

## Key note presentation

### The relationship between population and housing

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#### **Executive summary**

The relationship between population and housing is two-sided. On the one hand, population change leads to a changing demand for housing. Population growth, and particularly a growth in the number of households, leads to a growth in housing demand. Population decline might lead to a decrease in housing demand. This will, however, only happen in the long run, after not only the number of people but also the number of households has started to decline. The danger of population decline is greatest in remote rural areas and in areas with lower-quality housing.

At the same time, the supply of housing influences the opportunities for population increase through migration. Adequate housing supply might attract migrants or influence their choice of residential location. This mechanism, however, mainly operates for migration within countries and much less for international migration.

Usually, homeowners are considerably less likely to migrate than renters. This is partly the result of the fact that the transaction costs of moving are much higher for owners than for renters. So, if the level of home-ownership is too high in a country, this might seriously hamper the spatial flexibility of the labour force.

Housing supply may also play a decisive part in leaving the parental home and the formation of married and unmarried unions. It is even likely that the supply of housing plays a part in the timing of fertility or the number of children people have. The best opportunities for leaving the parental home and family formation are arguably found in a situation where housing quality is high and access is easy, or in a situation where quality and prices are diverse and there is an adequate supply of affordable rental next to owner-occupied accommodation.

National governments can accommodate an adequate relationship between population and housing in the following ways:

- a. Prevent oversupply of housing in a situation of population decline, by discouraging local governments from trying to compete for population.
- b. Focus on quality as least as much as on quantity of housing.
- c. Stimulate local diversity of housing types and housing tenure (rental versus owner-occupied), and prevent the development of large areas of low-quality housing.

- d. Stimulate the supply of affordable and rental housing next to owner-occupied housing.
- e. Decrease the restrictions on moving, for example by decreasing transfer tax (possibly in combination with decreasing tax relief for homeowners).

## 1. Introduction

The relationship between population and housing is two-sided.<sup>1</sup> On the one hand, population change leads to a changing demand for housing. Population growth, and particularly the growth in the number of households, leads to a growth in housing demand. Population decline might, in the long run, lead to a decrease in housing demand. But at the same time, the supply of housing influences the opportunities for population increase through immigration and the opportunities for people to form new households. Adequate housing supply might attract immigrants or influence their choice of residential location. Housing supply may also play a decisive part in leaving the parental home and the formation of married and unmarried unions. It is even possible that the supply of housing plays a part in the timing of fertility or the number of children people have.

The link from population to housing seems obvious. People live in households and households need housing. In the long run, the supply of housing will follow the demand and the number of dwellings in an area will approximately reflect the number of households, at least if a population is not too poor to afford the cheapest housing. But the market for housing differs from the market for other commodities (Bourne 1981). The production of housing is slow and subject to many laws and regulations. Once built, housing has a life of several decades. And housing is so expensive that hardly any household can just draw out the cheque book and buy a home immediately. So, there are not just producers and consumers on the market for housing; there is also a prominent role for landlords, developers, and financial institutions.

Because of these specific characteristics of the housing market, the relationship from population to housing is not as obvious as it may seem at first sight. In fact, it has been shown for the Netherlands that people move to regions where houses are built, but houses are not necessarily built in regions where people would want to live (Vermeulen and Van Ommeren 2006). And also, that jobs follow people, rather than that people follow jobs. These findings might be specific to the Netherlands – that is quite likely, because the Netherlands has particularly restrictive spatial policies. But nonetheless, this example demonstrates convincingly that the link from housing to population might be at least as important as the link from population to housing.

In the remainder of this paper, the links between population and housing are explored, with an emphasis on the link from housing to various population issues. The paper builds on previous academic research and limited other documentation, but it certainly cannot be claimed that all relevant available research material has been taken into account. It should also be borne in mind that the previous research on the topics covered in this paper is heavily biased towards North-Western Europe, and that most of the author's own research has also been conducted there. Therefore, many

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<sup>1</sup> This paper is a revised, extended and updated version of previously published work: see Mulder (2006a). It also contains ideas from a paper co-authored with Francesco Billari, titled 'Home-ownership regimes and lowest-low fertility', which is currently under review of a scientific journal.

examples mentioned in this paper pertain to that area, even though efforts have been made also to include examples from other UNECE countries.

## **2. Population decline and housing**

Obviously, population decline will in the end lead to a smaller demand for housing. But this is not automatically the case. The demand for housing is not determined by the number of people, but by the number of households. Following from a decrease in average household size, the number of households has increased much more rapidly than the population in most European countries in the past few decades. Likewise, a further decrease in household size will lead the number of households to remain growing for quite some time even after population decline has started.

Actually, the low fertility that is the main driving force underlying population decline is also a major driving force underlying further decreases in household size. As a matter of course, low fertility is associated with smaller families. Only after the children in these small families start to exert a demand for housing – some twenty years after they have been born – can a decline in housing demand be expected.

Another driving force underlying decreases in household size is the increase in the number of people living alone. Such an increase has been going on for many decades in many European countries. One cause of this increase is the ageing of the population and the accompanying increase in the number of widows and widowers. A second cause is the fact that an increasing number of young people live alone for a period of time between leaving the parental home and forming their first co-residential partnership, now mainly in Northern and Western European countries, but possibly in the future also in the rest of Europe and other UNECE countries. A third cause is the increase in divorce and separation.

UNECE countries having experiencing population decline in 2000-2005 include most former socialist countries in Europe (but not Albania and Slovakia) and some other countries in South East Europe and Central Asia (Source: UN Statistics Division). The strongest declines, with annual population growth of -0.6 percent or less, are found in Belarus, Estonia, Latvia, Azerbaijan (all -0.6), Bulgaria (-0.7), Georgia and Ukraine (both -1.1). However, many more UNECE countries have regions in which the population is declining.

Once population decline leads to a decrease in the demand for housing, there is a danger of oversupply of housing. This oversupply is likely to be concentrated in specific areas, specific housing types, or a combination of these. Remote rural areas with a shortage of jobs and amenities are particularly vulnerable to population decline. Furthermore, as soon as the housing market becomes less tight, people start to move from the less desirable, second-choice neighbourhoods and dwellings. If this process takes place in a certain area, it tends to reinforce itself: the fact in itself that many people leave and dwellings are visibly vacant renders the area less attractive to both potential in-migrants and the remaining population.

## **3. The link from housing to migration**

As opposed to residential mobility (changes of residence over short distances, mainly for housing or household reasons), migration is defined as any change of residence that involves a profound change of people's daily activity patterns (Mulder & Hooimeijer, 1999). Migration is further distinguished into internal migration (taking place within a country) and international migration. Housing may attract migrants or

prevent out-migration, and a lack of housing may prevent migrants from entering or lead to out-migration. The question is, of course, under which circumstances this link works and under which it does not. A credible hypothesis about these circumstances: the less urgent the migration, the closer the relationship with housing.

Urgent migrants are not very likely to choose their destination according to the availability of housing opportunities. They are also unlikely to postpone their move until the most suitable housing opportunity comes along. The most extreme example is refugees. They will migrate no matter what and start worrying about housing in a later phase. But there are also differences in urgency between other types of migrants. Those moving for housing reasons are generally in a better position to postpone or put off their moves, or to choose a different destination, than those moving for education or work. This difference is reflected in a research finding: those moving for work are indeed more likely to substitute housing of lower quality for the housing they would prefer than those moving for housing or household reasons (Goetgeluk 1997). This is undoubtedly even more true of international labour migrants, for four reasons. Firstly, the difference in wage between the area of destination and the area of origin is usually greater for international than for internal migrants, so they have more to gain even if they sacrifice housing quality. Secondly, international migrants frequently do not plan to stay permanently, so they expect a situation in lower-quality housing to be just temporary. Thirdly, international migrants are more likely to migrate without a family, which lowers the necessity of finding suitable housing. And fourthly, international migrants are less likely to have a thorough knowledge of the local housing market. So, with international labour migration, which we will probably see more of in the enlarged European Union, there seems to be a firmer basis for trying to accommodate the housing demand of the migrants than for trying to use housing policy to direct their location choices. That is not to say housing does not play any part in international labour migration. Large international companies do take housing-market circumstances into account when deciding upon the location of their headquarters or other important offices.

With regard to internal migration, it is possible to attract migrants or to prevent out-migration to neighbouring areas by manipulating the housing stock. This is what in fact was done in the city of Astana, the new capital of Kazakhstan. The population of this city has grown tremendously as a result of deliberate planning (Anacker 2004).

Of course, such a strategy only works in a situation of unmet demand. Even though people have followed housing in certain times and places, they do not do so automatically. All over Europe, there are many remote places, with an oversupply of housing. This problem will be exacerbated by the population decline facing large parts of the UNECE region now and in the coming decades. There is actually one type of international migration that is totally non-urgent and might help solve this problem, at least partially: migration to second homes used for holidays, weekends, and winters. Owners of second homes probably do not form the most desirable type of inhabitants of a village, but part-time inhabitants are better than none. Of course, to attract owners of second homes an area has to offer scenic beauty, an attractive climate or preferably both.

With regard to the type of housing, there is a close relationship between housing tenure and migration. In general, in many North American and Western European countries, homeowners are considerably less likely to migrate than renters (Speare, Goldstein & Frey 1975; Helderman, Van Ham & Mulder 2006). The low mobility of homeowners is partly the result of the fact that the transaction costs of

moving are much higher for owners than for renters. So, if the level of home-ownership is too high in a country, this might seriously hamper the spatial flexibility of the labour force. A notable exception is Britain, where migration is particularly infrequent among inhabitants of council housing. This might have to do with the administrative rules used by local authorities to allocate council housing (in which moving within a local authority area is much easier than moving between areas) or with the limited availability of council housing (Boyle 1995). This is just an example, but it illustrates that strict allocation rules and scarcity may be just as serious barriers to mobility as the transaction cost of home-ownership.

#### **4. The link from housing to household formation**

To form a household, people need a place to live. It is possible, therefore, that people postpone household formation or even refrain from it when they cannot find suitable housing. As with migration, the degree to which the availability of housing is a factor in household formation probably depends on the urgency with which people want to form new households.

There are three major forms of household formation: leaving the parental home, partnership formation, and divorce or separation. Leaving the parental home takes place for different reasons, and the role of housing is likely to differ for each of them. Those who want to leave home for reasons of education or work have little room for postponement. They are likely to move even if they have to accept substandard housing. Those who want to leave for reasons of independence, cohabitation or marriage have more opportunities to wait until they have found suitable or affordable housing. Indeed, for the United States it was found that higher house prices were associated with a smaller probability of leaving the parental home to live with a partner within the same state, but not with leaving home to live alone (Mulder & Clark 2000).

It is generally acknowledged that differences between countries in the age of leaving home are likely related to the availability of housing and other housing-market factors (Mandic 2008; Mulder 2006b). From a study of 24 EU member states (all except Malta), Mandic (2008) concluded that North-Western European countries have the best opportunities for independent housing. A combination of a high level of home-ownership, difficult access to mortgages, and high house prices seems to make it particularly difficult for young people to form their own households (Mulder 2006b). Such a combination of housing-market circumstances is found in Italy, Spain and Greece – indeed, three countries where the age of leaving the parental home is very high compared with Northern European countries.

In many former socialist or ‘transitional’ countries, the housing market is still heavily influenced by the transformation from socialist to market economies (UNECE 1996-2007). The transformation was frequently accompanied by mass privatization of formerly state-provided housing, leading to a sudden enormous increase in private home-ownership up to levels of over 90 percent (Palacin & Shelburne 2005). This was particularly the case in Hungary, Lithuania, Slovenia, Georgia, Armenia, Moldova and to a lesser extent the Russian Federation. Much more moderate levels of privatization are found in Slovakia, Poland, the Czech Republic, Estonia and Latvia (Kok 1999; Mandic 2008; UNECE 1996-2007). Mortgage markets are only just starting to be developed in most of these countries. Several transitional countries face severe housing shortages (for example Poland), a great challenge accommodating refugees (for example Azerbaijan), low quality of housing (for example Albania,

Moldova) a problematically low level of new construction (for example Lithuania, Moldova) or a weak institutional framework for housing development (for example Bulgaria) (UNECE 1996-2007). All in all, one would think the housing-market conditions are unfavourable to leaving the parental home in most transitional countries. Interestingly, however, in 2003 the highest proportion in the EU-25 of women aged 18-34 were found in Italy (57%) and Malta (54%). Next were Poland, Slovakia and Slovenia (34-39%), then Belgium, Portugal, Spain, Cyprus, the Czech Republic, Estonia and Hungary (27-30%).

In South European countries, but also in many transitional countries, self-help housing construction is an important route out of the parental home (Mandic 2008). In some countries self-help housing has taken the form of a large informal housing sector of sometimes inadequate quality (for example in Albania; UNECE 1996-2007).

In most UNECE countries, young people leave the parental home either upon partnership formation (cohabitation or marriage) or to live on their own, possibly sharing with roommates. It should be stressed, however, that other patterns are also prevalent. In Turkey, although the nuclear family is the most common household type, the extended family is still persistent, particularly in rural areas. The majority of newly married couples whose parents are alive spend some time in the husband's parental home before forming their own households (Koc, 2007).

All in all, the availability of affordable (rental) housing seems to be an important factor in young people's opportunities to leave the parental home. As in many cases, the direction of the causality in the association between housing-market factors and leaving the parental home is not completely obvious and probably complex. Why is there such a small amount of affordable rental housing in Southern European countries? If there were a demand for such housing, would developers not have jumped in and developed it, or would not the owners of vacant homes start letting them in greater numbers? At the same time, once the housing and financial markets in a certain country operate in a certain way, they do not change easily. It is amazing how local habits prevail in mortgage finance, for example. In some countries, mortgage banks are happy to provide loans up to the total value of the house or even more. In others, they require a substantial down payment. Such differences are often quite persistent. So, in the Southern European countries with their rigid housing and financial markets, a shift to younger ages of leaving the parental home and to more people living alone is probably not going to happen easily. In many Northern European countries, such a shift has been on its way for several decades.

Partnership formation taking place directly from the parental home leads to housing demand so that, if no suitable housing is available, couple formation may have to be postponed. In North-Western European countries, however, young people usually form their first co-residential union after a period of living alone. If that is the case, union formation may actually be accompanied by a decrease in housing demand; couples may move in together sooner to diminish housing costs.

Divorce and separation are obviously urgent reasons for forming a new household for one of the former partners. Some of those who want to separate might postpone their actual moving out for a short while for lack of housing. Some might decide upon separation a little more easily knowing that they can find an affordable place of their own. But generally, the availability of housing will probably not lead people to put off a separation, once the wish to separate has been formed. Nevertheless, there is some evidence in the literature that housing does play a part in the likelihood of divorce. In both West and East Germany, homeowners are less likely

to divorce than renters (Wagner 1997). This association between home-ownership and divorce was quite strong and it remained intact after accounting for the socio-economic status of the couple, the degree of urbanization and the quality of the home. For Australia (Bracher, Santow, Morgan & Trussell 1993) and Finland (Jalovaara 2002) it was also found that homeowners were less likely to divorce than renters. It is possible that the joint investment in a home and the greater opportunities for homeowners to adjust their homes to their wishes help stabilize a marriage. But we have to be careful here: it is also possible that those who are in stable marriages are more likely to buy a home. The clearest evidence that housing quality also plays a part in divorce was provided for Finland (Jalovaara 2002): after accounting for a wide range of socio-economic variables, living in overcrowded housing was found to increase the risk of divorce.

## **5. The link from housing to having children**

Housing factors might influence having children in two ways: indirectly, and directly. The indirect influence runs via leaving the parental home and via cohabitation and marriage. If people stay in the parental home for a long time, they are also late in forming families. This is true in countries where it is the norm to form families in housing separate from the parental family, as is the case in practically all European countries. Late parenthood leads to a smaller number of children being born, for two reasons. First of all, when the time between generations is longer, fewer generations live at the same time. This leads to a smaller population and therefore to fewer births than when the time between generations is shorter. Second, when women start childbearing at a later age, they have fewer fecund years left to have the number of children they desire. The chances are greater that they will end up having fecundity problems. Or they may not have the right partner or experience the right circumstances at the right time. So, any influence of housing factors on leaving the parental home has repercussions on the number of children born. Indeed, those European countries where people leave the parental home late (Italy, Spain, and Greece) are also those with low fertility.

The link via cohabitation and marriage is slightly different. It is possible that young people succeed in leaving the parental home to live alone, in student housing or small apartments for example, but that they think housing of much greater quality is needed to get married. In qualitative research for Britain, for example, there was a respondent who said: "There was very much that culture if you get married you buy a house and if you can't afford to buy a house then you should wait until you can." (Forrest, Kennett & Leather 1999: 97). Other research in Britain has also suggested that some couples postpone marriage because they are not able to buy a home (Ineichen 1979, 1981). Apparently, in countries where the quality norm towards housing for married or cohabiting couples is high, difficult access to high-quality housing for young people might lead to the postponement of cohabitation or marriage. Again, this will have repercussions on the birth of children.

There may also be a direct link from housing to the birth of children. The most obvious connection is that couples prefer to secure housing of a certain quality before they have children. According to Philipov (2003), lack of housing has been a traditional reason for a preference for small family size in Central and Eastern European countries (see also Olah and Fraczak, 2003). In Hungary, housing difficulties were mentioned by women who did not want to have another child as one reason why this was the case; it was mentioned as the sixth most frequently cited

reason after 'I only wanted this many children', 'I cannot afford it', 'I think the future is uncertain', 'I think I am too old' and employment difficulties (Kamaras 2003). For Finland, Kulu and Vikat (2007) have shown that couples living in single-family homes are considerably more likely to have a child than those living in apartments. Research in the Netherlands has shown that childbirth frequently follows after a move into a single-family home or an owner-occupied home (Feijten & Mulder 2002). An increased likelihood of having a child after home-ownership was also found for Germany (Mulder & Wagner 2001). This connection between home-ownership and having children is also visible when a long-term perspective is employed. Among a series of birth cohorts in Germany and the Netherlands, the proportion of people who had made the transition to parenthood by age 30 and 35 was consistently greater for those who had become homeowners by those ages than for those who had not (Mulder, 2006b). In countries where access to high-quality housing is difficult, this connection between housing quality and having children might lead couples to delay childbearing, because they have difficulties securing suitable housing (Castiglioni & Dalla Zuanna 1994; Krishnan & Krotki 1993; Pinnelli 1995).

It should be stressed, however, that the relationship between housing quality and having children is not automatically positive in all times and places. This seems to hold particularly for home-ownership. It has been argued that the cost of home-ownership might compete with the cost of rearing children (Courgeau & Lelièvre 1992). This cost competition might lead to the postponement of childbearing or even lower fertility among those who attach great importance to acquiring home-ownership. In Britain, it has indeed been found that home-ownership seems to be associated with low rather than high fertility: homeowners had fewer children than renters and had them later (Hakim 2003; Murphy & Sullivan 1985).

On the level of countries, it is certainly not true that those countries with the highest quality of housing offer the best opportunities for having children. In fact, a high quality of the housing stock in combination with difficult access to housing for young people might offer the worst opportunities for having children. Access to housing is difficult where housing is in short supply, prices are high, the level of home-ownership is high, and mortgage banks are strict. Such a housing market is found in Italy, Greece and Spain, where fertility was 'lowest-low' (at a Total Fertility Rate of fewer than 1.3 children per woman) in the early 2000s. In contrast, high fertility is found in Ireland, Iceland and Norway, where a high level of home-ownership goes together with a wide availability of mortgages. In countries where home-ownership is by no means universal and mortgages are widespread and a major source of home-ownership finance (Denmark, Luxembourg, Germany, the Netherlands, Sweden, Switzerland, the United Kingdom and the United States), mixed fertility levels are found. These countries range from very low (but not lowest-low; Germany) to relatively high fertility (United States). In a fourth group of countries, home-ownership is not universal either, but mortgages are not widely available, so housing finance has to come from savings, family help or inheritance. Renting is considered an acceptable alternative to owning. Countries in this group are Austria, Belgium, France, Portugal and Switzerland. Austria has very low fertility, but not lowest low. France has rather high fertility; Portugal, somewhat lower. In Belgium, fertility is rather high. In short, the best opportunities for having children are probably found in countries where housing quality is high and access is easy. This is not a very likely combination, but a second-best situation also seems to work: a situation where quality and prices are diverse. In such a situation, young people have the opportunity to start their independent housing careers early, in cheap housing. They can move on

to higher-quality and more expensive housing after they start to settle down in their labour-market and household careers.

Central and Eastern European countries form a special case in the development of both housing access and fertility. In the same period in which the housing market underwent dramatic changes with the transformation from socialist to market economies (see Section 4), fertility decreased markedly in the same period. According to Frejka (2008), the drop in fertility in Central and Eastern Europe had to do with the profound changes in society by which the transition was accompanied. Next to other favourable conditions for childbearing, such as job security, free education and free health care, low-cost housing provided by the state was no longer available (Frejka, 2008). An end was put to several pronatalist policies which were particularly prevalent in Central European countries (Sobotka 2003). One of these was the priority given to families with children in housing distribution. In contrast to a situation in which, in Central and Eastern Europe, having children was a way of moving on in the housing queue in state socialist times, under the new market economy buying a home requires hard working and accumulation of resources, that is, postponing childbirth (Katus 2003).

## **6. Conclusions and policy implications**

If there is one obvious conclusion from the above discussion, it is that the relationship between housing and population is complex. As I have shown, this relationship is two-sided. Population influences housing via housing demand. But also, housing influences the number of people and households via the attraction or deterrence of migrants, keeping in place or pushing away the resident population, and intricate links with leaving the parental home, separation, and having children. These connections between housing and population vary over time and between places. I have mentioned some of the circumstances that influence this variation. A major question at this point is what policy makers can learn from this story.

With regard to international migration, there is not too much room for using housing policy to steer migrants. A serious challenge for today's governments is to supply adequate housing for immigrants. In the ideal case, this is done taking advantage of the decrease in housing demand exerted by the resident population.

Housing can be used to attract internal migrants (from elsewhere within a country) or to prevent the resident population from moving out to neighbouring areas, but this strategy is not guaranteed to work. In a situation of population decline, there is a danger that local governments all try to compete for population. In an effort to prevent local population decline, they may try to enlarge their housing stock. Each individual local government may be enthusiastic and optimistic in trying to prevent people from leaving and to attract new inhabitants. This is in fact a natural and understandable reaction, which is likely to be met with support from the local population and business community. The end result of all these local policies, however, might be serious oversupply of housing on the regional or national level. A part of this oversupply may be absorbed by the formation of extra households or be used as second homes, but another part might end up vacant. A challenge for regional and national governments is to prevent oversupply by coordinating the construction efforts by local governments. The local governments themselves are best advised to focus on the quality and diversification of housing, rather than its quantity. A particular danger is formed by large areas dominated by one dwelling type. Such areas

run the risk of getting into a vicious circle of decreasing popularity, people moving out, oversupply, and an accompanying further decrease in popularity.

Smooth housing-market entry of young people is an important pre-requisite for partnership formation and subsequent family formation. To accommodate this housing-market entry, it is important that housing stocks are diverse – another reason to focus on diversification. Housing markets should offer not only high-quality and certainly not only owner-occupied housing, but also affordable rental dwellings. A sufficiently large rental sector also facilitates the spatial flexibility of the labour force. As I have argued elsewhere (Mulder 2006b), my estimation is that a share of 30 percent rental housing is needed for these two purposes. The availability of affordable rental housing of adequate quality is also important for yet another reason: the risks associated with home-ownership among low-income households. The recent sub-prime mortgage crisis in the United States clearly demonstrates how serious these risks can be.

Smooth housing-market entry is also facilitated by a greater residential mobility and an accompanying greater turnover of housing. Turnover can be enhanced by a reduction of the restrictions on moving. A relaxation of the restrictions on moving would also be beneficial to labour migration and therefore to mobility on the labour market. An important restriction to the mobility of owner-occupiers is the transaction cost of moving. In countries that apply transfer tax, this tax forms a substantial part of the transaction cost. A small transfer tax of, say, two percent is useful to discourage speculation. By reducing transfer tax to that amount, governments can substantially improve the opportunities for residential relocations. In countries where homeowners enjoy tax relief (for example where mortgage interest is tax deductible), this tax relief could be diminished in exchange for a reduction of transfer tax.

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