

Housing in Ireland:  
Performance and Policy  
Background Analysis

# Analytical approaches to housing

## 2.1 Introduction

This chapter sets out a number of the established analytical approaches employed in the discussion of housing markets. These inform our understanding of the developments in Ireland in recent decades. Section 2.2 summarises the characteristics of housing that distinguish it from the market for most goods and services. In Section 2.3, we discuss the relationship between land prices and house prices. This is critical, not only in understanding recent developments in Ireland, but also in devising policy measures to achieve the goals of housing policy. In Section 2.4, we describe some of the models used to explain the level and movement of house prices. The chapter closes with a summary of an influential theory of the dynamics of rental markets and their implications for different national housing systems. This is important in informing our interpretation of the evolution of the Irish housing system and in identifying options for the medium-term role of social housing.

## 2.2 The characteristics of housing

There are a number of special features of housing which require an analytical approach somewhat different from the economic analysis applied to the markets for most other goods. Housing economists identify the following characteristics (Meen, 2001, Miles, 1994)

- ◆ The *longevity or durability* of the housing stock: it is difficult to think of many other goods that have the longevity of housing. The housing stock of today is a result of decisions made in the past and the decisions that we make today will be a legacy to future generations;
- ◆ The *spatial fixity* of housing: given that each site has unique locational attributes houses are heterogeneous. Consequently, each house has an element of monopoly with regard to a particular location and all other dwellings are imperfect substitutes;
- ◆ The *importance of financial markets*: the ability of households to raise loans using property as collateral is greater than most other assets. This reflects the longevity of housing and the fact that there is a well developed secondary market in homes;

- ◆ *Price volatility*: while house prices may be no less volatile than many other forms of asset, the implications for household wealth and, therefore, consumption are generally greater;
- ◆ The *lumpiness* of purchase and consumption: the purchase of shelter is likely to represent the largest single item in an individual's budget, and if a house or apartment is purchased it is likely to be the largest asset in their portfolio. While financial intermediaries have an important role to play in facilitating the smoothing of housing purchase, the need to raise a substantial down-payment and to cover substantial transactions costs at the time of purchase, implies that the market in housing remains a particularly lumpy one;
- ◆ *Housing wealth* differs from most other forms of wealth: since every household needs shelter, increases in house prices simultaneously change the market value of wealth and the costs of future housing. Consequently, it is not clear that an increase in house prices makes households better off. While some may gain—namely those who are able to substitute away from housing to other goods or who had planned to trade down—others will lose, such as those who have a low level of substitutability away from housing or who were planning to trade up prior to the price increase;
- ◆ *Tax treatment*: the complex interaction of the property market with the tax system is widely regarded as an important feature of housing markets.

Some of these characteristics of housing are reinforced by the fact that settlement tends to agglomerate, with the formation of large cities. The clustering of economic activity and the formation of cities and sizeable settlements results from increasing returns to scale in production and externalities and spillovers in consumption. External economies give rise to increasing returns to scale in the production process implying benefits of agglomeration for firms (Fujita, Krugman and Venables, 1999). Others emphasise the tendency to agglomerate based upon externalities arising from consumption (Glaeser, 2000). Individuals benefit from the wide variety of goods and services the city offers, as a result of critical mass, and therefore choose to locate within cities. A third dimension of the benefits of agglomeration concerns services, both public and private. Sufficient density is necessary to make service provision viable, and this can have a significant long-term bearing on the public finances. The result is that much of the economic, social and cultural innovation that characterises dynamic countries with strong competitive advantage occurs within cities. Planning or other policies which dilute the dense interactions that characterise cities are liable to weaken innovation.

## 2.3 Land and house prices

### 2.3.1 Introduction

Land is a key resource in the provision of housing and widely seen as a key factor contributing to the high level of house prices. The rising cost of land and its potential impact on the housing market has raised discussion of possible policy interventions in the land market. However, before examining policy measures, it is desirable to develop an understanding of how the land market affects the housing market. Without such an understanding, it is possible that new policy interventions in the land market could be ineffective or have unintended and undesirable effects.

### 2.3.2 The Economic Theory of Factor Prices

From an accounting perspective, land prices are correctly seen a component part of the price of housing. In times of rising house prices, it is natural to wonder whether they are driven by rising land prices. This would be true if the accounting relation stated above was also a *theory or explanation* of how prices are determined. Such an ‘adding up’ theory of prices was common in the 19th century and was the subject of major debates in political economy. Opponents of the adding up theory argued that it did not really explain prices, since it required a clear independent theory of what determines each of the components of price: such as wages, land prices and profits. From the mid 19th century on, the adding up theory of price was rejected. But, in the theories that replaced it, it remains true that the price of a product is, in general, *equal to* the sum of inputs costs, even if it is not *determined by* them alone.

Modern economic theory views the prices of products as being determined by the interaction of ‘supply and demand’. Supply and demand are themselves seen as an expression of three underlying determinants: the preference of economic actors, the relative abundance or scarcity of factors of production and the technology available for turning factors of production into goods and services. It is these three underlying determinants that make the forces of demand and supply and, consequently, these three that do the explanatory work in modern economic theory.

This analytical approach has implications for the way the market for factors of production—such as land, labour or capital—is understood. The demand for these factors is described as a ‘derived demand’, derived from the demand for the final products and services that they produce. Stronger demand and higher prices for a final product will be associated with an increase in demand and higher prices for the inputs used to make that product.

### 2.3.3 Applying the Economic Theory of Factor Prices to Housing and Land

The economic theory of goods and factor prices would suggest that house prices are primarily determined by the demand and supply of housing. If the price of existing houses exceeds the cost of construction of new housing, new construction takes place. The gap between house prices and construction costs shapes the competition for the land that is available, given its location.

This economic theory of house and land prices is sometimes presented in a slightly simplified way as a ‘residual’ theory of land prices. This is useful for some purposes, especially as an antidote to the ‘adding up’ view, but can also be misleading. The ‘residual’ view is derived from looking at how the business of housing development is sometimes done. Developers compete for the available land and the price of land gets bid up to the point where, given developers’ expectations of the prices and costs of houses, a ‘normal’ profit can be earned on the provision of housing. Hence the price of land is the ‘residual’ left after the costs of construction, including interest and profits, have been deducted from house prices.

Thus the idea that land prices are *determined by* house prices, reflecting the pressure of housing demand, captures an important feature of both the long-term evolution of housing—in which the increased demand for housing deriving from economic and social development gives rise to a strong upward pressure on land prices—and of the business practice of developers in certain contexts.

However, while capturing an important feature of house prices, the ‘residual’ view cannot be regarded as a universal explanation of house prices. As Evans points out:

*given the supply of land, house prices determine land prices, but it is quite illegitimate to then drop the qualification and say that since house prices determine land prices, the supply of land is irrelevant and will not affect either the price of land or the price of housing (Evans, 1988: 5).*

In other words, the *supply conditions of land* have a major influence on the degree to which a given demand for housing translates into an increase in land prices and house prices. Conceptually one can imagine a situation where at one extreme, if abundant zoned and serviced land was available, even a dramatic increase in housing demand could be met without driving up land prices and house prices very much. At the other extreme, if land supply was highly restricted, a strong demand for housing would feed through to a very strong increase in land values and house prices. The implications of the fact that the supply of land for housing is variable and uncertain rather than being fixed has only recently been fully articulated (Evans, 2004).

The supply conditions of land can vary for two main reasons:

- ◆ Decisions on planning and infrastructure; and
- ◆ The decision of land owners to sell or develop their land.

Decisions on planning and infrastructure are major influences on the supply of land suitable for housing. Major efforts have been made in recent years to expand the supply of land that is zoned and serviced. There is a need for a high level of sustained investment in infrastructure to ensure an adequate land supply that not only has the basic services but also has satisfactory transport links and other services.

While the planning system decides on which land development is permitted, landowners have a key role in the development process. As Evans notes:

*Once one thinks in terms of the supply of land, then the owner of land has to make decisions as to whether the land should be put to this use or not, should be developed or not, should be let or not. Thus the owner has to make choices. There are alternatives ... one of which will be continuing as before, and the owner has to decide what to do (Evans, 2004: 246).*

Much economic discussion of land supply is based on the idea that the owner of land will allocate land to its most profitable current use – i.e. the owner will seek to maximise the current rent or income from the land. If this is true then the price of the land that is available will be determined by demand; planning decisions will affect what this available supply is, but once this is decided, the price of this supply will be demand determined. The motivations of landowners as such will not be a significant factor as landowners will behave in a predictable automatic way in allocating land to its more current profitable use.

Evans points out that there are a number of reasons why this is not an accurate analysis of how the land market works. First, landowners may have motives other than maximising the current income from their land. One possible motivation is that the existing landowner occupying potential development land may have a high attachment to living and working in that area, even if the development of land for housing is more profitable. Second, speculation regarding future increases in land values may lead to land being used in a way that does not maximise current income. Another reason why land may not be smoothly allocated to its most current profitable use is that the land market is characterised by information inefficiencies and uncertainty. While some land is formally advertised, this is not true for all land suitable for development. Developers do not know sites are available or what sites might become available in the future. They have to search for sites, a process that can be costly. When sites are found owners have to be negotiated with; these owners will have different motivations regarding their land and different reservation prices.

Both of these factors—the fact that owners have objectives other than maximising the current income of their land, and the information inefficiencies and uncertainty in the market—mean there is not a smooth allocation of land to its most profitable use. In this situation, the willingness of landowners to make land available for development can affect land prices and, to the extent that it affects the supply of housing in a given area, may also affect house prices.

Another significant feature of the land market is the fixed location of each piece of land. This means that the relative location of sites, in particular their contiguity, may be of overriding importance. This has significant implications.

*If the likelihood of a piece of land being put on the market depends solely on the owner's preferences, then the sites which are sold for development are unlikely to consist of sites adjacent to each other at a favourable location. Development is likely to sprawl in a quasi-random way across the landscape, sprawl which was seen in Britain between the wars and which continued to occur in countries like Australia and the United States after the Second World War (Evans, 2004: 181).*

Governments around the world use a variety of policies in seeking to avoid achieving an undesirable pattern of sprawling development. Planning is the major response to this concern and the planning system in turn becomes an important influence on the supply conditions of land. Consequently, this is a theme in analytical work on housing and is discussed in Section 2.3.4 below. In addition, compulsory purchase powers are widely used to address the problem of contiguity, in, for example, road construction. In some countries, public land banking (which may involve compulsory purchase) is used as a means of ensuring that the operation of the land market does not frustrate the goal of achieving integrated development. The role of activist public policy in land management is discussed in Chapters 7 and 8 of the main report.

The uncertainty and variability of land supply is one important factor that shapes the business practice of developers and others in the market. On the one hand, it increases the uncertainty that developers face and, on the other, it gives great market power to particular owners of land. If developers and builders are to maintain continuity in their operations they need to ensure that they have an ongoing supply of suitably located sites. They cannot rely on the market making land available at the time they require it. To ensure adequate land, developers need to invest in land banks. The practice of land banking by developers, in turn, becomes another influence on the supply of land in the market. Because the land that is available for development is limited, developers compete with one another for a scarce supply of sites. This tends to create rising land prices. And it 'encourages developers to buy land ahead of development to make absolutely sure of their own land stocks while, at the same time, making it more difficult for their competitors to find land on which development would be permitted' (Evans, 2004, p. 178).

### **Conclusion**

The Council's analysis of the relationship between house and land prices is that neither the idea that 'high land prices are the cause of high house prices' nor the idea that 'high land prices are the result of high house prices' provides a full explanation of the relationship. Land and house prices are jointly determined. The strong demand for housing in Ireland in recent years led to a bidding up of housing and land prices. However, it is increasingly recognised that the supply conditions of land are a key influence on land prices and on both the supply and price of housing.



### 2.3.4 The Impact of the Planning System on Land Supply and the Housing Market

Given the importance of the supply conditions of land in determining both land and house prices, it is not surprising that the impact of planning on those supply conditions is the subject of much analytical and empirical research. The following section outlines some thoughts on the economics of planning controls and the views of the All Party Oireachtas Committee on the Constitution (APOCC) on the operation of the planning system and land market.

#### The Economics of Planning Controls

The logic of public policy in housing development is based, in the first instance, on 'spillover' costs or externalities. These arise because the building decisions of one firm or household has external effects on other households. Some externalities can be dealt with by the price system or private negotiation between the relevant parties. In practice, neither is likely to be adequate in dealing with the main externalities that arise from housing development. Consequently, some form of government action is required. In many areas of economic and social life, this action takes the form of taxes, subsidies or the creation of a pricing system. In some areas, it takes the form of direct public provision of a good or service. In the area of land use and development, public policy usually takes the form of physical controls.

The economic analysis of planning controls suggests that their application can deliver the following benefits (Harvey, 2000):

- ◆ Improved knowledge, through the removal of uncertainties that inhibit private investment or lead private actors to make decisions that reduce welfare;
- ◆ Allowing for externalities, for example, by siting houses, schools, shopping facilities and bus termini in strategic proximity;
- ◆ Dealing with imperfect competition, for example, by using public authority when the owner of a particular site stands in the way of comprehensive development;
- ◆ The provision of public and collective goods;
- ◆ Improving the mobility of resources, for example, by ensuring that housing is developed in areas of strong business growth;
- ◆ The redistribution of income, by encouraging development of a certain type in some areas, and preventing it in others.

Given these possible benefits, an economic case can be made for planning. In particular, its case-by-case approach allows it to achieve outcomes that cannot easily be achieved by general taxes, subsidies or regulations. At the same time, planning control can create a number of difficulties. It can lack flexibility, take insufficient account of some of the benefits of existing land use and overlook certain repercussions of the controls imposed. For example, Harvey notes that 'low-density housing requirements may mean that building for the poorer members of the community is confined to those parcels of land available for high-density development, with the result that its price per acre exceeds that

of land for rich people's housing' (Harvey, 2000, p. 181). Planning tends to be negative in character and cannot easily stimulate the schemes the authorities would like to promote. Case-by-case examination of applications for planning permission can lead to significant delays. And, of course, the planning process itself uses resources.

Overall, planning has significant repercussions on the land market and the economy of particular localities. These include:

- ◆ Changing the value of individual sites;
- ◆ Altering the overall pattern of land values, raising some and reducing others;
- ◆ Reducing or increasing overall land values, not merely shifting land values from one area to another;
- ◆ Distributional effects, not only through changing land and house prices, but also through changing job opportunities and the quality of life of different social groups.

It was the contention of Evans that the planning system in the UK was unnecessarily restricting the supply of land and thereby driving up both land prices and house prices. There have been a number of empirical studies in the UK that sought to quantify the effect of the planning system on house prices. Some studies have found evidence of planning having a significant influence on house prices.

#### **Report of the All-Party Oireachtas Committee on the Constitution (APOCC)**

In an Irish context, the effect of land use planning on property market is discussed in the recent Report of the All-Party Oireachtas Committee on the Constitution (APOCC, 2004). Drawing on the work of Dunne, the report outlines the following argument on the timing of development, the hoarding of land and the upward pressure on land prices (Dunne, 2003).

Planning allocates development rights to some land owners and denies them to others. If, in addition to this, the amount of land zoned is inadequate, the value of zoned land will increase further. If this value is 'given by way of gift to the owners of zoned development land', it 'distorts the operation of the market'. 'The super profits available to those dealing in this land send a signal to entrepreneurs to involve themselves in the acquisition and holding of zoned development land' (APOCC, 2004, p. 84).

The Committee argues that this analysis points to the critical need to zone and service an adequate amount of development land. 'In fact a marginal shortage, resulting from a landowner deciding not to bring zoned land to the market, can have a disproportionate effect on the market. Such a deficiency in the supply of zoned land to the market will probably result in a substantial increase in the value of the land that does come to the market' (APOCC, 2004, p. 85).

As the Committee states 'The solution might appear to be to zone and service much more land, than required to meet forecast development needs. Local Authorities are however, understandably reluctant to do this because the resources available to service land are scarce. Plainly it would be wasteful to provide

services to land that may not be developed for a generation.’ (APOCC, 2004:85). The Committee goes on to note that ‘As a result of this, and bearing in mind that planning authorities have no real control over the rate at which zoned land will come to the market, there may be a perceived shortage of development land. Once there is a perception of shortage, speculators will buy land with the intention of cashing in on anticipated price rises and, having bought it, they are likely to have an incentive to maintain the shortage and keep values up by not developing the land until it suits their interests’ (APOCC, 2004, p. 85).

The Committee notes that there has been considerable comment on the apparent concentration of land ownership and on land hoarding. It accepts that developers must maintain at their disposal a steady supply of land as this is of vital importance in being able to conduct their business. Additionally, it reports that, when pressed, those whose submissions cited hoarding, ‘were unable to provide clear evidence of land hoarding in the sense of a deliberate policy of accumulating land holdings and withholding these from the market. It comments that, ‘the planning system as operated at present facilitates those with the resources to buy up development land and hold on to it: this, as we have shown, creates distortions of the market’ (APOCC, 2004, p. 86).

It argues that when Irish planning law was drafted there was insufficient appreciation of ‘the difference the planning process could cause in relative land values when there are even marginal shortages in the amount of services land available or when zoned land does not come to the market for development’. Nor was there sufficient appreciation of how this could give rise to intense speculation in development land. This led to flaws in the planning laws, flaws that ‘remain today’ (APOCC, 2004, p. 88).

Leaving aside the planning system, an important issue is the ability of private restrictions on land to increase the price of land and housing. The possibility that this could occur is acknowledged in the literature. Monk *et al.* (1991) refer to the possibility that the landowners would restrict supply and increase prices because of monopoly ownership or other market imperfections. There is, however, very little literature on this issue.

## 2.4 Theories of house price dynamics

### 2.4.1 Explaining House Price Movements

A significant portion of the economic analysis of housing is concerned with the movement of prices over time. In particular, a range of empirical studies seek to determine the degree to which changes in house prices are predictable and to forecast price movements on the basis of past and present determinants. If price changes are predictable, then there may be opportunities for informed agents to profit from this predictability through arbitrage opportunities. The degree to which future changes in price can be predicted is also important for those seeking to formulate and implement housing policy. A set of related studies seek to examine the change in real house prices over time. As noted above, the time

involved in the construction of houses is one of the basic features of the housing market. Supply cannot meet a sudden increase in demand, giving rise to a temporary change in real house prices. Prices will overshoot, but in the long run, when sufficient time has passed to allow additional housing to be built, prices will revert to trend and change in line with construction costs. If this relationship holds, then real house prices can be said to be constant or 'stationary'. If not, then a revision, modification or extension of the existing theory is required. Many economic studies examine persistence in price movements and the 'stationarity' of real prices.

#### 2.4.2 Spatial Determinants and Housing Models

As noted above, an important characteristic of housing is its fixity in space. Each house has its own unique locational attributes. Therefore, in analysing a housing market an important consideration is the choice of an appropriate spatial scale. A hierarchy of spatial options and considerations is shown below in Figure 2.1.

**Figure 2.1** Housing Markets - A Spatial Hierarchy



It is clear that each of the spatial determinants overlaps and is a sub-set of each other. The type of economic model employed and the type of analysis adopted depends on which spatial unit is under consideration. At the tip of the hierarchy is the traditional microeconomic location theory, whereby the individual chooses to be housed in a determinate location based upon a personal trade-off between the consumption of space and transport costs, subject to the budget constraint. However, models of this type, while informative in understanding individual decisions, do not shed significant light on the overall workings of the housing market. At the other extreme are studies that model the movement of house prices at the national level. Models of this type focus on the aggregate drivers

of supply and demand, such as national income, changes in interest rates and the user cost of housing and demographic developments. It is primarily this type of analysis that we undertake in Background Papers 3 – 5. However, an intermediate set of models examine housing markets on a regional basis.

### 2.4.3 Regional Housing Markets

Regional house price models measure the interaction of house market determinants while still being concerned with the macroeconomic or aggregate drivers, rather than analysis of the individual decision making processes. In the case of the housing market, modelling of regional differences will often be defined by the availability of administrative data. There is a growing international literature on the causes and explanation of regional house price variation and their dynamics.

In particular in the UK, there is an awareness that the South East and London tend to lead the house price cycle and that the gap between prices in the South East and elsewhere widens in boom times and falls back at other times. A similar pattern appears to exist between Dublin and the rest of Ireland (see Background Papers 4 and 5). In the UK, it is also noted that geographical differences in house prices exceed those in incomes. At present, this is the case in Dublin, where incomes are 15 per cent above the national average while house prices are some 30 per cent above the average level. However, this has not always been the case. A tendency for regional house prices to change at different rates must be caused by:

1. Change in the economic conditions in different regions; or
2. Differences in the responsiveness of regional house prices to common changes in economic variables.

In Ireland it seems likely that both have occurred. The economic boom has been experienced more strongly in and around Dublin than elsewhere, while the supply response of housing in Dublin may have been less responsive than in other parts of the country (see Background Paper 5).

The tendency of prices to rise in one part of the country and then spread to other parts is called the ‘ripple effect’. Meen sets out a number of explanations for the dynamic processes that underpin the ‘ripple effect’ (Meen, 2001). Perhaps the most important is migration. It seems obvious that in deciding where to live people will take into account differences in house prices. This is particularly true if the individual is relatively ‘footloose’ and able to substitute between locations. To the extent that this is the case people living in a highly-priced region are likely to move to the relatively low price regions, causing some re-balancing of relative prices between the two regions. There are a number of frictions in the market, such as transaction and search costs, which will reduce such movements. Search and transactions costs can also play a further role. There is substantial evidence that as demand for housing weakens, sellers are often unwilling to reduce prices, at least in nominal terms (because of what economists call ‘backward looking price expectations’). The unwillingness to reduce the price will delay sale and lower the number of transactions. Consequently, prices in each region will not necessarily change rapidly.

The modelling of regional house prices is fairly uncharted territory in Ireland and we are only aware of the study by Stevenson (2003). Stevenson tests for the 'ripple' effect, finding that there is some evidence of dispersion in regional prices from Dublin and less so from Cork. However, while many people have moved out of Dublin in response to higher house prices, this process has been far out-weighted by net domestic in-migration to the region as a result of economic development.

#### 2.4.4 National House Price Models

Here we provide a typology of the econometric or empirical models commonly used to model house prices on a national basis, drawing on the review contained in Meen and Andrew (1998). A first class of models are what is known as mark-up models. These models suggest that house prices can be thought of as a mark-up on construction costs. Such models imply a high level of responsiveness in the supply of housing which gives rise to the long run 'mark-up' over construction costs. It is unlikely that these circumstances apply as, given the locational uniqueness of dwellings, individual dwellings are not easily replicable and these models are of limited use to us. A second form of model is what economists call a reduced form approach; it specifies separate supply and demand equations and equates the two to derive a price equation. The model is static in nature and assumed to be stable over time. A variation on this type of model incorporates dynamic effects through changes in demography and is known as a life cycle model. This is the type of model most commonly employed in Ireland and elsewhere.

The net return from housing must be measured against the likely post tax return from other assets. The return on housing is usually reflected in measurement of the 'user cost' which takes into account on-going maintenance and depreciation as well as the costs of finance and compares these to the imputed income and capital gain (for further discussion of user cost see Background Paper 5).

There are also important interactions between general price inflation and the housing market. In particular, it was often asserted that in times of high inflation the relative return on housing would rise, leading to a reduction in other asset prices and a 'crowding out' effect on other productive investment. Certainly inflation erodes the real value of debt held upon the housing stock, implying an advantage to 'capitalising' the value of the debt which is then reduced over time relative to wages and prices of other goods.

A further strand of economic analysis suggests that past house prices affect current house prices through inter-temporal equity transfer, which may include inter-generational equity transfer. The idea is that the down-payment, and willingness to pay, on the next property bought is in some way linked to the equity built up in the existing property. If this is the case, it can also lead to persistent trends in house prices within regions and may force up the prices in other regions where there is a spill-over from one region to another. Effects of this nature give rise to cyclicalities which is the subject of the next sub-section. They are also tied to credit constraints which are then examined.

### 2.4.5 Cyclicalities in Housing Markets

Housing markets are prone to cyclical movements in both prices and the volume of new construction. It is important to clearly distinguish the different factors that can generate strong cycles in the housing market. At least three causes can be identified (Wheaton, 1999):

1. *Housing demand and construction*: the core characteristics of housing (in section 2.2) can generate cycles because supply takes time to respond to demand. Indeed, this can be amplified by the fact that demand can increase quickly in response to income or interest rate movements, since it is largely financed by borrowing rather than saving (Miles, 1994);
2. *The macroeconomic cycle*: cycles in the property market may be driven by the underlying macroeconomic cycle. Indeed, there are a number of reasons why the housing cycle can be an amplified version of the macroeconomic cycle;
3. *Market speculation and asset price bubbles*: housing, property and asset markets can be the subject of speculative activity that drives prices well above what is justified by the economic ‘fundamentals’. While prices are rising it is possible to make gains from capital appreciation, and hence demand feeds on itself. At some point, such a bubble must burst, and prices can collapse. The resulting negative sentiment can hang over the market, limiting supply for a considerable period.

This categorisation suggests that observed cyclical behaviour in the housing market does not necessarily imply the presence of a bubble. The relevance of this in our interpretation of the Irish housing system is discussed in Chapter 3 of the main report.

### 2.4.6 The Impact of Credit Constraints

An important question is the degree to which liberalisation and the extension of finance leads to increased house price pressure and may be responsible for generating additional house price volatility. The main changes in the mortgage markets are considered in Background Paper 3. However, it is undoubtedly true that the increase in credit availability has been an important development in the recent past and the growth in residential debt is considerable. Despite the increased availability of credit, individuals still face credit constraints of a number of types—in particular, loan-to-value ratios or down-payment constraints and loan-to-income ratios. These credit constraints may be entirely reasonable, reflecting concerns about the ability to service loan repayments or to guard against asymmetric information and adverse selection by those borrowers who are least able to service the loans concerned.

In our analysis of housing affordability in Background Paper 5 and Chapter 3 of the main report, we will distinguish between the on-going costs of accommodation, as required to service a mortgage, and the one-off or point-of-entry costs to ‘get onto the property ladder’ of which down-payment constraints are probably the greatest. We will see that while the on-going cost of accommodation in Ireland has risen in recent years it is not that much higher than it has been over recent decades. But the down-payment has risen dramatically relative to take home



pay. These measures differ from the concept of ‘user cost’, which takes into account not only changes in the post-tax cost of mortgage repayments but also expected changes in the capital value. While user cost gives a more accurate view of the cost of ‘holding’ housing, including additions to paper wealth, the analysis of point-of-entry and on-going costs is also a useful reflection of the cash costs of property and an indicator of where buyers are likely to feel the greatest pinch. In particular, the data reviewed in Background Paper 5 suggest that the greatest increase has been in the point of entry costs where access to inter-generational wealth is an important factor.

In a recent book, Meen analyses the possible implications of down-payment constraints on the impact of a rising housing market (Meen, 2001). In particular, he distinguishes between credit-constrained households and householders that are unconstrained, due to overall wealth endowments including parental gifts and other bequests.

He considers the case of two households—with identical income expectations and other characteristics, including preferences for the consumption of housing — but where one is credit-constrained by the need to accumulate a down payment and the other is not, as it is able to acquire the down payment from other sources (e.g. parental contribution). An unconstrained household may choose to consume its desired level of housing at any point in time, based upon its preferences and budget. However, a household which faces credit constraints may be unable to enter home ownership for quite a while, until it is able to accumulate assets. This is despite the fact that both households may have the same expected lifetime income.

Meen notes that these characteristics imply considerable differences between the position faced by constrained and unconstrained households (Meen, 2001):

- ◆ Credit constraints generate ‘lock in’ costs and reduce the ability of some groups to move or take advantage of profitable housing opportunities. The presence of credit constraints, and the fact that some households are ‘locked in’ to particular properties or locations, can help explain the persistence of regional price variations. It can also create a correlation between house prices and transactions which may further exacerbate housing market cyclicality;
- ◆ The consumption of housing and the type of housing occupied is typically bumpier and more fragmented for low income households who face credit constraints and are more reliant on current rather than permanent incomes;
- ◆ For a given set of changes in the economy, low income households are likely to adapt more slowly due to down-payment constraints. If certain locations experience shocks, then high income residents are likely to be in a better position to move to alternative locations quickly.
- ◆ The effects of credit constraints vary by age cohort and may be particularly important when considering those of key household formation age (e.g. 25–34 year olds).



This analytical approach would seem to have relevance in analysing developments in the Irish housing market. As will be seen in Background Papers 3 to 6 and in Chapter 3 of the main report some households have been in a position to benefit from the dramatic movements in the Irish housing market, while others experience these changes as an increased source of financial and other pressure.

## 2.5 The dynamics of rental systems: Unitary and dualist

In understanding housing, it is important to take note of the dynamics of rental housing and its impact on overall housing systems. These dynamics have been identified in a number of influential studies by Kemeny (1990, 1995). The core of Kemeny's approach is identification of an underlying economic dynamic, what he calls the 'maturation process'. The process of maturation refers to the widening gap between the outstanding debt on existing housing units and the debt on new units. This gap is a result of the inflation of construction and land costs. The second element of Kemeny's analysis is a country's strategic policy response to the maturation process. He argues that the interaction between the underlying maturation dynamic and long term policy strategies determines the trajectory of each country's overall housing system. This leads Kemeny to the third element of his overall analysis: the distinction between unitary and dualist rental systems. The fourth element is identification of the economic and social effects of unitary and dualist systems. The final element is Kemeny's discussion of the policy measures that can start a transition, over several decades, from a dualist to a unitary system or vice versa. Here we summarise and explain the first four elements of this important analysis of the dynamics of rental and overall housing systems. Policy strategies are discussed in Chapter 6 of the main report.

### 2.5.1 The Underlying Economic Dynamic: The Maturation Process

The maturation process is a result of the inflation of construction costs. Because of this, there is a growing gap between what it cost to build the first houses erected and those currently being constructed. Because debt servicing comprises a large proportion of total housing costs, maturation reduces the cost of providing old housing to well below the costs of new construction'. 'Maturation' refers not to the age of the dwelling of the overall stock, but to the level of outstanding debt on it. Kemeny measures maturation as the average outstanding debt per dwelling on a given stock, expressed as a percentage of the value of outstanding debt per newly acquired or renovated dwelling. Maturation is, of course, a phenomenon common to all housing stocks, including both owner occupied and rental housing. Indeed, most owner occupiers are keenly aware of how much easier their mortgage becomes over the years.

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1. Economists tend to be uncomfortable with Kemeny's concept of historic cost. From an economic perspective, maturation does not reduce the cost of providing old housing since the true cost is the opportunity cost; this would include the return that could be earned from investing the full capital value of the property. In the economic perspective, setting rents based on actual money cost of mature housing (Kemeny's historic cost) means that the return on investment is being used to offer renters accommodation below the market price. Whether one adopts Kemeny's terminology, whereby costs refer to money costs, or the economist's terminology, where costs refer to opportunity costs, the maturation process undoubtedly makes it possible to set rents below the market rate without any external subsidy.

The degree of maturation of a stock of dwellings can be measured in terms of the ratio between the average debt on the existing dwelling and the average debt of a newly acquired dwelling. Where the ratio is 1:1 the stock of dwellings manifests no maturation at all - i.e., the average outstanding debt on the stock of dwellings is identical to the average debt on newly acquired dwellings. A ratio of 1:2 means that the average outstanding debt on existing dwellings is half that on a newly acquired dwelling. Kemeny terms this the *maturation index*.

Maturation is not simply a product of inflation. It reflects a range of other economic and policy factors. One important factor is the rate at which new dwellings are added to the stock. Adding newly acquired dwellings to the existing stock reduces the average age of the total stock and increases the average debt load per dwelling. Kemeny terms this 'front loading'. The degree of maturation of a stock of dwellings can be slowed or even reversed by investments made to modernise older dwellings. Other influences on maturation include the extent of equity leakage. Maturation is reversed in owner occupation if dwellings are either sold or re-mortgaged and the proceeds are consumed or invested outside the housing market. Reversal of maturation occurs in public rental when dwellings are sold at discounted prices.

Kemeny argues that the phenomenon of maturation has been neglected in housing studies, particularly in the literature on public renting. He argues that the process of maturation and policy responses to it are central in understanding the dynamics of housing systems.

### 2.5.2 Strategic Policy Responses to Maturation

Before considering the critical role of public policy, it is important to clarify Kemeny's preferred terminology. In discussing housing systems, Kemeny objects to the 'three tenure' model, which distinguishes between owner occupation, public renting and private renting. He rejects the common assumption that public and private renting constitutes different forms of tenure. The more important distinction, he argues, is between profit renting and cost renting. Profit renting refers to a situation in which a landlord charges the maximum obtainable rent for a dwelling, regardless of the historic cost. Cost renting refers to a situation in which rents cover only actual incurred costs of providing the dwelling. Because of maturation, these costs tend to fall in real terms over time, allowing cost based rents to fall also. Cost renting may involve charging the cost of an individual dwelling or rents that reflect a pooling of costs across a large housing stock. There is an important conceptual distinction between cost rental housing that competes with profit renting and cost rental housing in the form of segregated public housing.

Kemeny argues that these definitions have more analytical value than the distinction widely used in the Anglo-Saxon world, between 'private' and 'social' housing. Much owner occupation could be termed 'social'. Likewise, referring to social renting as 'social housing' creates an artificial distinction between 'social' and 'market' forms of housing that obfuscates more than it clarifies. 'It invidiously reinforces the belief that owner occupation is somehow a 'market' form of housing

and is not subsidised. By the same token, it can convey a suggestion that social housing is somehow a form of welfare' (Kemeny, 1995, p. 34).

Kemeny argues that various housing systems can be seen as a result of the strategic policy response to the maturation process. The key element of these strategies is the policy response to maturation in the cost rental sector, such as the public rental system. The underlying economic dynamic means that the maturation process in cost renting reaches a point at which debt servicing falls in real terms to a level at which cost renting begins to compete strongly with other forms of housing, particularly profit renting and owner occupation. This is reflected in falling real rents and lengthening waiting lists for cost rental housing. This creates pressure for some policy response. One response is to encourage cost renting, allow it to expand and use its high level of maturation to compete with profit renting. Increased construction would allow cost renting to cater for wider and wider groups of households. Kemeny terms the market that results from this policy strategy 'an integrated rental market' or a 'unitary rental market'. The alternative policy response is to undermine or reverse the maturation process by hiving off cost rented units and suppressing cost renting by limiting it to a public rental sector that comprises a strictly controlled minority form of housing. Kemeny terms the rental system that results from this a 'dualist rental system', since its distinguishing characteristic is the existence of parallel public and private rental systems subject to increasing divergent forms of provision and conditions of tenure.

Kemeny labels the unitary rental system a 'market oriented' one, because it seeks integration between profit and non-profit oriented rental housing and integration is sought by relying on market mechanisms. In particular, cost renting provides a significant element of competition to profit renting. He labels the dualist approach a 'command policy' system, since it does not allow competition, does not constitute a market and curtails cost renting within a command economy under the direct state control.

### 2.5.3 Dualist and Unitary Rental Systems

Using this analytical approach, Kemeny provides a telling account of the evolution of housing systems in range of western democracies.

#### **The Dualist Model**

The underlying maturation process increases demand for cost renting in the form of long waiting lists. This places pressure on policy makers to either increase the supply of cost rental housing in order to satisfy the growing demand, or to dampen demand by making cost renting less attractive by reducing its availability. The dualist response is to adopt a range of measures that reverse the maturation of the cost rental sector by selling off dwellings, limit demand for cost renting by confining it to a state controlled command economy and expand demand for owner occupation by subsidising it. These measures prevent the emergence of a rental market that might tempt a large number of households to continue renting rather than buy into owner occupation.

Nevertheless, the dualist response requires continual policy adaptation. Kemeny's account of this evolution is worth noting. While the maturation of the cost rental sector can be reduced by selling off stock, it is necessary to subsidise owner occupation. Indeed, there is increased pressure for escalating subsidies to owner occupiers to tempt ever more marginal households into owner occupation, in what Kemeny calls the 'ratchet effect'. The policy-created shortage of cost rental housing impels more and more households to buy who would not do so if cost rental housing were in adequate supply. Cost renting becomes increasingly concentrated among low income households. It takes progressively larger and larger subsidies to bring about progressively smaller and smaller decreases in the ever more marginalised and impoverished rump of non-buyers. 'One of the hallmarks of a dualist strategy is therefore a shift in subsidies from all owner occupiers to marginal owners and marginal first time buyers' (Kemeny, 1995, p. 54). As more tenants with lower incomes are encouraged to owner occupation, private renting becomes increasingly dominated by owner occupiers, heavily committed to high mortgage payments, renting out their homes for short periods or renting rooms to eke out low incomes. Access to the public rental sector in a dualist system is limited, effectively, to a decreasing proportion of those who are in urgent need of housing. Sales of public housing units to tenants at large discounts reverse the process of maturation and, directly or indirectly, increases the rents on the remaining tenants or the tax burden on society at large. The scarcity of cost rental housing means that rent rebates increasingly replace unitary housing subsidies.

A dualist rental system of this sort is found primarily in English speaking countries: Britain (particularly England), Ireland, the US, Canada, Australia and New Zealand. It is also found in some other countries, notably Iceland and Finland.

### **Unitary Rental Systems**

The alternative strategy to suppressing cost renting is to take advantage of maturation by allowing cost renting to compete with profit renting and owner occupation, thereby creating a unitary rental market. In such a market, the maturation of cost renting is used to exert downward pressure on profit rents in order to limit landlord extraction of profits that reflect the rising value of property rather than the historic cost of the dwelling. Renting provides a realistic alternative to owner occupation by making it attractive for a significant proportion of households to remain in the rental market. Kemeny notes that considerable profits may be possible in the profit-oriented rental stock until such time as cost rental organisations have built up a stock of housing that is fully mature and comprises a sufficiently large proportion of rental housing in all geographical and socio-economic sectors of the market.

While dualist or command housing systems in various countries tend to be very similar to one another, unitary market systems vary considerably. One dimension of this variation is the degree to which the cost rental sector is a market leader in determining rent levels for the rental market as a whole. Kemeny identifies cases in which cost rental is 'dominant' (the Netherlands), 'leading' (Sweden) and 'influencing' (Germany and Switzerland). He argues that the two crucial variables

determining the degree of influence are the relative size of the cost rental sector and its level of maturity. The long term strategic orientation of state policy is, in turn, decisive in determining what form the rental market and the overall housing system will take.

In his analysis of the evolution of housing systems, Kemeny notes that unitary systems are common in countries with a negotiated, partnership, approach to public policy, while dualist systems are common in countries with an adversarial, ideologically adversarial system. Ireland is an exception to this pattern.

#### 2.5.4 Economic and Social Effects of Dualist and Unitary Systems

Kemeny's analysis identifies wide ranging economic and social effects that derive from adoption of a dualist or unitary housing policy strategy. Among these are a number of limitations of a dualist approach and a number of pressures that can build up in a unitary system.

First, dualism leads to greater state intervention in housing than does a unitary rental market. Cost rental housing is nationalised and often placed under increasing tight centralised political control. Second, dualism results in artificially induced housing shortages. This is because 'profit renting has never in any period of history been able to satisfactorily meet the demands for rental housing and when cost renting is structured in such a manner as to limit its availability then rental housing shortages are almost inevitable' (Kemeny, 1995, p.152). Third, dualism minimises housing choice, by a policy strategy that in effects forces as many household as possible into owner occupation.

The choice that is made available to the vast majority of households is that between owner occupation and profit renting. The latter, with its high insecurity of tenure, rents that gravitate towards a return on the current market value of property, and often high levels of landlord selectivity from among potential tenants and interference in domestic matters, creates a housing system in which the only form of housing that offers security of tenure, and at least an element of non-profit extraction, is owner occupation. Dualism therefore channels demand into owner occupation (Kemeny, 1995, p. 152).

Fourth, dualist systems are subject to periodic 'rent differential crises'—in which the rents in cost rental and profit rental differ dramatically—which forces government to a range of responses. This is because in private renting with unregulated rents, a mature stock enables landlords to charge rents which earn them the equivalent of a market return on the capital value of the property (which increases with economic development) over and above covering actual incurred costs. 'The landlord and not the tenants benefits from the maturation process' (Kemeny, 1995, p. 42). Fifth, dualist systems are subject to the ratchet effect, whereby subsidies to encourage marginal buyers are increased, thereby increasing the relative deprivation of the remaining non buyers. Sixth, dualist systems are subject to cycles in which the owner occupation market swings between glut and famine.

Perhaps the most important aspects of Kemeny's analysis is the way in which it reveals that one of the overall effects of a dualist system is to limit the development of a commercial rental sector, thereby restricting the availability of rental housing overall. Kemeny observes that 'Dualist rental systems in countries with high rates of owner occupation are likely to have private rental sectors that are heavily influenced by the owner occupied sector' (Kemeny, 1995, p. 161). Two examples of this influence are worth noting. One is that much private renting consists of rooms or flats in owner occupied houses or rental of second homes by non-professional landlords. 'A central concern of such landlords is therefore preventing tenants gaining security of tenure by granting only short-term leases and the highly personalised nature of such landlordism that places severe restrictions on who may or may not be acceptable as a tenant' (Kemeny, 1995, p. 161).

The other way in which large owner occupied sectors influence the nature of the private rental sector is the way in which heavy subsidisation of owner occupation boosts prices of owner occupied housing. The subsidies to the owner occupied sector becomes capitalised in the value of houses which impacts on the valuation of rental property, increasing the minimal rental income that is considered necessary to generate a return on investment. The result of this will often be that renting ceases to be an attractive form of investment and the supply of rental housing falls. The overall effect of a large subsidised owner occupier housing market is therefore to reduce the demand for rental housing:

*In a well functioning rental market where there is a reasonable degree of security of tenure the price of rental property will reflect the rental income it is able to generate. Vacant possession price will play a marginal part in determining values. In a residential property market dominated by heavily subsidised owner occupier housing vacant possession prices will be more important in determining the market value of rental property and the high level of subsidisation of owner occupied housing will make it worth while to sell rental housing into owner occupation. Another way of putting this is that the owner occupied housing market penetrates the rental market to such an extent as to undermine the autonomy of the latter. This is one important factor in the drastic decline of private renting in home owning societies with dualist rental systems.*  
(Kemeny, 1995, p.162)

Not only is the size of the overall rental sector constrained, but the *nature* of private renting is also shaped. Kemeny argues that the kind of short-term opportunistic profit renting that tends to be associated with owner occupation may have a role in providing temporary rental housing for a specialist market for students, foreign visitors and those seeking temporary housing, for example as a result of divorce. 'However, it cannot reasonably be expected to provide permanent rental housing' (Kemeny, p.162).

It seems clear that these features of a dualist system have important consequences for those on modest incomes and the poor. 'The exclusion of important groups from access to owner occupation in home-owning societies comprise a major source of inequality. Dualist systems provide no viable alternative to owner occupation for most households' (Kemeny, 1995, pp. 70-71). In addition, Kemeny argues that there is a significant gender dimension to dualist housing systems.

He argues that after access to wage labour, access to adequate low-cost housing is one of the most important preconditions for gender equality. ‘By structuring housing choice in such a manner that favours owner occupation a built-in bias in favour of two-income households which can afford to buy is created’ (Kemeny, 1995, p.70). Single-income households – especially those among lower income earners – will be severely disadvantaged in gaining access to housing. Given the considerable increase in single-person households, and particularly single-parent households, over the post war period, and the fact that women are over-represented in these groups, it is clear that dualist systems have highly differential gender implications.

This analysis of the economic and social effects of a dualist, command, rental system has had some influence on the British policy debate. It must be examined when the strategic direction of Irish housing policy is considered.

Kemeny’s analysis also reveals some of the pressure that can build up in unitary market rental systems. One is the pressure to raise rents in the cost rental sector to levels that might drive tenants away from the sector. Another is pressure to remove the element of support that is commonly given to profit renting. Among the difficult policy decisions faced are the speed at which rent control should be relaxed and the setting of rents in the cost rental sector at levels that both pool the costs between household and also respond to the differential demand for different dwellings. These pressures and challenges can create policy crises in which the overall direction of the housing system becomes contested and inconsistent policy measures can be adopted.

#### **2.5.5 Policy Strategies for Moving Between Dualist and Unitary Rental Systems**

The final element of Kemeny’s analysis is his identification of the policy strategies that engineer transition from a dualist to a unitary housing system, or visa versa. Although housing has a strong systemic dimension, that makes change slow, the underlying dynamics of maturation and cyclicity ensure that pressures and crises do recur. These periods of pressure or crisis demand policy responses and provide the opportunity for a change of strategic direction. The policy implications of Kemeny’s analysis are discussed in Chapter 6 of the main report.