Comment
On building typologies of housing systems in the OECD

Comment on the article *"Building a typology of housing systems to informe policies in OECD and EU member states"* by Christophe André and Thomas Chalaux

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Abstract – This paper discusses the first major piece of work based on the new OECD *Affordable Housing Database* (*AHD*). That work uses statistical techniques to develop a typology of OECD countries based mainly on housing market and policy variables which both helps to describe how attributes vary across countries and can form a basis for further comparative analyses. The paper starts by commenting on the strengths of the data, methodology and outputs arising from their analysis and goes on to discuss the attributes of the resultant typology and what they mean for how the typology might be used. The paper then goes on to discuss two pieces of research that generated topic specific typologies, the first where the *AHD* provided a valuable starting point for a more detailed qualitative comparative analysis of a particular housing policy – safety nets for mortgagors –, and another where broader based OECD data helped to define the problem of whether increased regulation was limiting access to homeownership among younger households.

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The research

The starting point for "Building a typology of housing systems to inform policies in OECD and EU member states" is the publication in 2017 of the OECD's *Affordable Housing Database* (*AHD*)[1] which has been developed to help countries monitor access to good-quality affordable housing and strengthen the knowledge base for policy evaluation. The database includes indicators from OECD countries and EU member states grouped along three main dimensions: housing market context, housing conditions, and public policies towards affordable housing.

The article provides a second stage in making this database operational: the construction of a typology of housing systems using principal component analysis and cluster analysis based on housing market features and housing condition indicators included in the database supplemented by other OECD data, notably on household indebtedness. The objective of such a typology is to provide a tool which researchers can use first to describe and group the major attributes of housing systems across countries and potentially to assess the relative importance of economic and other conditions in determining the success of particular housing policies.

The article follows a fairly well-trodden path particularly in the European context, where a range of different approaches to classification (in particular Epsing-Andersen (1990), Kemeny (1992, 1995), Kemeny & Lowe (1998)) already exist. These have been used to evidence debates on the convergence or divergence of housing policies and outcomes as well as the relevance of social structures and ideological choices in determining outcomes notably in the context of welfare and rental systems. The researchers here however step back from these debates and look only to identify patterns and the attributes of the groupings that emerge. As such it is very much a tool to be used by others rather than at this stage drawing implications for instance about such issues as path dependency or the relative success of different types of policy between the identified categories.

The methodology used for developing the typology is straightforward and well understood but it is used in a particularly careful and comprehensive fashion. The data used come mainly from the new database which concentrates on three main topic areas: the housing market context (an interesting use of the term market?); housing conditions including affordability, quality and to a limited degree accessibility but concentrating on homelessness; and public policies notably government financial support by tenure, social housing provision and rent and security legislation. There are clearly gaps, and indeed some inaccuracies, particularly where the questions are rather general and use terminology which may be unclear to the country expert filling in the form or where the country in question uses country-specific definitions and variables. Some particularly difficult definitions – such as the position of social housing in Sweden – are identified. Overall the database provides a rich source of information but at a level which would only act as a starting point for anyone wishing to research any individual country or indeed particular issues across countries. At this stage however, André and Chalaux are only asking whether the data can identify groups of countries which can be clearly distinguished from one another based on statistical techniques.

Such groupings are indeed identified, based on twenty-five OECD member countries. The resulting typology is generally consistent with earlier classifications – which in the main use fewer variables and a smaller number of, mainly European, countries. Four groups emerge from the analysis: "Northern", covering most of Northern Europe, including Germany and Switzerland but also the USA, which feature high levels of private rental accommodation and generally high household debt; "Western", including France, the United Kingdom, Ireland and south western European countries as well as Finland and Austria, which have relatively high homeownership rates and more social housing; "South Central" including Mediterranean countries such as Italy and Greece as well as Eastern Europe countries such as the Czech Republic, Estonia and Slovenia – where high levels of outright ownership dominate – although arising from different causes; and "Eastern" made up of Hungary, Latvia, Poland and the Slovak Republic – which are also distinguished by high outright ownership but also by poorer housing conditions. The final two groups are clearly differentiated by the statistical analysis but have many attributes in common. Adding a further seven countries where data are more limited but does not change the basic picture.

1. OECD (2017) Affordable Housing Database. *Available at: http://www.oecd.org/social/affordable-housing-database.htm*

It is interesting to note the emphasis on tenure in distinguishing the groups. This leads to some questions of interpretation, notably with respect to the inclusion of both Germany and the USA in the Northern category. This may be in part because other Anglo-Saxon countries such as Australia, Canada and New Zealand are not included in the analysis because of lack of *AHD* data. However, the substantive problem is that while both countries have relatively high proportions of private renting the attributes of their rental systems are completely different (with rent stabilisation and indefinite security of tenure in Germany – as is the case for most countries in the group, while the USA experience is of short term tenancies and generally market determined rents) (Whitehead *et al.*, 2012; Scanlon & Whitehead, 2014). The findings raise at least three issues in relation to their robustness – and therefore the use to which such categorisations should be put. First, while, as already noted, the typology is generally consistent with earlier research based on similar methodologies, the results differ somewhat from other classifications based more on governance, regulatory frameworks and economic approach than housing specific variables. In this context for instance, "Milestone in European Housing Finance" (Lunde & Whitehead, 2016) identifies five categories – Anglo-Saxon; Scandinavian widely defined to include the Netherlands and sometimes France; Corporatist systems notably Germany and Austria; ex-Communist countries; and Southern Europe. This type of approach would almost certainly put the USA in a different category – the Anglo-Saxon one rather than with Germany. Equally France would be in the Northern Europe category.

Second, is the appropriate level of analysis for categorisation purposes at housing system level (as implied here) or, given housing is so affected by macro-economic and other factors, should housing specific variables be supplemented or indeed replaced by more variables that reflect the context in which housing decisions are made? In this context it is worth noting that the correlation analysis shows a much stronger relationship between GDP per head and housing conditions than between housing policies and these conditions – but equally that GDP per head is not strongly related to the use of policy instruments. Third, is the typology likely to remain stable over time? Again housing finance provides an example. In Lunde and Whitehead (2014; 2016) groups are identified at the beginning and end of the period, based not only on how finance systems have developed but also on outcomes since the Global Financial Crisis. Not surprisingly the groups, now, while to some extent reflecting the original categorisation, show that the reasons for successful and unsuccessful outcomes varied greatly both within and between the identified groups. Research concentrating on the position of a single or a smaller number of countries within an overall categorisation also shows that outcomes are often unpredictable in terms of initial categorisations (Tutin & Vorms, 2014; Priemus & Whitehead, 2014; Scanlon *et al.*, 2011).

It is important to stress that the authors do not claim anything more for the typology than that a clear statistically based categorisation emerges from these data. It is for other researchers to put these materials to use in the context of particular housing questions.

This comment now goes on to discuss two pieces of research where the data and typology could form useful inputs – one where some of the *AHD* data have already been used and one where there might be considerable potential as the database is expanded.

Mortgage Safety Nets

As part of a study of how UK mortgage safety nets have been changing (Williams *et al.*, 2017) we looked at how they worked in a range of countries across the OECD. Our starting point was the data in the *Affordable Housing Database* which has within it material which could provide relevant information on housing allowances across all tenures and on public spending in support of home ownership.

Using the Affordable Housing Database

The *Affordable Housing Database* showed that some 33 OECD countries, of which 25 are in Europe, had some forms of housing allowances in place for low income households in the rented sector. However, only half of these countries had in place housing allowances for low income owner-occupiers[2] (including 12 of the 25 European countries). One additional country (Denmark) had them only for the elderly; another, Switzerland, had allowances only in some cantons.

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2. *These were widely spread across the OECD groups including: Austria, Cyprus, Czech Republic, Finland, France, Germany, Greece, Latvia, Norway, Poland, Sweden and UK.*

The database[3] splits public spending on financial support for homebuyers into three categories: (i) grants – which are mainly about increasing access for first time buyers of different types; (ii) mortgage subsidies and guarantees which are there to reduce interest rate costs by providing potential support and (iii) mortgage tax relief for over-indebted home owners, subsidies and measures to avoid foreclosure on residential dwellings, owned by households in financial distress. The data show that some 8 European countries[4] as well as Canada, New Zealand and the USA use forms of mortgage guarantee but these are mainly supporting access to home-ownership by reducing risks to lenders. Only 8 countries – Australia, Hungary, Ireland, Japan, the Netherlands, Norway, Portugal and the United States – actually responded to the final question on helping borrowers in financial distress[5]. They identified particular schemes including subsidies to mortgage interest payments; contributions to paying off arrears; postponement of payments; refinancing; and mortgage to rent initiatives. What the commentary also shows is that types of support are not easily categorised; many countries have large numbers of interventions (not all of which were reported); and it was not possible to obtain information on the scale of assistance given.

More detailed examples

We also asked a range of country experts about the experience in their countries with respect to three groups of policies: traditional approaches put in place by government or industry to provide income support or address changes in individual circumstances; short term measures put in place by government and/or industry when there were major problems in the mortgage market; and longer term regulatory changes, aimed at ensuring those who buy can maintain their mortgages when circumstances change.

The responses showed that housing allowances are not usually available to owner-occupiers. Rather households must depend on more general income protection policies – but also industry initiatives. However, in many Western European countries, levels of out-of-work benefits, especially those that are linked to previous earnings levels, are relatively high and so are seen to remove the need for measures specifically related to mortgage costs (Ditch *et al.*, 2001).

Responses to crises appear to fall into three main categories:

• those countries (such as Germany, the Czech Republic, Canada and to lesser degree France, Slovenia and Sweden) where there have been few mortgage specific problems in the past and the Global Financial Crisis had little effect on the market. In these countries, little or nothing has changed in terms of how the individual is treated in the face of unexpected problems;

• those where there had been earlier crises – notably Australia, Portugal and Sweden, but also the UK, where policies put in place in response to these crises appeared relatively adequate after the Global Financial Crisis;

• countries (ranging from the extremes of Spain and Ireland but including more stable countries such as the Netherlands and also the USA) that suffered severe housing market problems associated with more fundamental economic and financial difficulties following on from the Global Financial Crisis. In these countries governments usually put in place an, often hurried, range of measures to limit foreclosure, restructure mortgage payments and sometimes to transfer the household or the dwelling into the rental sector.

Finally, macro-stabilisation regulatory changes since 2008 have been relatively consistent across countries. Most of the emphasis has been on limiting lender capacity to make higher risk loans or increasing their costs to the institutions. These constraints in turn affect who can obtain a mortgage and so impact on future risks. This may reduce the need for safety nets to be put in place – at least with respect to the mortgage market.

Overall, the cross-country evidence suggests that, where mortgage payments are not being kept up to date, the most usual approach is to ensure appropriate negotiations take place between mortgage lender and borrower to restructure payments, e.g., to extend the mortgage and to backload payments to a time when the borrower can pay. Subsidies to individuals are rare and where they exist may have to be financed by the industry.

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3. *Table PH2-1 Public spending on grants and financial support to home buyers.*
4. *Table PH2-1.2 Croatia, Estonia, Finland, Latvia, Luxembourg, the Netherlands, Sweden and the UK.*
5. *Table PH2-1.3 Mortgage relief for over-indebted home owners: overview of existing measures.*

Relevance to the typology

There are probably three main messages in relation to the André-Chalaux typology:

• The example reinforces the relative importance of economic pressures and macro-economic policy as compared to housing policies in determining housing outcomes;

• The example also suggests that if the typology is based mainly on housing market and housing policy variables it is likely to be fairly unstable in the face of macro-economic change. So for instance, in the housing finance context examined here the USA and Germany would be extremely unlikely to be in the same group; while France and Austria look like the odd ones out in the "Western" group;

• Third, the database itself cannot – and is not meant to – provide the level of detail that can enable analysis of specific housing issues, but it can be a useful starting point as it was in this piece of research.

Access to homeownership among younger households

It might have been expected that another project undertaken for the OECD in 2017, on whether changes in mortgage regulation has impacted on young people's capacity to access owner-occupation (Whitehead & Williams, 2017), would have benefitted from the *Affordable Housing Database*. In practice, however, the most relevant OECD data came from *Society at a Glance* (OECD, 2016 and earlier years) which includes information on the proportion of younger people under 30 living with parents and on the employment rates of this group.

The evidence showed that in twenty-three countries the proportion of younger people under thirty was above the OECD average of just under 60% living with parents in 2014. It also showed that seven of the top nine countries lay within groups "South Central" and "Eastern" of the André-Chalaux typology, the other two being Spain and Portugal. Importantly, the proportion of younger people living with parents across the OECD had risen since 2007 with Italy, Hungary, Greece and France among those with the biggest increases. Evidence on employment rates among younger people suggests a similar picture – with the number of jobs taken by this age group falling

by 8% on average since 2007; but by a quarter or more in seven countries all but one of which (Ireland) correspond to the countries with the highest increases in those living with parents and are included in groups "South Central" and "Eastern" of the André-Chalaux typology. These data were undoubtedly part of the reason for commissioning the research.

In practice however the *Affordable Housing Database* included little of relevance to this particular project except for the data on home ownership policies which identified some policies supporting access to homeownership. In particular, the material on regulation is limited to the rented sector. As a result, the research depended significantly on regulatory data from other sources and on country experts and the statistical and other data they could provide.

Again a typology was developed specific to the project, distinguishing countries by the scale of impact of the Global Financial Crisis, what had happened to lending and the extent to which mortgage regulation had changed – ranging from countries such as Germany and Slovenia where regulation was basically unchanged and lending had increased since the Global Financial Crisis to countries such as Greece and Hungary where there was still almost no lending taking place and regulatory change was more general: countries in between had concentrated more on mortgage specific regulation which had impacted on levels of lending and eligibility.

A core issue was the scale of deposit required. In this context there are four distinct reasons why it has become more difficult in addition to regulatory change: private rent increases make it more difficult for potential owners to save for a deposit; real incomes, notably for younger people, have often decreased making it harder to save; interest rates on savings have declined – making it more difficult to achieve a given deposit; and house prices have often risen, so deposit requirements are higher. The importance of parental assistance had clearly increased – but in a number of countries with high unemployment and falling incomes family capacity has also declined.

Even if people can save the deposit (itself increased by the regulation) in most countries it has always been necessary to have a permanent job in order to obtain a mortgage. But the proportion of younger people with job security has been falling. This growing group of potential

owner-occupiers would therefore generally not be able to enter the sector.

Other problems relate to the capacity to make repayments: unemployment and job insecurity have risen rapidly especially among younger people while real incomes have often fallen. In this context renting a home becomes a logical choice because of its flexibility. Equally, individual attitudes to risk appear to have become more conservative. So it appears to be that demand has declined rather than that regulation has been the constraining factor.

Overall, therefore, while regulation is having a direct impact on access to mortgages in most countries included in the analysis, there are many other reasons why younger households are finding it more difficult to buy

Conclusions

"Building a typology of housing systems to inform policies in OECD and EU member states" has many valuable attributes. One of the most immediately relevant is that it helps to introduce a wider audience to the new OECD *Affordable Housing Database* – an important addition to the OECD's growing databank. Even though there are clearly gaps, its publication will of itself almost certainly provide an incentive to member countries to improve their own data.

The analysis presented – based on principle components and cluster analysis techniques – identifies four groups of OECD countries. However perhaps the most immediately important result is a simple correlation analysis which suggests that market factors are far more closely correlated with outcomes than housing policies. This may in part be a result of data deficiencies – in particular there is no evidence on the scale of the interventions and the data available suggest that by no means all interventions were captured. But it also reflects the

strongly held view held by many commentators that housing is more affected by the wider economic environment than by housing specific interventions.

However, it is important to stress that the techniques used are not hypothesis based and say nothing about causality. The biggest issue in this context is therefore whether the variables included in the analysis provide a good starting point for further analysis that looks more closely at individual relationships and behaviour. The two pieces of more policy specific research discussed in this paper use OECD data sources in this way as a starting point but then go on to more qualitative analysis which generates problem specific typologies rather than the more data driven one presented by André and Chalaux.

It is less clear that the specific typology generated can be used as more than a starting point for discussion. While it is relatively consistent with earlier more ideologically based classifications (e.g. Epsing-Andersen, 1990; Kemeny, 1992, 1995; Kemeny & Lowe, 1998) this may of itself be a matter of concern as the housing world has changed rapidly since these studies were undertaken. Classifications can be expected to change over time as well as because different variables are included.

The argument that it is wider economic and indeed social variables that are more important in terms of housing outcomes than housing specific variables, suggests a somewhat different approach to the selection of variables. Equally when the topic to be discussed is more specific, such as is the case with the two examples discussed here, one would expect to see different data used and a different classification arise.

Most importantly this paper should be seen for what it is – a very careful statistical analysis of new and interesting data that will support the development of high quality comparative research into housing markets and policy. □

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