4. DEMAND AND SUPPLY OF LABOUR IN THE HOUSING SECTOR

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The housing sector is large and significant in all aspects of human life, making the task of the policy-maker especially complex. Homes constitute the largest single land use in the ‘built environment’, they are generally the largest single item of expenditure in household budgets and the largest form of household wealth, and they are instrumental in our social networks and our psychological wellbeing. The scale and extent of the connections have complex impacts on, and are impacted by, both the demand for and supply of labour and the socio-ecological transition. The ageing of European populations, for example, will continue to influence the demand for housing in terms of location, size and services, which in turn will create jobs in construction, raw material acquisition and delivery, infrastructure (ranging from roads to medical services) and transaction activities (such as legal services, new furniture and fittings). The link between the geographical location of the family residence and of the workplace will be altered by further developments of ICT and home working, influencing the impact of housing sectors on the direct supply of labour.

Of the many possible linkages and considerations for policy-makers in relation to the housing sector, this chapter focuses on three specific aspects. Section 4.1 examines the likely impact of energy renovation of the

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housing stock on jobs in the construction industry. Section 4.2 looks at possible developments in direct employment in mortgage markets. Section 4.3 examines how home ownership shapes the supply of labour. The final section offers policy recommendations.

4.1 Energy renovation is crucial to achieve energy-efficiency targets

The building stock is important to energy-efficiency targets in Europe, being responsible for some 40% of overall energy usage and 36% of CO₂ emissions across the region.¹ There are currently around 230 million dwellings in the EU and, measured in floor space, they account for 75% of the total building stock. In any one year, new house building typically adds no more than 1% to the existing stock. One consequence of this is that perhaps as much as 75% of the housing stock that will be in use in 2050 has already been built, and was built at a time when energy conservation was not an important objective. Therefore, it is the existing buildings, and not new buildings, that present the major challenge to achieving the energy-saving goals. The renovations necessary to achieve energy-efficiency goals covering a range of targets – including greenhouse gas emissions, renewable energy and energy consumption – can lead to job creation in the housing sector. For every €1 million invested in upgrading the energy efficiency of the existing building stock, as many as 17 new direct jobs could be generated.²

While there is general agreement that progress towards realising EU and member state energy-saving targets has been slower than was expected and hoped for, there is actually a lack of unambiguous data on almost all relevant parameters – about the physical characteristics of the European housing stock, the renovation rate, the extent of the measures being undertaken, the investment that has been made, the results of this investment in terms of energy efficiency and the impact on employment.

Across the member states, there are many programmes of improvement and renovation to bring existing dwellings up to acceptable standards of energy efficiency. Estimates of the exact number of renovations vary, but it seems likely that they are being applied to

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approximately 1% of the stock per year. In order to realise the energy goals that have been set, the renovation rate must be tripled, while the number and type of renovation measures should also be increased significantly.

There are several reasons why the renovations expected (and needed) will most likely not materialise. First, there is evidence of market failures, including a poor reflection of environmental and social costs in energy market prices, as well as poor incentive structures and a general lack of adequate training and knowledge of many actors in the building sector. Second, there are financial barriers to the renovation of the housing stock. Given the high level of initial costs, housing investments must provide returns over a long period of time to be financially viable. Equally, the lack of awareness among lenders of the benefits of housing renovation limits households’ access to credit. Third, the regulatory frameworks in many member states are often inadequate to achieve the energy targets. In many countries, there is a lack of administrative capacity to develop effective energy-efficiency legislation, as well as a lack of enforcement.

Looking to the future, our investigations indicate that the ageing of European populations may depress the demand for energy renovation, which is not necessarily intuitive as the elderly tend to feel the cold and suffer ill health through poor-quality housing. Many studies find that older people – perhaps as a result of low income, but also perhaps due to having more limited time horizons than younger people – may be less responsive to the poor condition of their housing and more likely to make a calculation that investments will not generate a return for them.\(^3\)

A comprehensive review of national and EU-wide studies on energy renovation conducted by Meijer et al. offers insights into the number of jobs that may be created and the skills that will be demanded.\(^4\) Looking to 2020, estimates of the total number of jobs created by energy renovations in the housing stock vary from 0.28 million to 1.40 million. In part, the variation reflects the level of activity, with a continuation of the current rate of energy renovation being likely to create a number of jobs at the lower end of the range of the estimates. On average, 12 to 17 new jobs can be created per €1 million invested. Even at the bottom end of this range, however, job creation could be considered the main motivation for investing in energy efficiency, with energy saving itself being an important corollary effect. Additional benefits would be a reduction in spending on government subsidies for presently unemployed workers, and improved health of citizens because of the reduction in air pollution and a better indoor
climate, both of which would mean fewer hospitalisations and improved worker productivity.

The jobs themselves would include those in industries that produce materials, components and products needed to improve the energy performance of buildings, those in the construction sector fitting new materials and products, energy auditors and certifiers, and inspectors of heating and air-conditioning services, for example. There could be others, such as those supplying financial packages enabling investments to be made. Against this, jobs could be lost in the energy sector because of the relative reduction in energy consumption, compared to what it would have been.

With respect to the construction industry, there appears generally to be a shortage of skills, which has both qualitative and quantitative aspects. Qualitative skills mismatches are of particular importance: the introduction of advanced green technologies and practices makes previously demanded skill sets obsolete. Many workers will therefore have to undergo training to upgrade their skills. For example, renovation work is relatively labour-intensive and more demanding in terms of craftsmanship than new construction. As a result, the skills of construction workers without previous experience in renovation work will have to be upgraded. This applies not only to manual operatives working on-site, but also to professional staff such as architects and engineers. There will also be a need for people to carry out ‘new’ jobs, such as energy-efficiency analysts or energy auditors.

4.2 Employment in mortgage markets in 2025 will be the same as or lower than in 2007

The importance of the housing market for the labour market goes beyond the construction/renovation sector. Given the increasing weight of the financial sector in advanced economies, especially up to 2007, employment in mortgage markets also needs to be considered for completeness. Moreover, the financial crisis demonstrated that mortgage markets can undermine economies.

Although existing statistical sources do not allow the identification of the precise number and nature of the jobs generated by mortgage activities, it is clear that not only are the numbers large, but they are also skewed towards workers with higher levels of education and training and earning higher wages. For these reasons, the future of mortgage markets and
employment within them, particularly in the context of the post-2007 reductions in the size of mortgage markets in most of the EU, are important.

Analysis of the sector is limited not only by the limitations of existing statistical sources, but also by the paucity of studies of mortgage markets, and especially of the links between mortgage market activity and size on the one hand, and jobs on the other. Nevertheless, an examination of existing written sources, as well as interviews conducted with key informants in three countries with very distinctive mortgage markets (the Netherlands, Poland and the UK), provide insights into the key future developments in employment supported by mortgage market activity.5

On the face of it, there is considerable capacity for further growth of mortgage activity, and with it employment. Across Europe, mortgage debt in the mid-2000s was equivalent to about 50% of total GDP, and in some countries it was as high as 100%. Whereas the latter figure may not be achievable in all countries, in many there may nevertheless be great growth potential. However, the willingness of households to take on such large debt has been affected by the financial crisis, at least in the short term.

There is the general recognition that a high debt-to-income ratio is not sustainable in the long run and could have serious macroeconomic implications when faced by an adverse shock. Hence, it should not be assumed that levels of mortgage activity and employment will automatically grow to pre-crisis levels. Rather, the evidence from our investigations is that the future will be determined by a set of drivers, the first of which is the route out of the current economic crisis. Mortgage market activity in member states since 2007 has broadly matched changes in GDP; in other words, activity has declined where GDP has declined, and increased where GDP has increased. A key to the future, then, is how quickly and in what ways the present crisis is resolved. Given the economic turmoil in the eurozone, it seems unlikely that this will happen quickly; instead, a return to what might be called ‘normal’ market conditions and market growth – and normal levels of employment – might perhaps be delayed until the end of the current decade.

The issue of what is meant by ‘normal’ and whether mortgage markets – and more generally, financial markets – will return to anything like their former nature is unknown. One element of this lies in the development of new regulatory regimes being drawn up by member states, the EU and international authorities. Although much is yet to be agreed on and put in place, it is difficult to conclude anything other than that financial
institutions will face a greater degree of regulation in future, with greater capital and liquidity requirements and less exposure to risk. Broadly, the emphasis of mortgage markets is being switched from growth in new lending towards stability and safety.

For those involved in providing mortgages, this will mean more information, more verification and more monitoring, and all with greater responsibility placed on lenders to assure the accuracy of the evaluations. This suggests that more labour input will be required per unit of mortgage activity. It also seems likely that lending institutions will develop new operational models that might imply, for example, more or less use of outsourcing through intermediaries. In turn, this might lead to different configurations of skills. But while the overall increase in labour input will enhance total employment for a given level of lending activity, it will also increase costs which, passed onto customers, could lead to an overall reduction in demand. And so, on balance, new regulation seems likely to increase costs, but will not necessarily increase the numbers employed in mortgage industries significantly. It may be expected that these effects will be greater in those countries where regulation has previously been the loosest, for example in the liberal UK market as opposed to the more regulated German one.

A further set of drivers relates to the development of new products serving different household needs. A large proportion of the personal net wealth of European households is held in the form of housing equity, net of mortgage debt. In certain member states, there is evidence that households previously accessed this net housing wealth to fund consumer expenditure.

In a context in which governments are presented with challenges of meeting the costs of established welfare models and entitlements – challenges that are exacerbated by a combination of the present crisis and demographic ageing – one potential approach is to encourage households to draw on their own resources embedded in mass home ownership. In this way, a part of tax-based state expenditure may be replaced by schemes in which European households take greater responsibility for the costs of meeting their needs in later life. In doing so, there is the potential to extend what, in most European countries, has been an emphasis on forward mortgages that enable households to invest to an associated emphasis on reverse mortgages that allow households to dis-invest. The theoretical potential for the expansion of mortgage business, and therefore of employment, is considerable.
Another direction of expansion for housing finance markets is supporting energy-reduction activity, i.e. expanding the opportunities for households to participate by taking loans against the collateral of their homes. As this is additional business rather than a diversion from lending to purchase housing (or indeed, lending to extract equity), it could mean an expansion of overall lending activity.

Set against these possibilities for employment growth are productivity gains. In recent years, increasing use of the internet and ICT has reduced the number of employees needed to process each unit of mortgage activity. The extent of such developments clearly varies across the member states, but with continuing restrictions on the amount of lending, many lenders are trying to reduce costs further, and in so far as such systems continue to be developed, they will continue to depress the workforce across all European mortgage markets. Furthermore, ICT developments could lead to changes in the patterns of skills required in the industry, and perhaps to a reduction in skills, by replacing the discretion previously vested in frontline staff with more automated and centralised monitoring and decision systems. This in turn could lead to further job and remuneration polarisation within the industry, with an increasing divide between highly skilled and highly remunerated central office staff and lesser skilled, more modestly remunerated staff interacting with the public.

The effect of these drivers in the member states, each of which has a different starting point, will be different. For example, based on six scenarios for the UK, with different levels of future mortgage activity, productivity increases and impacts of regulation, projections by Doling indicate that only in the case of the market quickly recovering to its 2007 level and regulation imposing significant additional labour inputs would overall employment be likely to exceed its 2007 peak. A more general rule-of-thumb estimate is that in 2025, activity in the mortgage market in each member state will be at a similar level to 2007, adjusted by the changes in the 2007-2010 period. Broadly speaking, activity, and therefore employment, could be at the same or a lower level compared to 2007 in the Anglo-Saxon and Mediterranean countries (and also perhaps the Netherlands), and perhaps higher in Scandinavian and the northern mainland countries, with a mixed picture across the eastern countries.
4.3 Home ownership influences small business formation, unemployment and retirement

A holistic approach to an analysis of the impact of the housing sector on the labour market requires a discussion of how home ownership influences the demand and the supply of labour. Over the decade leading up to 2007, the general pattern across the EU was one of home ownership sectors increasing in size, to the point at which about two-thirds of Europeans had become homeowners. The increases were generally supported by public policies that, for example, gave tax subsidies against interest payments and encouraged the sale of social housing to individual owners. The trends were also associated with expanding mortgage markets and increasing house prices. For households, this contributed to increasing levels of indebtedness – with housing costs, including loan repayments, frequently being the largest single item in the household budget – as well as wealth portfolios dominated by housing equity.

Our investigations point to two important general issues. The first is whether home ownership will continue to grow, or if it will in fact decline. A trend-based projection for the UK, for example, suggests a 10 percentage-point reduction by 2020.7 EU-wide, the impact of demographic ageing, international migration, insecure labour markets, fiscal pressures on governments leading to the withdrawal of tax breaks for homeowners, and depressed mortgage markets could all combine to result in decreasing home ownership.

Second, as household finance correlates with home ownership, it influences the ability and willingness of European households to participate in labour markets. In this respect, the pattern of constraints and opportunities facing homeowners places them in a different position from those who rent their homes. There are many dimensions to this tenure divide, of which we considered three: small business formation, unemployment and retirement.

i) Small business formation

The European Commission has acknowledged entrepreneurship as an economic driver and actively supports small and medium-sized enterprises. But a persistent problem is that while many Europeans express an interest in doing so, in practice relatively few actually start a business, with one of the major constraints being access to finance. Here, it might be expected that housing equity would provide collateral, thus overcoming credit restrictions set by formal financial institutions. In this respect, having
a house, whether owned outright or with a small outstanding mortgage debt, may be important.

However, Horsewood and Dol argue that the relationship between home ownership and small business formation is more complex. While there is evidence that funds to support entrepreneurial initiatives may come from housing markets, via homeowners increasing the size of their mortgages, a statistically stronger effect is that high returns from home ownership appear to discourage households from starting a new business. Policies encouraging people to become homeowners and that lead to rises in house prices may have the effect of diverting enterprise and funds away from industry and instead encouraging speculation in the housing market. Furthermore, high levels of mortgage indebtedness also appear to discourage new business formation. This effect is not completely clear, since increases in loans may reflect at least some households taking on a mortgage, or increasing their current one, in order to finance their business objectives, but it could also be that high leverage in the housing market reduces the ability of people to borrow additional money to support those objectives. To sum up, employment should increase in those countries where home ownership fuels growth in small business formation, but the loss of employment in larger industries needs to be taken into consideration. The net effect will be positive, especially in the more dynamic economies.

ii) Unemployment

A widely held, but also widely contested view is that labour mobility is lower for homeowners than for renters, because homeowners’ higher transaction costs lead to a disincentive to relocate to areas where jobs are more abundant. As a consequence, the housing market could be responsible for a mismatch between vacancies and the unemployed within a country, and also across nations. This mismatch could therefore be larger in countries with higher rates of home ownership.

The findings of Horsewood and Dol indicate that, although there is some evidence that an economy with a high proportion of homeowners will have a higher unemployment rate, the main influence of the housing market appears to be through the stock of outstanding mortgages. It appears that when families take on large mortgages to finance dwellings, they are less mobile and the locations of their employment opportunities
are effectively restricted. While this may not be a problem when adults are in continuous employment, difficulties may arise when a household needs to relocate for employment reasons. In effect, homeowners with mortgages may be less able to respond to changing circumstances. Thus, countries where home ownership (with a mortgage) is the dominant form of tenure appear to experience higher unemployment for a given demand shock.

Insofar as this is the case, it is an effect that may be modified by future trends in ‘remote working’. The development of ICT, for example through use of the internet, has broken the previous relationship for many organisations and workers between home and work. Much productive activity, especially in the service industries, is now undertaken at the home of the worker, so that daily travel to the employer’s premises is no longer necessary. Clearly, the greater the extent of such developments in technology and work practices, the less the location of the home will impact on the ability of the worker to get a job.

iii) Retirement

Although all countries have formal retirement ages at which entitlement to pensions can be taken up, in reality approximately half of European workers retire either early (i.e. before the formal retirement age) or late (after the formal retirement age), although with a marked skew towards early retirement. In recent years, governments have tried to reverse this trend and prolong working life by increasing the formal retirement age and creating both disincentives for early retirement and incentives for later retirement.

The housing circumstances of workers appear to impact on their ability to act independently of government objectives. Dol and Horsewood show that compared with households who rent or own with an outstanding housing loan, those who own their home outright are more likely to retire early. A credible explanation is that those who own their own homes can effectively live rent-free and thus get by on a lower income, as well as sometimes having the opportunity to release equity – perhaps by moving down market – to create an income. Households with outstanding housing loans, in contrast, need a higher income in order to maintain repayments.
Consistent with this, labour market participation rates for 55-59 year olds and for 65-70 year olds are highest in those countries where there has been a high growth of mortgage debt. It is not clear from the analysis whether mortgage debt ties people into labour market participation, or whether access to mortgage finance is predicated on a decision to retire late anyway. Nevertheless, it leads to the conclusion that the objective of increasing labour supply by extending working life is dependent in part on developments in mortgage markets.

4.4 The complexity of the relationships between the housing sector and labour markets poses difficult policy challenges

i) Energy renovation

Overall, there seems to be agreement that progress in realising energy-efficiency goals set by the EU and its member states is lagging behind expectations. Policy-makers should act to ensure that this progress improves in the coming years. This raises questions over the desirability of energy-renovation targets themselves, but wider economic considerations are also important. Given the present economic conditions of high unemployment and low (even negative) GDP growth, energy-renovation measures offer a relatively low-cost way of expanding the demand for labour. While directly contributing to higher employment and lower social security expenditures, other potential economic benefits from energy-conservation measures include improved health (and lower healthcare expenditures) and improved productivity.

In order to achieve such goals, policy-makers will need to recognise and overcome the barriers to the expansion of energy renovation activity. Important here is the fact that expansion will require increased levels of investment, which will in turn require consideration of the balance between public and private investment. Insofar as investment will depend on the financial capacity of private owners, access to appropriate forms of loan financing will need to be developed. One way in which this could be achieved is through using housing finance markets, which would effectively allow owners to use existing equity in housing either directly or as collateral. This will require consideration not only of the supply of finance, therefore including the role of financial institutions, but also the demand from households. Here, the position of the growing number of older home-owning households is particularly important. As older people
may be less willing to invest when the pay-back period is long, it may be appropriate for policies to emphasise the fact that, in addition to reductions in energy bills, energy-saving measures tend to enhance the comfort of the living environment.

There should also be an assessment of the existing ability of the public sector to draw up adequate legislation, codes and procedures, including regulation and stricter enforcement. Additionally, it is important to recognise that any increase in the amount of energy-renovation activity will, in many countries, come up against skills shortages. In some cases, these will arise because existing workers will need to enhance their skills to meet the new challenges imposed by energy renovation technologies, but new skill sets will also be needed to enable the undertaking of different jobs.

**ii) Mortgage markets**

In thinking about mortgage markets, macroeconomic outcomes – such as the contribution of housing finance to finance sectors in general – as well as the desirable levels of household debt need to be taken into account. Further, there are considerations about meeting the needs of those who want to purchase their homes. As these considerations affect the size of the mortgage sectors (as defined by their levels of new lending and outstanding loans), they also affect the number and type of jobs. It seems likely that the sectors will continue to be important in requiring highly skilled and highly paid workers.

However, the considerations of the extent to which housing equity should be utilised in order to fund household consumption and investment are much more complex. The large amount of housing equity – held in particular by older households, many of whom have paid off forward mortgages – could be utilised in order to meet important EU and member state agendas. Housing equity could, for example, provide the foundation for loans to enable a higher level of energy-renovation activity. Furthermore, it could contribute to the challenge of the fiscal requirements of meeting present social provision entitlements (on pensions and long-term care, for example) as these increase with the growing number of older people.

Such developments would require consideration of whether subsidies and regulations that apply to established forward mortgage
systems are appropriate for reverse mortgages or other types of lending based on housing. For example, should tax relief on interest payments also apply to energy-renovation loans? Further, in some countries where reverse mortgages are currently not allowed, legal frameworks would need to be amended, and other barriers overcome.

Alongside such activity and the related employment growth scenarios are regulatory issues. In the continuing aftermath of the 2007 financial crisis, new regulatory architecture and requirements are being set up and implemented. Reducing risks for individual borrowers and lenders, and also economies, will require additional labour inputs to evaluate and monitor lending decisions. But the greater the labour input, the higher the cost passed onto consumers in the form of more expensive products, and the lower the demand. The regulatory regimes themselves will therefore influence the size of the market and the number and type of jobs.

### iii) Home ownership and labour supply

Since 2007, there has been a reversal of the previous long-lasting trend of increasing levels of new mortgage activity in most member states. As net mortgage indebtedness appears to have a positive impact on the unemployment rate and the duration of unemployment via its influence on labour mobility, a key consideration is the extent to which mortgage markets will return to their former trajectory. Insofar as they do, and insofar as this increases the levels of household indebtedness tied to housing, this suggests that in the future home ownership will impose an even greater barrier to labour mobility than in the past and thus to the optimum matching of workers with jobs.

The physical separation between the location of a worker’s residence and workplace is critical here. The development of cheaper and quicker means of physical transport has enabled longer commuting distances, while IT developments have increasingly enabled remote working practices. Both of these developments reduce the importance of moving home in order to relocate the place of work. One issue for governments will be the extent to which they encourage further investment in transport and IT infrastructure.

Housing debt also appears to be an important factor in decisions over the timing of retirement. Outright home ownership may provide households with an investment that enables them to resist policy moves to encourage longer working lives – essentially, to facilitate early exit pathways. If it were thought desirable to counteract this effect, broad
strategies could include encouraging tenure structures which are less skewed towards home ownership, encouraging longer repayment periods for housing loans or re-mortgaging possibilities, and imposing taxes on the capital value or imputed rent of homes so that owners do not live rent-free.

Finally, housing debt is important to new business formation. While housing equity has the potential to contribute to the financial basis for new businesses, high levels of housing debt contribute to a downward shift in new business formation. This may suggest that governments should act to reduce incentives to expand mortgage lending. And, insofar as mortgage lending may be diverted into small business formation and expansion, it would suggest that the appropriate response would be to promote lending to entrepreneurs.

These notions provide further support for the actions of member state governments and their regulatory bodies in monitoring the build-up of net residential debt and considering the imposition of limits in relation to income. Such actions may include reconsidering inducements for households to maximise their mortgage debt and phasing out incentives such as mortgage interest tax relief, which still exist in some EU countries.
Bibliography

**Notes**

1 ACE (2009); Itard et al. (2008).
2 Janssen and Staniaszek (2012).
3 See, inter alia, Littlewood and Munro (1996); Rechovsky and Newman (1991); Tuominen et al. (2012); and Munro and Leather (2000).
4 Meijer et al. (2012); it must be noted, however, that many of the reviewed studies build on strong assumptions.
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