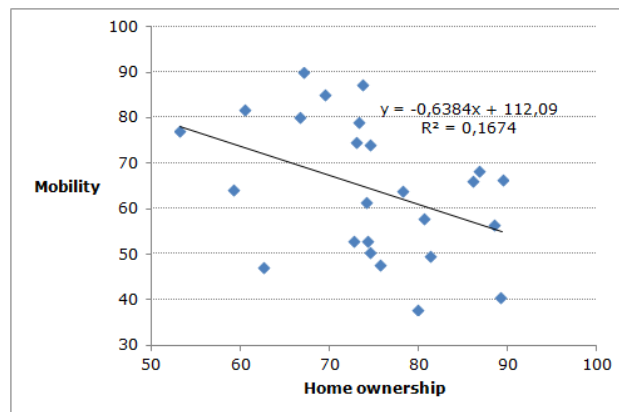
In the meantime, based on both microeconomic and macroeconomic data, there is considerable evidence in the empirical literature that owners tend to move less frequently than renters, even after controlling for household and locational characteristics (i.e. Rohe et al., 1994 or Böheim et al., 2002). Several authors have shown that the lower mobility resulting from high levels of home ownership creates friction on the labour market, thereby contributing to higher levels of unemployment (Patridge et al., 1995, Nickell, 1998, Oswald, 1999 and Cochrane et al., 2008). Some of these papers conclude that the differentiation in home ownership across countries might have contributed significantly to the differentiation in unemployment rates. For instance, based on cross-country and cross-regional correlations, Oswald (1999) suggests that a 10 percentage point increase in home ownership is associated with a 1.3 percentage point increase in unemployment. Nevertheless, other authors contradict the theory of a significant negative impact of home ownership on unemployment or challenge it, at least in part (Green et al., 2001; Flatau et al., 2003; Glaeser et al., 2003, and Coulson et al., 2009).

More recently, Head et al. (2012) developed a model whose purpose was to study the interactions among geographical mobility, unemployment and home ownership in an economy. The decision of home-owners to accept job offers from other cities depends on how quickly they can sell their houses (i.e. the houses' liquidity), which in turn depends on local labour market conditions. Consequently, home-owners accept job offers from other cities at a lower rate than do renters, generating a link between home ownership and unemployment both at the city level and in the aggregate. When calibrated to match aggregate US statistics on mobility, housing, and labour flows, the model of Head et al. (2012) predicts that the effect of home ownership on aggregate unemployment is small. When unemployment is high, however, changes in the rate of home ownership can have economically significant effects.

Considering macroeconomic data in the EU28, some regressions suggest that mobility, measured as the share of the population of a country that moves at least once during a lifetime, and home ownership (measured by Eurostat as the "owner occupied rate") might be negatively correlated (around 17%, as shown in Figure 1). High home ownership might then be an impediment to the mobility of citizens, including workers.

On the other hand, low mobility might imply that households have high incentives to invest in home ownership. Therefore, it seems more logical to consider an interaction between mobility and home ownership rather than a unique relation of causality.

Figure 1. Home ownership and mobility (in %)



Note: Mobility is measured as the share of a country's population that moves at least once during a lifetime. This data was published in 2007.

Sources: Eurostat and Eurobarometer 64.

In order to estimate the impact of both the level of mobility and the level of home ownership on unemployment dynamics, we need to consider other possible drivers behind unemployment rates. Okun's Law quantifies the relationship between changes in output and the change in the unemployment rate. Typically, as revealed by the economic crisis triggered by the financial meltdown of 2008-09, unemployment is very reactive to a decrease in output, while output recovery following a significant slump impacts unemployment rates with significant lags. To a certain extent, this significant relationship between growth in GDP and growth in unemployment mirrors the 'economic cycle component' of employment dynamics. Given their low variations over the short and medium term, mobility and home ownership might be perceived as structural rather than cyclical components of unemployment.

The academic literature generally shows that higher levels of educational attainment tend to reduce the risk of unemployment, especially in the long term. Numerous papers confirm the hypothesis that low educational attainment has a negative impact on long-term unemployment, which is examined as a proxy of (lack of) employability (Burrige et al., 1981, Simon, 1988, Partidge et al., 1995, Garrouste et al., 2010). In the present model, the level of education of a country is approached through the "share of adult population with upper secondary or tertiary education (age group 25-64)", published annually by Eurostat.

Eurostat also provides the data on real GDP and unemployment rates (via the labour force survey), while the level of mobility is published by the Eurobarometer 64. Given the relatively low variations of home ownership rates over time, the model integrates only two periods of four years each: 2006-09 and 2010-13. For each period the cumulative variations in % of real GDP; the cumulative variations in percentage points in unemployment rates; the average level of home ownership; the level of mobility (measured by the share of a country's population that moves at least once during a lifetime); and the share of the population with upper secondary or tertiary education are included.

Simple panel data regressions with two periods and a sample of 25 of the EU28 countries tend to confirm the robust negative relationship between GDP growth and unemployment variation, both in the EU28 and in sub-groups of EU28 countries. However, the index used to control for educational attainment does not have any significant impact on unemployment rates.

Both the variables used for mobility and home ownership seem to have the expected significant impact on unemployment rates in the EU28, thus revealing how low mobility and high home-ownership might create friction on the labour market. The model suggests that for an increase of 10% in the level of home ownership, the unemployment rate increases by broadly 1 percentage point. Countries displaying home ownership of around 75-80% are likely to perform poorly in terms of unemployment when compared to countries with home ownership of around 60-70%. In the PIIGS (Greece, Ireland, Italy, Portugal and Spain), relatively high levels of ownership prior to the crisis might have reinforced the deterioration of the labour markets sparked by the economic crisis and the cumulative output contraction in recent years. For example, in some European areas where a specific industry played a key labour force role before the crisis, then collapsed as a result of the credit crunch and the poor demand for products, unemployment might have increased because workers owning their homes were unable to move to an area offering more jobs. This interpretation makes all the more sense since home ownership in PIIGS has stagnated somewhat since 2009, except in Ireland, where it has fallen dramatically.

On the other hand, while it had the lowest OOR during the whole studied period and recorded stagnation in this OOR, Germany was the only country in the sample to record decreases in unemployment rates during the crisis. More surprising, despite displaying a relatively high OOR in 2007, the UK has seen low increases in unemployment in comparison with its southern counterparts (the domestic unemployment rate reached a maximum of 8.1% in 2011 (2.8 pps above its 2007 level) and then decreased to 7.6% in 2013 and 6.1% in 2014. In Spain, the national unemployment rate stood at 8.2% in 2007, 21.4% in 2011, 26.1% in 2013 and 24.5% in 2014). One possible explanation is to consider the evolution of home ownership in 2006-13. While the Spanish OOR contracted by 'only' -2.9 pps over the period, the corresponding figure for the UK was -8.7 pps. To a certain extent, the reduction in home ownership in the UK might have contributed to a higher mobility of the labour input, hereby reinforcing the flexibility of the labour market. In other words, workers in the UK might have been more apt to supply work where needed.

Table 1. Determinants of unemployment rates (2006-13) (2 periods: 2006-2009 and 2010-2013)

Independent variables	EU28	EU28	EU15	NMS12
Home ownership	0.103*** (0.039)		0.183** (0.099)	0.06 (0.081)
GDP growth	-0.487*** (0.051)	-0.511*** (0.056)	-0.492*** (0.08)	-0.476*** (0.08)
Education	-0.010 (0.025)	0.005 (0.027)	0.017 (0.047)	-0.008 (0.037)
Mobility		-0.062** (0.028)		
Constant	-3.468 (3.417)	7.053*** (2.247)	-10.862 (9.126)	-0.26 (7.172)
R-squared (overall)	0.694	0.672	0.680	0.699
Number of countries	25	24	15	10
Number of observations	49	48	29	20

Notes:

***, ** and * denote significance at 1%, 5% and 10%, respectively.

Variations in unemployment rates are in percentage points.

GDP growth is in percentage and home-ownership is in levels and percentage.

Education and mobility are in levels.

References

- Andrews, D. and A.C. Sanchez (2011), "The evolution of homeownership rates in selected OECD countries: demographic and public policy influences", *OECD Journal: Economic Studies*, Vol. 2011/1.
- Böheim, R. and M.P. Taylor (2002), "Tied down or room to move? Investigating the relationships between housing tenure, employment status and residential mobility in Britain", *Scottish Journal of Political Economy*, Vol. 49(4), pp. 369-392.
- Burridge, P. and I. Gordon (1981), "Unemployment in the British metropolitan labour areas", *Oxford Economic Papers*, Vol. 33(2), pp. 274-297.
- Cochrane, W. and J. Poot (2008), "Homeownership and the New Zealand labour market", in P.S. Morrison (ed.), *Labour, Employment and Work in New Zealand*, Proceedings of the Twelfth Conference, Victoria University of Wellington.
- Coulson, N.E. and L.M. Fisher (2009), "Housing tenure and labor market impacts: the search goes on", *Journal of Urban Economics*, Elsevier, May, Vol. 65(3), pp. 252-264.
- Flatau, P., M. Forbes, P.H. Hendershott and G. Wood (2003), "Homeownership and unemployment: the roles of leverage and public housing", NBER Working paper No. 10021, National Bureau of Economic Research, Cambridge, MA.
- Garroute, C., K. Kozovska and E.A. Perez (2010), "Education and long-term unemployment", JRC Scientific and Technical Reports, paper prepared for the third edition of the workshop on Geographical Localisation, Intersectoral Reallocation of Labour and Unemployment Differentials (GLUNLAB3), RCEF, 10 June.
- Glaeser, E.L. and E.F.P. Luttmer (2003), "The misallocation of housing under rent control", *American Economic Review*, Vol. 93(4), pp. 1027-1046.
- Green, R.K. and P.H. Hendershott (2001), "Home-ownership and unemployment in the US", *Urban Studies*, Vol. 38(9), pp. 1509-1520.
- Head, A. and H. Lloyd-Ellis (2012), "Housing liquidity, mobility and the labor market", *Review of Economic Studies*, Vol. 79(4), pp. 1559-1589.
- Nickell, S.J. (1998), "Unemployment: questions and some answers," *Economic Journal*, Vol. 108(448), pp. 802-816.
- Oswald, A.J. (1999), "The housing market and Europe's unemployment: A non-technical paper", unpublished, University of Warwick.
- Patridge, M.D. and D.S. Rickman (1995), "Differences in state unemployment rates: the role of labour and product market structural shifts", *Southern Economic Journal*, Vol. 62(1), pp. 89-106.
- Rohe, W.M. and M.A. Stegman (1994), "The impacts of home ownership on the self-esteem, perceived control and life satisfaction of low-income people", *Journal of the American Planning Association*, Vol. 60(1), pp. 173-184.
- Simon, C.J. (1988), "Frictional unemployment and the role of industrial diversity", *Quarterly Journal of Economics*, Vol. 103(4), pp. 715-728.