Paul C. Cheshire and Christian A. L. Hilber

Housing in Europe: a different continent- a continent of differences

Article (Accepted version)
(Refereed)

Original citation:
Cheshire, Paul C. and Hilber, Christian A. L. (2018) Housing in Europe: a different continent- a continent of differences. Journal of Housing Economics. ISSN 1051-1377 (In Press)

DOI: https://doi.org/10.1016/j.jhe.2018.11.001

Housing in Europe: a different continent – a continent of differences

Paul C. Cheshire [1]
Christian A.L. Hilber [2 *]

Abstract

This article provides the introduction to the special issue on 'Housing in Europe: a different continent – a continent of differences' in the Journal of Housing Economics in 2018. Europe is a large continent with a long and rich history, consisting of around 50 countries with vastly different institutional settings and government policies for housing and an abundance of quasi-natural experiments. Some countries have remarkably rich public data and some institutions and policy assumptions are all but the opposite of those familiar to US institutions. In this introduction we briefly outline the seven papers of this issue that exploit in one way or another this extraordinary richness for research. Each paper provides novel insights and has important implications. Collectively, they illustrate the potential opportunities for new and exciting research on housing in Europe.

JEL Classification: E4, E5, G2, H2, H7, N14, P2, P3, R1, R2, R3, R5

Keywords: Europe, land and housing markets, institutional settings, regulation, affordability, tenure, urban sprawl, social housing, privatization, relationship lending, monetary policy, credit conditions.

[1] Department of Geography and Environment, London School of Economics, Houghton Street, London, WC2A 2AE, UK, p.cheshire@lse.ac.uk

[2] Department of Geography and Environment, London School of Economics, Houghton Street, London, WC2A 2AE, UK, c.hilber@lse.ac.uk

[*] Corresponding author

Introduction

This is a special issue on housing and housing economics in Europe. A focus on Europe has two substantial advantages in our view. Europe contains more than twice as many people and has a significantly bigger economy than the US, but the great bulk of housing research has been done on US data and so has been framed by US institutions. This reflects both the large size of the US community of scholars and also data availability. However, while the normal principles of economic analysis and methodology apply to housing, as to other goods and services, housing is uniquely subject to both government regulation and intervention: and market outcomes are conditioned on incentives and other constraints either imposed intentionally or accidently by policy on housing; or, indeed, often, by non-housing policies. So while markets work in similar ways across countries, housing outcomes differ and differ substantially.

The second, and perhaps intellectually more appealing justification for having a special issue focused on Europe, is that not only is Europe very different to the US in terms of its institutional settings and government policies for housing but, importantly, there is much more variation across European countries than there is within the US. In principle, this has advantages for research because it allows researchers not only to exploit across country institutional and legal differences but it also provides potential opportunities to exploit many more natural experiments and boundary discontinuities. We have a careful paper by Schultz and Wersing (2018) exploiting the re-unification of Germany, as an example.

In practice, this advantage for research can be offset by problems of data availability and comparability. There are European countries, however, with quite remarkably rich public data – particularly Scandinavian countries. Two papers in this issue are from Scandinavia, covering specific features of housing markets in Finland (Eerola and Saarimaa, 2018) and Norway (Larsen, 2018): small countries with exceptional data.

The strong national differences in institutional settings, which give rise to a wide variance, also have substantial disadvantages for pan-European research. There is really very little pan-European data. There is, for example, no Europe-wide micro data on the most basic variables of all: house prices and rents. Yet, it is not all bad. There are some pan-European datasets, such as the EU Labour Force Survey or the European Community Household Panel (though the latter was discontinued in 2001). But the most useful for housing and land use are GIS-satellite data such as the Corine Land Cover data. This provides the basis for the paper by Ehrlich, Hilber and Schöni (2018) analyzing 'urban sprawl' and its relationship to country-specific institutional settings.

The variation in institutional arrangements for housing is illustrated in the much greater importance of the rental sector in some European countries such as Germany or Switzerland compared to the US; but much more obviously, the much greater importance of the social housing – typically social rental – sector in many European countries. Two of the papers in this issue examine aspects of the social housing sector. This is substantial in the Netherlands – even in the late 1990s only about 15 percent of Amsterdam's housing stock was owner-occupied – but is declining and being sold off: the paper by Rouwendal, Keus and Dekkers (2018) analyzes the impact of this sell off on neighborhood house prices and gentrification in Amsterdam. The paper by Eerola and Saarimaa (2018) exploits both the extraordinarily rich Finnish data and the importance of subsidized housing in Finland.

We can broadly categorize the papers in this special issue into three themes: (i) the importance of the institutional setting for housing market outcomes, (ii) the interrelationship between housing policies and affordability and (iii) the role of financial markets and financial institutions.

The Importance of the Institutional Setting for Housing Market Outcomes

The importance of the institutional setting for housing market outcomes is highlighted in the first two papers. Ehrlich, Hilber and Schöni (2018) is our only pan-European paper and is able to exploit cross-country variation in institutional settings to good effect. It uses the Corine Land Cover satellite data to analyze across country differences in 'urban sprawl' - the spatial dispersion of settlements - and how those differences relate to variations in the restrictiveness of land use regulation and in turn to differences in the price and affordability of housing. Using a panel dataset to estimate alternative measures of settlement dispersion for 36 countries, the authors reveal very significant differences in its incidence across countries with 'sprawl' particularly a feature of Central and Eastern European countries and least evident in the UK and some other Northern European countries. They also find that the incidence of urban sprawl is strongly and negatively associated with real house price growth, suggesting a trade-off between urban containment and housing affordability. Interestingly, they find that urban sprawl is strongly associated with more decentralized governmental and fiscal systems.

It is probably not a coincidence that the one really pan-European paper uses satellite data: one of the plagues of Europe is the politicization of national data definitions where definitions are not internationally standardized. This is a particular problem for small area data when sample size also comes into play. For example, in the European Labour Force survey, the 'standard' sample size (of individual households) does not allow reliable estimates for geographical units even as big as so-called NUTS Level 3 regions – the 96 départements of Metropolitan France, for example. Some countries pay to have an enhanced sample. Even then, sample size precludes small area analysis and anyway many countries do not pay. Satellite data, however, comes free of political baggage about boundaries or differing national definitions of jurisdictions or cities.

Schultz and Wersing (2018) is a fine example of a study that exploits a quasi-natural experiment to explore the role of changing institutional settings for the functioning of land and property markets. Their study is not the first to explore the economic impacts of the German reunification. The most prominent such study is Ahlfeldt *et al.* (2015) who structurally estimate agglomeration and dispersion forces using micro-geographic data in Berlin prior to and after World War II, and prior to and after the fall of the Berlin Wall. The focus of Schultz and Wersing instead is on the land and housing markets in the west and the east of the city, after the fall of the Berlin Wall in 1989. Prior to the reunification-shock, property rights in East Berlin's (and East Germany's) land market were heavily curtailed through expropriation, forced administration, rationing, and restrained marketability. When the Berlin Wall fell, well-defined property rights had to be re-established. Schultz and Wersing (2018) carefully document the revival process of East Berlin's land market, using West Berlin's land market as comparator. Interestingly, the authors document that East Berlin's land market quickly revived and converged to

West Berlin's property market, both with respect to the housing stock composition as well as its pricing behavior.

Housing Policies and Affordability

As was noted above, social housing is much more important in most European countries than it is in the US. Two papers focus on very different aspects of social housing. The first, by Rouwendal, Keus and Dekkers (2018) examines a particular consequence of its sale. The other by Eerola and Saarimaa (2018) analyzes the results of alternative means of providing it: directly and by targeted subsidies to households.

The Netherlands has a large proportion of housing as rental: there are large stocks in both the private and the public sectors and all has been rent controlled since WWII. In 1995 in Amsterdam about 85 percent of the total housing stock was rental with 45 percent social rent. Rouwendal and co-authors (2018) analyze the effects of a policy introduced in the mid-1990s to sell off the rental – especially the social rented – houses. In 1998 the city of Amsterdam agreed with the social housing associations to sell off 28,575 houses by 2010, increasing the proportion of the housing stock in owner occupation to 35 percent. This paper focuses on the impact this, and the parallel policy of selling private rental housing, had on local house prices and neighborhood composition. The authors control for area fixed effects, distinguish between short and long-term impacts and address the potential endogeneity of the sale of rental housing. This helps them distinguish between the supply effects of increased stock locally available from the gentrification effect: neighborhoods became more attractive to buyers as stock was transferred into owner occupation. The 'supply' effect would be expected to reduce houses prices, all else equal while, the 'gentrification' effect would increase local house prices. They find that the net effect on house prices, strongest in more central neighborhoods, was dominated by the 'gentrification' effect: local house prices increased with the increasing sale of rental stock.

Finland is a rich and very equal country and Helsinki is both far its biggest and richest city. There are two separate systems to assist access to housing. There is a system of direct provision both by housing associations and municipal building. Together these account for some 20 percent of Helsinki's total housing stock: then there are housing allowances. These are means tested and available on that basis to the adult population regardless of tenure but there are additional and separate schemes for pensioners and for students. In practice 95 percent of housing allowances go to renters. Both these housing assistance programs are supposed to be implemented in ways that reduce the spatial concentration of poorer households.

Eerola and Saarimaa (2018) exploit the extraordinarily rich data available to them to analyze and compare the effects of the two programs in terms of their respective success in targeting poorer households and in avoiding the segregation of the poor. They conclude that the housing allowances ('vouchers') are more successful on both counts.

Financial Markets and Financial Institutions

Not only housing policies differ vastly across Europe but also financial institutions and housing finance products. The differences to the US in how households access credit for housing purchases are striking.

Whereas in the US, government-sponsored enterprises (Fannie Mae and Freddie Mac) aim to create a liquid secondary market for mortgages, such comparable institutions do not exist in Europe. This has implications for the available mortgage products. Rather than 30-year fixed rate mortgages (made possible through securitization), European mortgage markets tend to be dominated by a mix of short-run fixed and long-run flexible terms.

One very particular form of lending that is widespread in Continental Europe – especially in Germany, Austria, France or the Czech Republic – is the so called 'contractual saving for housing' (CSH). It works as follows: during the contractual savings stage, households regularly transfer savings to the contract-providing institution over an agreed time span, thus revealing credit-relevant information. After that, a housing loan—typically with a contractually fixed interest rate—is made contingent on the savings behavior of the household. CSH can be considered as a form of 'relationship lending' that is based on information production about borrowers in the preceding saving relationship. It is effectively the antithesis to secured lending, which dominates in the US. Relationship lending does not make much sense in a world where loans can be perfectly secured. However, the more imperfect and risky collateral is, and the more expensive it is for the lender to collect on the collateral, the more important private information about a borrower's characteristics becomes.

The contribution of Kirsch and Burghof (2018) is to demonstrate in a theoretical setting under what conditions and why relationship lending may be superior to arm's length (secured) lending. Employing a multi-period partial equilibrium model of lending to households to compare savings-linked relationship lending with arm's-length lending, they demonstrate that in markets of low time preference or low average borrower quality, CSH may indeed lead to an increase in the allocative efficiency of the financing market of housing compared to arm's length lending. In their framework, this is because savings-linked relationship lending helps to overcome financing market failure due to adverse selection. Their theoretical finding provides a novel explanation for synergies between the two main activities of traditional commercial banks: deposit taking and lending.

The final two articles focus on the extreme housing booms and busts that occurred in some European countries over the last two decades and the role that monetary policy and credit conditions played in this. The careful study by Larsen (2018) focuses on Norway and a time period with a significant house price decline and a swift and very strong recovery period. The article asks: what causal role did monetary policy reversal (from contractionary to expansionary) play for the housing market recovery? To answer this question, the author first exploits extraordinarily detailed micro data on housing transactions (with precise dates on accepted bids) between 2007 and 2010 to construct a weekly hedonic house price index for Norway. Using interrupted time-series and difference-in-difference techniques, Larsen (2018) then documents the existence of a pronounced housing market discontinuity immediately after the monetary policy reversal was initiated, suggesting that causation may run from monetary policy to house prices. The strong causal finding may surprise, after all, many central banks tried to stabilize house prices, but few succeeded. The author speculates that the reason for the success of Norwegian monetary policy may be twofold. First, the majority of Norwegian homeowners have variable rate mortgages that mirror the central bank's target rate (quite unlike US homeowners who tend to have 30-year fixed rate mortgages) suggesting that the response to interest rate cuts may be strong and rapid. Second, the central bank introduced a well-timed and sizeable asset-swap facility that appears to have alleviated the funding situation for banks, allowing them to increase rather than reduce credit supply.

The role of credit conditions is the focus of the final paper in our special issue. The article by Lyons (2018) focuses on Ireland, which since 2000 has observed a quite extraordinary house price boom and bust period. Utilizing novel data on first-time buyer loan-to-value ratios and employing a one-step error correction model of the housing price ratio, Lyon finds clear evidence that, alongside user costs, credit conditions were central in determining equilibrium in the housing market. Thus, the findings would appear to support the recent move by policymakers (at least in Ireland and during the sample period) to use macro-prudential rules to anchor housing sale prices to the real economy.

The aim of this special issue is to provide some insights into housing and housing policies in Europe. As the seven papers illustrate, the continent yields a wealth of country-specific differences in institutional settings, policies and quasi-natural experiments. We hope this issue will not only become a reference for scholars and policymakers interested in issues of housing supply, affordability and tenure in Europe, but more importantly, that it may stimulate new and exciting research, particularly new work which is pan-European in scope. The problem is scarcity of truly comparable data; the potential reward is the range of institutional settings and policy interventions.

References

Ahlfeldt, G.M., S.J. Redding, D.M. Sturm and N. Wolf. 2015. The economics of density: Evidence from the Berlin Wall. *Econometrica*, 83(6), 2127-2189.

Eerola, E. and T. Saarimaa. 2018. Delivering affordable housing and neighborhood quality: A comparison of place- and tenant-based programs. *Journal of Housing Economics*, 42(December), xxx-yyy.

Ehrlich, M.V., C.A.L. Hilber and O. Schöni. 2018 Institutional Settings and Urban Sprawl: Evidence from Europe. *Journal of Housing Economics*, 42(December), xxx-yyy.

Kirsch, S. and H.-P. Burghof. 2018. The efficiency of savings-linked relationship lending for housing finance. *Journal of Housing Economics*, 42(December), xxx-yyy.

Larsen, E.-R. 2018. Can monetary policy revive the housing market in a crisis? Evidence from high-resolution data on Norwegian transactions. *Journal of Housing Economics*, 42(December), xxx-yyy.

Lyons, R. 2018. Credit conditions and the housing price ratio: evidence from Ireland's boom and bust. *Journal of Housing Economics*, 42(December), xxx-yyy.

Rouwendal, J., A. Keus and J. Dekkers. 2018. Gentrification through the sale of rental housing? Evidence from Amsterdam. *Journal of Housing Economics*, 42(December), xxx-yyy.

Schulz, R. and M. Wersing. 2018. The revival of East Berlin's land market after the German reunification. *Journal of Housing Economics*, 42(December), xxx-yyy.

****

Order of articles:

Ehrlich, M.V., C.A.L. Hilber and O. Schöni. 2018 Institutional Settings and Urban Sprawl: Evidence from Europe. *Journal of Housing Economics*, 42(December), xxx-yyy. **[Article 1]**

Schulz, R. and M. Wersing. 2018. The revival of East Berlin's land market after the German reunification. *Journal of Housing Economics*, 42(December), xxx-yyy. **[Article 2]**

Rouwendal, J., A. Keus and J. Dekkers. 2018. Gentrification through the sale of rental housing? Evidence from Amsterdam. *Journal of Housing Economics*, 42(December), xxx-yyy. **[Article 3]**

Eerola, E. and T. Saarimaa. 2018. Delivering affordable housing and neighborhood quality: A comparison of place- and tenant-based programs. *Journal of Housing Economics*, 42(December), xxx-yyy. **[Article 4]**

Kirsch, S. and H.-P. Burghof. 2018. The efficiency of savings-linked relationship lending for housing finance. *Journal of Housing Economics*, 42(December), xxx-yyy. **[Article 5]**

Larsen, E.-R. 2018. Can monetary policy revive the housing market in a crisis? Evidence from high-resolution data on Norwegian transactions. *Journal of Housing Economics*, 42(December), xxx-yyy. **[Article 6]**

Lyons, R. 2018. Credit conditions and the housing price ratio: evidence from Ireland's boom and bust. *Journal of Housing Economics*, 42(December), xxx-yyy. **[Article 7]**