

THE IRISH HOUSING STOCK: GROWTH IN NUMBER OF VACANT DWELLINGS

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1. Introduction

This article assembles data from a range of different sources to build up a picture of the stock of vacant or second dwellings in Ireland today and how that stock has changed over time.¹ It also considers the regional distribution of these dwellings.

The construction of dwellings now accounts for an eighth of the output of the Irish economy. Even in terms of its impact on domestic demand and employment, the prospects for this sector are very important to the overall well-being of the economy. However, the housing market can also have a very important impact on the wider economy through the effects of changes in personal wealth, which the housing stock represents.

The price of accommodation in Ireland is now exceptionally high by the standards of the rest of the EU. This high price is impacting on the productive potential of the economy by restricting labour supply through its effects on migration into Ireland and also through its effects on internal migration. However, the addition to personal wealth, from the high valuation of the stock of dwellings, has a positive effect on consumer demand and investment. A collapse in house prices accompanied by a collapse in housing output, while possibly having long-term benefits for the productive potential of the economy, could have serious short to medium-term effects on economic growth. As a result, it is very important to understand the factors that are driving the housing market, including the factors driving the demand for dwellings for investment or leisure purposes.

A very important element in the boom in housing over the last decade has been the growth in the number of dwellings that are vacant, for whatever reason, for most of the year. These dwellings should be distinguished from dwellings that are rented and occupied,

¹ The author is very grateful for the assistance and advice received from the Central Statistics Office (CSO) in assembling the data. The author alone is responsible for the results and conclusions presented in this article.

providing permanent accommodation for independent households. The distinction considered in this article between dwellings vacant for at least some of the year and dwellings that are occupied does not concern tenure, but rather whether the dwelling is the primary residence for a permanent household².

The growth in the number of second or vacant dwellings has added to the boom in the housing sector, playing a significant role in adding to inflationary pressures. Using standard statistical sources such second dwellings are difficult to distinguish from dwellings that are occupied by households – there is no one there to answer questions from those conducting surveys or the Census. This article uses a range of sources to establish the pattern over time in ownership of second or vacant dwellings in Ireland and considers the implications for the housing market.

There are a number of different reasons why dwellings may lie vacant. In a limited number of cases the owners may be away temporarily; in other cases the homes are for holiday use, either by the owner or on a rental basis; and in yet more cases houses may be held vacant by their owners, either while they are being sold, or on a longer term basis for investment purposes. In each case the dwelling does not serve as the home for an individual household.

The reasons why individuals hold and acquire such second dwellings are different from those driving the acquisition or rental of a principal private dwelling. There is more emphasis on the asset value of the property and also, in the case of holiday homes, the demand derives from household leisure interests.

Whether the second or vacant dwellings are new or second hand, because they are not available to permanently house independent households, they add to upward pressure on the demand that would arise naturally from the growth in the number of households. Even if the “new” second or vacant dwellings are converted from dwellings previously occupied by households this will have an indirect effect on the demand for new building. The resulting increased demand for the services of the building and construction sector puts upward pressure on the price of the output of that sector and, indirectly, on land prices.

The number of second or vacant dwellings, and how that number is changing, is a very important issue for policy makers (see Fitz Gerald *et al.*, 2003 and McCarthy, *et al.*, 2003). Our understanding of the nature of the current housing boom, how sustainable it is, and of the number of people who are seeking housing is affected by the proportion of dwellings which are vacant for all or part of the year rather than being used to permanently house independent households. To the extent that the increased stock of dwellings is

² Strictly speaking, it is not possible to determine from the Census whether the dwellings in which persons were enumerated were their “primary residences” or not. It is conceivable that a household could be at their second home and that their primary residence was vacant. However, such an outcome could affect the location where the second dwelling was recorded but not the absolute number of vacant dwellings.

absorbed as second or vacant dwellings, there are fewer dwellings available to meet the rise in the number of households driven by the changing age structure of the population.

The data sources used in this article are discussed in Section 2. Section 3 examines the data from the Census on the stock of dwellings, including the stock of vacant dwellings. In Section 4 these data are put together with the data on housing completions and estimates of the rate of depreciation or obsolescence to derive a series for the stock of dwellings over the last thirty years. Details of how the stock data are derived and estimates of the rate of depreciation or obsolescence are given in an Appendix. Together with the series on the stock of dwellings, data on the numbers of households are used to derive a measure of the change in the number of second or vacant dwellings over time. Section 5 looks at the evidence on the regional breakdown in the growth of second or vacant dwellings. Section 6 looks at the pattern of headship (the proportion of each cohort who are “heads of household”) in Ireland and how it has changed. Section 7 considers the implications of these data for future housing demand and for economic policy and Section 8 presents conclusions.

2. The Data

The data used in this article include unpublished data from the 1991, 1996 and the 2002 Census on the stock of dwellings, the Department of the Environment data on housing completions,³ and ESB data on the number of household electricity connections. Data are available from successive Censuses, the Labour Force Survey and the Quarterly National Household Survey on the number of independent households. Census data for the last forty years on the stock of dwellings occupied by independent households, classified by when the dwellings were built, provide a means of estimating the depreciation or obsolescence in the housing stock – the number of dwellings that disappear between Censuses.

While the bulk of the analysis is conducted at a national level, the article also looks at more recent data on the construction of dwellings by county, and combines these data with the Census data on the stock of second or vacant dwellings by county to get a picture of the regional dispersion of the stock of dwellings and how their number has changed since the 1996 Census.

3. Census 2002 Data on Stock of Second Dwellings

The Census, undertaken in April 2002, was targeted at the population resident on the night of the Census. It provided a comprehensive enumeration of the number of households in the country who were resident the night of the Census. However, as part of the visual count carried out by the enumerator at the form delivery and collection stages of the Census an indication of the

³ The housing completions and the ESB connections data are not fully independent as the completions data make use of information on new electricity connections.

status of the dwelling was recorded by the enumerator using the following categories:

Dwelling status:

- Occupied
- Temporarily absent

If vacant:

- Habitable house/flat
- Holiday home
- Under construction
- Uninhabitable

The categorisation of these dwellings was, of necessity, difficult. While it was clear to an enumerator where a house was under construction, without a resident it was difficult to allocate dwellings into the “holiday” or “other” category. The “holiday” category could be interpreted as applying purely to dwellings which are available to rent or, alternatively, a broader interpretation might have been used where the dwellings were the second dwelling of someone who used it for holiday purposes. It is likely that a significant number of the latter dwellings were classified as “other”. Where the dwelling was built as part of a tax finance scheme the dwelling may have a dual role – as an investment and as a dwelling for letting for seasonal visitors. Similarly, second dwellings in Dublin (and other cities) may be used by residents from outside Dublin for short-term “holiday” visits, as well as representing an investment. There will also be dwellings vacant as part of the normal sale and purchase process. However, the number vacant due to the normal operation of the second-hand market is likely to form a fairly stable proportion of the housing stock over time. As a result, in our analysis in subsequent sections of this article we do not distinguish between the different categories of vacant habitable dwellings. In addition to the problems in classifying habitable dwellings, it may not always have been clear whether a vacant dwelling was “habitable” or not. However, these data provide a very important benchmark number.

The dwellings enumerated include houses, apartments, flats, and bed-sits. What distinguishes them as separate dwellings is that they are occupied by a separate household or could potentially be occupied by a separate household. Some ambiguity may arise in the case of vacant dwellings where the dwelling is part of a larger dwelling – for example a vacant bed-sit in a larger dwelling. However, the number of cases where such ambiguity may arise is likely to have been small.

Table 1 shows the results from the Censuses for 1991, 1996 and 2002. The regional dispersion of these vacant dwellings is discussed later in Section 5. Over 88 per cent of habitable dwellings were occupied at the time of the Census. A further 1.8 per cent of the total were temporarily vacant, while holiday homes *per se* accounted for just 2.7 per cent of the habitable dwellings.

Table 1: Stock of Dwellings, including Second Dwellings, 2002

	1991	Average Growth %	1996	Average Growth %	2002
Private households	1,029,084	1.8	1,127,318	2.7	1,287,958
Habitable vacant dwellings	131,165	0.1	131,630	5.3	170,154
Of which:					
Temporarily absent	26,023	0.3	26,380	0.3	26,736
Holiday homes	14,799	11.6	25,671	8.9	39,383
Other houses/flats	90,343	-2.5	79,579	5.5	104,035
Total habitable dwellings	1,160,249	1.6	1,258,948	3.0	1,458,112
Total uninhabitable	25,120	12.5	45,349	0.5	46,555
Of which:					
Under construction	4,497	26.3	14,431	14.2	28,033
Uninhabitable	20,623	8.4	30,918	-9.7	18,522

Source: CSO Census 1991, 1996 and 2002, unpublished data.

The rate of household formation increased in the second intercensal period 1996-2002 and this accounted for a significant part of the increase in the housing stock. However, it is clear from the data in Table 1 that the stock of habitable vacant dwellings grew much more rapidly than the stock of dwellings occupied by households. While the increase in numbers of dwellings recorded as holiday homes was particularly marked, following on an earlier rapid increase between 1991 and 1996, the numbers in the “other vacant” category also increased rapidly over the most recent period. The numbers temporarily absent on Census night in 2002 were very similar to the number in 1991. (The 1996 figure is derived by interpolation – the actual number was not available from the CSO.)

Probably the biggest class of vacant habitable dwellings in the “other” category are dwellings held for investment purposes. It would appear that the numbers in this category actually fell between 1991 and 1996. This was a period of relatively slow growth in prices and investors may have taken the opportunity of the pick-up in activity after 1994 to initially reduce their stock of vacant dwellings.

The number of houses reported to be under construction is approximately half the number of dwellings built in 2002. Given the fact that many dwellings are built over quite a short period, this seems to be reasonably consistent with the number of dwellings being built in April 2002. The other uninhabitable dwellings category probably covers a very wide range of dwellings in different states of decay.

Table 2: Proportion of Dwellings that are not Principal Private Dwellings, 1991, Percentage

	Total	Holiday	Other
Germany	4.8	0.8	3.9
Greece	33.9	33.6	0.3
Spain	32.0	17.3	14.7
France	19.8	10.7	9.1
Ireland 1991	11.3	1.4	9.9
Ireland 2002⁴	11.7	2.7	9.0
Italy	21.1	13.9	7.1
Netherlands	5.2	0.2	5.0
Austria	12.5	8.5	4.1
Portugal	27.0	15.8	11.2
Finland	8.1	1.2	6.9
Sweden	3.1	1.3	1.8
United Kingdom	6.2	1.2	5.0

Source: Eurostat New Cronos web site, file “dweltyp”. The statistics for Ireland come from unpublished Census data.

Table 2 shows comparative data for 1991 from Eurostat for a range of EU countries and data for Ireland for 2002. Not surprisingly the countries in the South of Europe have a very high proportion of their housing stock that are used for holiday purposes. When these holiday dwellings are excluded seven of the countries in the table had between 4 per cent and 9 per cent of the housing stock vacant in 1991 for “other” purposes. This is not dissimilar to the situation in Ireland in 2002.

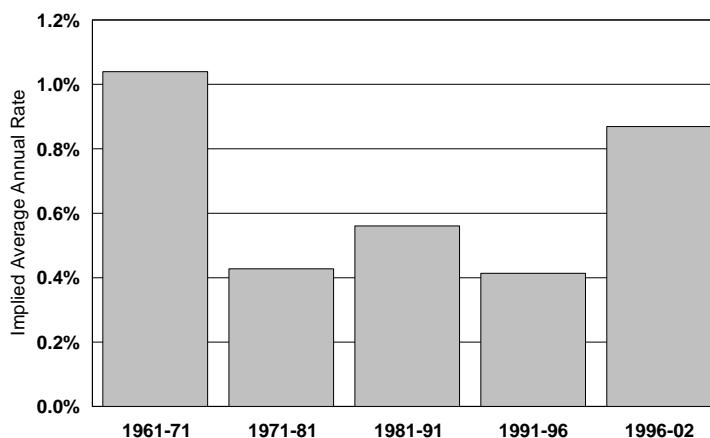
4. Estimate of the Stock of Dwellings

The Census 2002 data on the stock of dwellings, whether occupied or vacant, can be used as a benchmark to construct a time series for the number of such dwellings back to 1970. To project the benchmark series back in time it is necessary to have a series for the number of dwellings constructed each year and an estimate of the number that became obsolescent or otherwise disappeared each year. The number of vacant inhabitable dwellings can then be derived by subtracting the number of independent households resident in permanent dwellings from the total number of inhabitable dwellings.⁵

⁴ The Irish data are taken from Census 1991 and 2002 and refers to habitable dwellings which were occupied at the time of the Census.

⁵ The number of households each year can be obtained from Census with interpolation used for intervening years. The Labour Force Survey and the Quarterly National Household Survey give data for each year from 1988 to 2003.

Figure 1: Implied Annual Depreciation in Stock of Dwellings



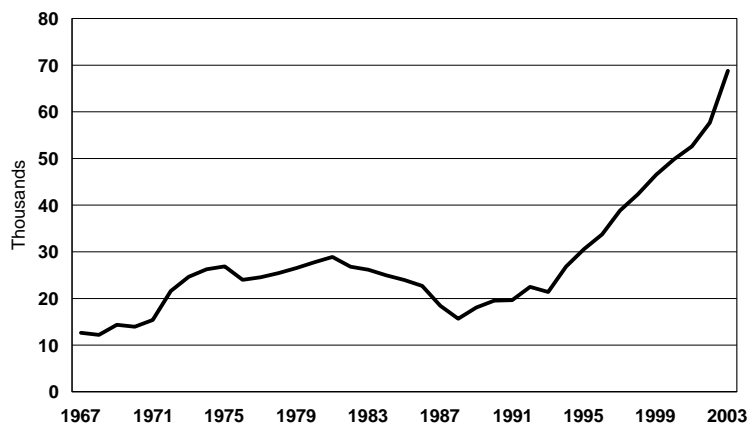
For the period 1991 to 2002 the number of dwellings that became obsolescent or otherwise disappeared each year can be obtained by taking the change in the stock of dwellings from the Censuses and subtracting this from the numbers of dwellings built over the relevant period. For years before 1991 the number is not obtainable directly from published sources. However, as described in the Appendix, data from successive Censuses on the age of the housing stock are used to derive an estimate of the rate at which dwellings ceased to be habitable. This estimate of the rate of depreciation or obsolescence is shown in Figure 1 for each of the decades back to 1971.

There was a striking increase in the number of dwellings that disappeared over the 1996-2002 period. This rate of obsolescence was around 0.8 per cent of the housing stock each year. While some of those dwellings which disappeared were demolished to make way for new denser building or were otherwise replaced (e.g. Ballymun) the numbers do look quite high. In particular, an analysis of the stock of dwellings by age in successive Censuses suggests that many of the dwelling disappearing were quite young, possibly under thirty years old. Some of the dwellings which disappeared may be due to the reconversion of numbers of poor quality bed-sits back into single family dwellings.

Prior to the latest period, the depreciation rate was highest in the 1961-71 period when a significant number of the houses built before the foundation of the State disappeared. However, the 1971-81 decade saw a slowdown in the rate of obsolescence.

The series for house completions produced by the Department of the Environment is available on a fairly consistent basis back to 1971. In addition, there are data available back to early 1966 from the same source on a slightly different basis. As shown in Figure 2, we have linked the two series to give a continuous series for the number of completions of dwellings from 1967 to 2003. Figure 2 illustrates the magnitude of the change in gear that occurred around the mid-1990s, with dwelling completions running at a multiple of the level previously experienced over the last forty years.

Figure 2: Completion of Dwellings, Annual Figures



Source: Department of the Environment.

The current rate of construction of dwellings in Ireland, shown in Figure 2, is not only exceptionally high by previous Irish standards, but is also dramatically greater than the rate of construction of dwellings currently experienced elsewhere in the EU. Table 3 shows the rate of construction of new dwellings for the most recent years for a selection of EU countries and the US and compares their rates to the rates a decade ago.

Table 3: Number of Dwellings Completed Per Thousand Population

Country	1992-3	2001-3
Denmark	3.1	3.0
Finland	7.3	5.9
Ireland	6.3	17.3
Netherlands	6.0	4.1
Poland	3.5	2.7
Portugal	5.6	10.3
Spain	3.3	10.2
United Kingdom	3.3	3.1
United States	4.5	6.1

Source: United Nations Economic Commission for Europe. UK – UK Office of National Statistics. US – US Census Bureau New Residential Construction. Spanish data for 1993, all others 1992. Irish data for 2003, Netherlands, Spain, UK and US data for 2002. Rest data for 2001.

The 2003 figure for Ireland is higher than that experienced by any other European country from the Urals to the Atlantic (EU or non-EU) since 1990. It is almost three times the current US rate and six times the rate for the UK. While in 1990 Cyprus (14), Greece (12), and Finland (13), approached the Irish rate for 2003 of 17 dwellings completed per thousand of the population, no European country has been close to the Irish rate since that year. This exceptional rate of new construction means that the Irish housing stock is rising rapidly.

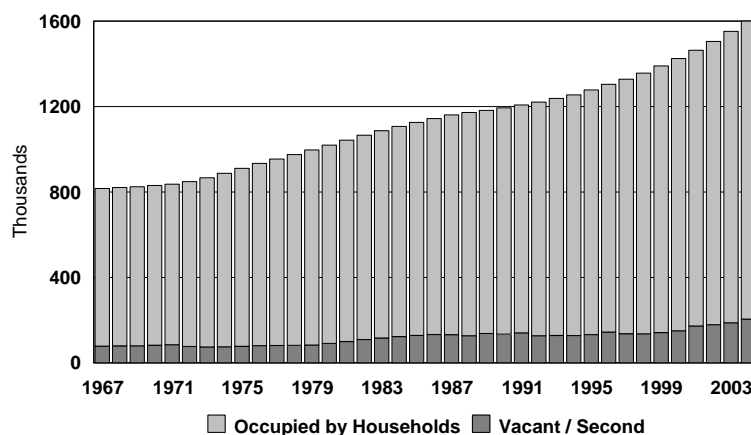
Data from the Census on the stock of dwellings is not available before 1991. However, with no obsolescence or depreciation, the

stock of dwellings in 1986 would be equal to the stock in 1991 (from the Census, Table 1) less the new dwellings constructed over the relevant period.⁶ However, to arrive at the actual number of dwellings in 1986, allowance must be made for the number of dwellings lost over the intervening period, through obsolescence or depreciation. This exercise can be repeated for each intercensal period back to 1971.⁷

Each of the Censuses gives a figure for the number of households in permanent private housing units. While there are some minor discontinuities over the Censuses since 1961, together they provide a reasonably good set of benchmark figures for the number of permanent dwellings that are occupied by independent households on a full-time basis. The Labour Force Survey (LFS) and the Quarterly National Household Survey (QNHS) provide an alternative estimate⁸ of the number of households on an annual basis from 1988 onwards which mirrors the figures in the Census.

For the purpose of deriving the stock of dwellings, we have relied solely on the Census figures to ensure consistency between the housing stock and household numbers. For the years between each Census the number of households has been derived by interpolation. The resulting estimate of the number of households is shown in Figure 3, together with the estimated series for the stock of vacant habitable dwellings. This shows the increase in the stock of vacant or second dwellings since the mid-1990s.

Figure 3: Stock of Occupied Dwellings and Number of Households



Source: ESRI Estimates.

⁶ To match the timing of the Census, the annual completions data used are for dwellings completed in the year ended the first quarter of each calendar year.

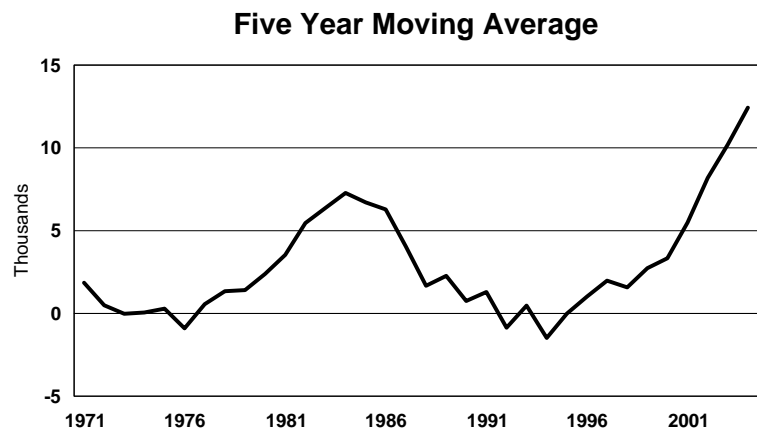
⁷ We only have housing completion data from the second quarter of 1966 so it is not possible to go back to 1961.

⁸ Although the Labour Force Survey is not fully independent of the Census.

Table 4: Stock of Habitable Dwellings

	1971	1979	1981	1986	1991	1996	2002
1. Private Dwellings	709,360	876,659	910,700	976,304	1,029,084	1,123,238	1,287,958
2. Vacant Dwellings	80,685	73,514	85,004	120,970	131,165	135,710	170,152
3. Total Stock of Dwellings	790,045	950,173	995,704	1,097,274	1,160,249	1,258,948	1,458,110
4. Vacant as % of Total	10.2	7.7	8.5	11.0	11.3	10.8	11.7
5. ESB Connections adjusted ⁹	774,311	941,120	989,930	1,096,000	1,182,377	1,309,750	1,560,000
Ratio of 5 to 3	0.98	0.99	0.99	1.00	1.02	1.04	1.07

An alternative estimate is available for the stock of habitable dwellings from the number of household electricity connections. By 1981 very few inhabited dwellings were without electricity therefore this provides an independent estimate of occupied dwellings. As can be seen from Table 4, the ratio of the estimated stock of household electricity connections to the stock of inhabited dwellings, having been fairly stable between 1971 and 1991, rises in the 1990s. The number of electricity connections can be higher than the stock of inhabited dwellings because some households may have more than one account (e.g. farmers) and the account for some small businesses and for the common services in apartment blocks may also be classified as a separate household connection. However, there must be some concern about the extent of the discrepancy that has arisen since 1991. When combined with the surprisingly high depreciation or obsolescence figures for the period 1996-2002, it does raise questions about the consistency of the housing completions and the housing stock data.

Figure 4: Net Increase in Vacant or Second Dwellings

Source: ESRI estimate.

⁹ The figure for ESB connections in 1971 has been adjusted by adding the number of dwellings shown in the Census as having no electricity connection in that year. It is assumed that by 1981 the number of such dwellings was so small as to be irrelevant.

5. Regional Breakdown

The data in Table 4 show that the share of the total stock of habitable dwellings accounted for by second or vacant dwellings showed a small rise between 1996 and 2002. However, this must be seen in the context of a very rapid rise in the number of households and, therefore, in the number of occupied dwellings.

Figure 4 shows a moving average of the increase in the number of second or vacant dwellings. Because the estimated number of households¹⁰ shows a rather uneven pattern from year to year and is subject to sampling error we have used a moving average of the annual estimates rather than showing individual year data. The Figure shows that the proportion of the dwellings added to the housing stock in the latest five-year period which are second or vacant dwellings is at an all time high, constituting over a sixth of all dwellings constructed. Thus the share of the stock of habitable dwellings, which falls into the category of second or vacant dwellings, is still rising.

The same data sources, discussed in Section 2, have been used to construct series for the stock of occupied dwellings and for the stock of vacant habitable dwellings by county. The Censuses of 1991, 1996 and 2002 give data for the number of inhabited and uninhabited dwellings by county.¹¹

Table 5 shows the proportion of the stock of habitable dwellings in each county that were vacant or second dwellings for 1991, 1996 and 2002. The counties are ranked according to the size of the increase in the number of vacant habitable dwellings between 1996 and 2002. For the State as a whole the proportion of the housing stock unoccupied increased by just over one percentage point between 1996 and 2002. The biggest increase occurred in the counties on the Atlantic seaboard from Kerry to Donegal.¹² Taken together the counties on the “Atlantic seaboard” had 19.4 per cent of dwellings vacant in 2002. The only other counties with more than 15 per cent of their habitable dwellings vacant in 2002 were Wexford, Waterford and Roscommon.

This pattern strongly suggests that a substantial number of such dwellings are intended as holiday homes located in scenic areas. It also indicates that the Census categorisation of the 2002 data probably underestimates the number of dwellings used for holiday purposes. In some cases these dwellings may have been financed under various tax incentive schemes and may be viewed by their

¹⁰ The years between the Censuses are interpolated on the basis of the Labour Force Survey and Quarterly National Household Survey data.

¹¹ In addition to the assumption on depreciation a number of other simplifications have been used. The housing completion data are for the calendar year rather than for the year ended March. As a result, the total for the State differs slightly from the total for all the counties.

¹² The “Atlantic seaboard” counties are Kerry, Clare, Galway, Mayo, Sligo, Leitrim and Donegal.

Table 5: Regional Breakdown of Habitable Vacant or Second Dwellings

	Vacant as % of Habitable			Change in Vacant as % of Change in Total
	1991	1996	2002	1996-02
Carlow	8.5	7.9	9.3	15.3
Dublin Co. Borough	9.5	8.8	8.5	0.5
Dublin-Belgard	4.2	3.8	4.2	6.7
Dublin-Fingal	6.1	5.7	7.1	11.7
Dun-Laoghaire-Rathdown	6.8	5.9	7.1	29.4
Kildare	7.4	5.9	7.8	14.0
Kilkenny	9.5	8.2	8.2	8.6
Laoighis	10.5	9.5	10.4	14.8
Longford	15.9	12.6	14.2	26.9
Louth	8.7	8.0	7.6	6.5
Meath	8.8	8.2	10.4	20.6
Offaly	9.3	8.7	9.4	13.8
Westmeath	11.8	10.7	11.7	16.1
Wexford	13.1	11.6	16.9	35.4
Wicklow	11.5	10.3	9.6	4.8
Clare	16.5	15.0	18.3	34.7
Cork Co. Borough	10.0	8.2	8.1	4.4
Cork	13.9	13.1	13.7	16.7
Kerry	18.9	18.9	20.1	30.2
Limerick Co. Borough	8.7	9.1	7.9	-4.9
Limerick	11.3	10.3	10.9	14.5
Tipperary N. R.	11.8	10.4	12.0	22.2
Tipperary S. R.	10.5	9.3	9.1	7.5
Waterford Co. Borough	8.8	7.2	8.8	20.0
Waterford	13.6	13.5	16.3	30.7
Galway Co. Borough	10.7	8.9	9.8	13.5
Galway	14.7	14.3	16.6	28.3
Leitrim	19.3	20.3	23.5	47.4
Mayo	16.8	17.2	19.8	34.7
Roscommon	14.4	13.9	17.5	42.2
Sligo	15.2	14.5	15.9	26.5
Cavan	13.1	12.2	13.6	23.4
Donegal	17.7	17.0	22.3	46.8
Monaghan	10.5	10.2	9.4	0.1
Total	11.3	10.5	11.7	19.3
Atlantic Seaboard, except Cork	16.9	16.6	19.4	35.5

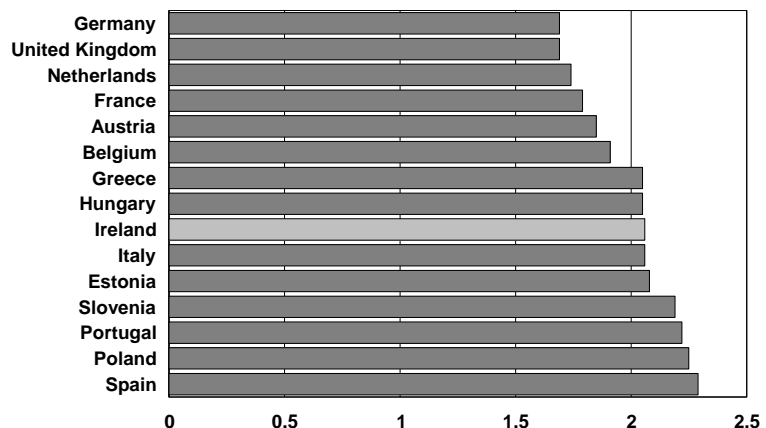
6. Change in Headship

owners principally as an investment, albeit in a scenic location where their use value would come from letting or sale as holiday homes. It is interesting that tax incentives applied in part or all of 12 of the 13 counties with the biggest increase in vacant dwellings between 1996 and 2002 (Dun Laoghaire Rathdown was the exception).¹³

Table 5 also estimates the share of all additions to the stock of dwellings between 1996 and 2002 that were held vacant, albeit in many cases for holiday purposes. For the “Atlantic seaboard” counties around 35 per cent of the net increase in the number of habitable dwellings was in the “vacant” category. In counties Donegal, Leitrim and Roscommon the share exceeded 40 per cent.

There are four main demographic factors driving the demand for additional dwellings. First, the number of older people who die or enter institutional care determines the number of existing dwellings that become available for newly formed households. Second, the natural increase in the adult population drives the number of new households formed each year. Third, migration affects the number of independent households in the country that need housing. Fourth, changes in the proportion of the adult population who form independent households determine the number of dwellings needed to house a given population of adults. This latter factor is often defined as the change in the headship rate: the proportion of individuals in an age cohort that list themselves as “head of household” or “principal reference person” in the Census or in the QNHS.

Figure 5: Number of Adults per Independent Household



Source: Eurostat new Cronos web site.

¹³ The tax schemes included the Urban renewal Resort Areas scheme, applying to a range of seaside resorts, and the Rural Renewal Scheme which applied to building in the Upper Shannon Region. For details see Cooney, Martyn and Reck, 2001.

When prices for accommodation are high relative to income and where there is a tradition of multigenerational families living together the headship rates will be low. Adults will be slower to form independent households and this will be reflected typically in low headship rates for those aged between 20 and 35 years.

Figure 5 shows the number of adults per independent household for a range of EU countries. It shows a fairly clear pattern where countries with an ageing population, which have had a high standard of living for a sustained period, have a relatively low number of adults per independent household. Typically, countries such as Germany, the UK and France have less than 1.8 adults per household. For countries where the population is still relatively young (Ireland, Spain, and Portugal), with relatively few dwellings being released by the oldest age cohorts, there are significantly more adults per dwelling. In addition, where countries have a standard of living well below the EU average (Slovenia and Poland) they are not yet able to devote major resources to increasing their stock of dwellings. For those countries where living standards have shown significant convergence to the EU standard of living (Ireland, Portugal and Spain) the relatively high number of adults per dwelling, combined with increased real incomes, is reflected in a high rate of construction of new dwellings (Table 4).

As discussed above, Ireland has a relatively high number of adults per dwelling compared to the richer EU members. If preferences in Ireland were similar to preferences in other EU member countries this would, *ceteris paribus*, lead to falling headship rates. However, the very high cost of accommodation in Ireland may be playing a significant role in offsetting or delaying such a trend.

Table 6: Headship Rates, Per Cent of Cohort Who Are “Heads of Household”

Age	1981	1986	1991	1996	2002	UK, 2001
20-24	15.8	14.2	14.0	14.9	18.9	21.6
25-29	32.5	32.1	29.8	29.3	31.2	43.4
30-34	41.7	42.9	42.8	42.4	42.9	53.3
35-39	45.2	46.6	47.6	48.2	47.8	55.7
40-44	47.0	49.0	49.6	51.0	50.8	57.2
45-64	53.0	54.1	54.8	55.1	54.2	58.5
65+	57.4	59.2	61.1	62.6	61.9	72.5

Source: Ireland – Central Statistics Office, Census of Population. UK – Office of National Statistics, *Labour Force Survey*.

Table 6 shows the headship rates for Ireland since 1981. It shows a small increase in headship rates in recent years for those aged 20 to 24 years. There was also some increase in headship rates in the 1980s for those aged over 35. What is surprising about these data is how little change there has been over the course of the last decade. There was a small increase in the headship rate for the 25-34 age group, with a somewhat bigger increase for the 20-24 age group. The latter may have been affected by the rise in participation at third-level education, necessitating a move by some students away from home. There remains a big difference compared to the UK for all age

groups. The pattern of limited change in headship is discussed in more detail in McCarthy *et al.*, 2003.

The UK data, while not strictly comparable to the Irish data, being drawn from the Labour Force Survey rather than the Census, indicate a much higher rate of headship for all age groups. The smallest difference is for the 45-64 year age group. If preferences were similar in Ireland to the UK one would expect some convergence in headship rates. Such a change was assumed in the last two ESRI *Medium-Term Reviews*. However, the evidence from Table 6 is that this has not happened to date.

The stability of the Irish rate of headship in the face of rising incomes no doubt reflects the very rapid rise in the real cost of dwellings. The decision to form an independent household, with all the set-up costs involved, has been affected by the rising costs of accommodation. This is true whether the independent household is seeking rented or owner-occupied accommodation.

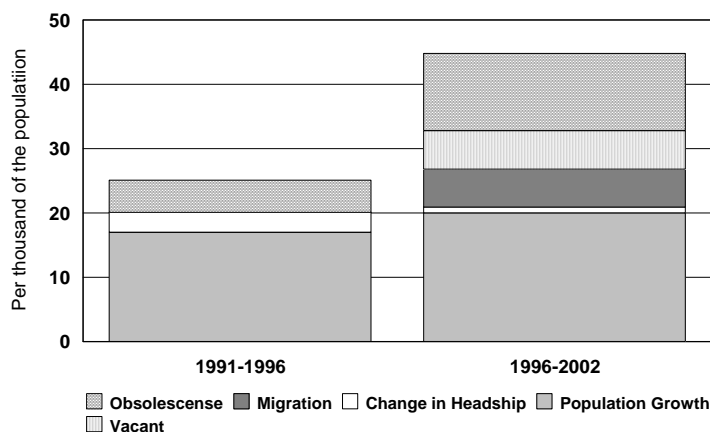
It looks as if headship rates will remain fairly stable until the real cost of accommodation shows a significant fall from its current level. However, the fact that headship rates remain low means that any drop in prices could see new households being formed at that point through rising headship rates. In turn, in the medium term such a reaction to falling prices may limit the extent of the possible fall in the cost of dwellings.

7. Policy Implications

The dramatic increase in the rate of construction of new dwellings in Ireland since the mid-1990s means that the stock of dwellings is increasing very rapidly. However, it is clear from the data summarised in Figure 6 that a very important component in the demand for new dwellings is the rapid increase in the stock of vacant or second dwellings. With such second or vacant dwellings accounting for over 12,000 of all dwellings constructed over the last five years (Figure 4), the factors driving this demand merit further investigation. Not least, this heightened demand for dwellings for leisure or for pure investment purposes (held vacant) is an important factor in adding to the rate of inflation in house prices.

Fitz Gerald, McCarthy Morgenroth and O'Connell (2003), Appendix 1, calculated that the number of vacant dwellings in Ireland had increased by 80,000 over the period 2000-2003. On the basis of the modelling work in that paper it was estimated that this additional demand would have added between 15 per cent and 20 per cent to house prices over the same period. Because the estimates presented in this article for the increase in the number of vacant dwellings are somewhat lower than in Fitz Gerald *et al.* (2003), the average increase in prices for the country as a whole was probably lower. However, because of the regional concentration of the growth in vacant dwellings, the increase in the price of dwellings as a result of this demand has probably been much greater in the Border, Midlands and Western (BMW) region than in the country as a whole.

Figure 6: Decomposition of Housing Demand



The effects on house building in the counties affected by tax schemes is particularly striking. A high proportion of the building in these counties is of dwellings that are now vacant. While beneficial for the building industry and landowners in these counties, the effect has been to greatly raise the housing costs for new young households setting up in these counties. The negative effects of this on the growth prospects of these counties, especially of those counties in the BMW region, must be taken into account when assessing the impact of the tax schemes.

Figure 6 shows a decomposition of the sources of demand for new dwellings over the period 1991-2002. The effect of population growth on the demand for new dwellings is calculated on the basis that headship rates remain unchanged. The separate small effect of changes in headship rates on demand is shown in the Figure. After 1996 there was a big increase in the net immigration into the country. Over the period 1996-2002 many of the immigrants were returning emigrants and the majority of those who were not Irish had a high level of educational (see Box C in this *Quarterly Economic Commentary*). The growth in immigration from 1996 onwards added significantly to the demand for additional dwellings.

A striking feature of Figure 6 is the extent of the loss of dwellings through obsolescence over the most recent period. This figure for obsolescence, derived from the Census and the house building data, seems high, especially given the relative youth of the housing stock. As described in Appendix, the data on the age of the housing stock in successive Censuses suggest that for the most recent period quite a lot of the dwellings that have disappeared from the stock are under thirty years of age. Also, the fact that the ESB connections data has shown a bigger increase in housing stock than the Census data suggests the need for further research to better understand the process.

As discussed in the last *Quarterly Economic Commentary* (McCoy *et al.*, 2004), the Irish housing market is currently in an unstable position. House prices are not only exceptionally high by historical standards, but they are also very high relative to the price of similar

accommodation in most of the rest of the richest countries in the EU. In the very long run there is no reason why the cost of building in Ireland should be dramatically different from that elsewhere in neighbouring EU states. When the demographic pressures eventually ease it can be anticipated that house prices will fall in real terms to closer to the levels currently prevailing in countries like France, Germany and Denmark.

In Duffy *et al.* (2001) and Bergin *et al.* (2003), and in the last *Quarterly Economic Commentary* the possible effects on the Irish economy of a sudden big fall in house prices or the volume of housing output was analysed. The medium-term effects were seen to be adverse but the longer term effects of a lower price for accommodation could enhance the productive potential of the economy through increasing the elasticity of labour supply. The information in this article does not allow us to distinguish how much of the increase in vacant or second dwellings is due purely to investors. It would be important to establish this information to better understand the exposure of the Irish economy to a potential large fall in house prices.

The slow progress made over the last decade in raising headship rates to a more “normal” level means that, even with a higher than anticipated current supply of dwellings, demographic factors adding to demand in the medium term may be stronger than envisaged in Bergin, *et al.* (2003). This could sustain demand further into the future than envisaged in the last *Medium-Term Review*.

If the supply of housing was very flexible then there would be limited need for public intervention in the market, other than to provide for social housing. However, the sector cannot adjust supply very rapidly to meet demand changes without significant costs. While output rose dramatically over the second half of the 1990s, it was at a very significant cost in terms of inflation. Costs were driven up by the need, *inter alia*, to attract labour from outside the sector and from outside Ireland. Significant benefits accrued to owners of land that was rezoned close to developing cities and towns. Successive reports have made recommendations on reforms aimed at expanding the supply capacity of the industry relieving or reducing inflationary pressures.

A significant part of the benefits from the boom are accruing to landowners as a result of the major investment in infrastructure by the State and the rezoning of the land for development (NESC, 2005). It would be appropriate for a significant part of this development gain to be used, through appropriate taxation, to part fund the infrastructural investment that creates the gain. While the increased development levies reflect such a change in policy, they do not affect existing home-owners. Any further measures to capture some of the development gain should also be designed to encourage liquidity rather than to encourage hoarding of land.

The State is intervening in a number of different ways to encourage demand for housing, pushing up the price. This rise in price, in turn, makes it very difficult for the State to achieve its objectives under the NDP/CSF. Given inelastic supply of housing in the short run, the tax relief on mortgage payments, the

encouragement of second dwellings through tax breaks, and the under-pricing of infrastructure all encourage higher demand and higher prices, especially for land. Restrictive zoning, while popular with existing suburban residents, fuels an artificial shortage and encourages urban sprawl (McCarthy, 2004). Recent policy changes have seen some relaxation of the latter constraint.

An important driver of the price of houses is the demand for second or vacant dwellings. This demand is well above that experienced in any previous five-year period. This greatly enhanced demand has put further pressure on the resources of the building industry, driving up prices. It has also greatly increased the exposure of the sector, and of the economy generally, to possible shocks.

If the price of second or vacant dwellings reflected their true economic cost, then this would be an economically efficient outcome. However, there is a major problem with second dwellings in rural areas in that the cost to the individual greatly underestimates the true cost. Apart from the visual impact of such dwellings, they impose substantial additional costs on society, costs that the owners do not have to pay for.

The provision of electricity, telephone, post, water supply, sewerage, roads and other services in rural areas is much more expensive than the provision of such services in villages or urban areas. For example, in the NDP/CSF there is provision for major infrastructural investment to deal with the problems of providing water and sanitary services to such isolated dwellings. While the provision of subsidised services to those living and working in rural areas may well be justified, this is hardly justified for second dwellings or dwellings left vacant for much of the year. Because such dwellings are only used for part of the year they make a much smaller contribution through existing user charges to meeting the capital cost of service provision than do those permanently resident in rural areas. Even those occupied full-time do not cover anything like their full costs.

Because many of these dwellings are outside Dublin, in particular in the BMW region, the effect on house prices outside Dublin has probably been much more extreme. This has narrowed substantially the differential between house prices in Dublin and regional locations. This runs counter to the desire for balanced regional development, making it unnecessarily expensive for individuals to live and for businesses to operate in regional locations. By pre-empting the resources of the building industry, those buying or building second dwellings are pricing those wanting to live and work in regional locations out of the market.

Even in urban areas, the provision of the necessary infrastructure for new dwellings is a very expensive process. Where such dwellings are held vacant for investment purposes, there is not an occupier to generate tax revenue to help defray these costs.

8. Conclusions

This article provides estimates of both the stock of second or vacant dwellings in Ireland over the last thirty years and also of the change in the numbers of such dwellings. The estimates in this

article are probably, if anything, on the low side. The electricity connection data would suggest a higher stock today than the Census figures and the estimated depreciation or obsolescence rate seems high, given the relative youth of the housing stock. These issues merit further research.

The rapid growth in the number of second dwellings in recent years has been particularly striking in the BMW region. The counties where the biggest increase has occurred are also counties where special tax relief applied. The effect of the enhanced demand for dwellings for investment or holiday purposes has had a very significant impact on the cost of housing in the affected regions. The result has been a significant reduction in the competitiveness of the BMW region, adversely affecting the government's policy goal of promoting more balanced regional development.

In the long run it seems likely that the population in Ireland (and elsewhere) will desire a larger stock of holiday dwellings, especially in the BMW region. This is a natural process and would not pose any long-term economic problems if those acquiring or holding such dwellings paid their full economic cost. However, the infrastructure costs and the negative externalities (in terms of higher prices for residents) imposed by such dwellings is not factored into the price paid by their owners.

Even without these problems, there is, in any event, a strong economic argument for having a property tax (Callan, 1991) but this has proved unacceptable to the public. However, a property tax levied on vacant or second dwellings would have a number of important advantages, while possibly being more acceptable. It would help defray the infrastructural costs that these dwellings entail. It would also reduce demand pressure from this quarter, helping ease house prices. This in turn would enhance the productive potential of the wider economy. A very important side-effect would be that it would reduce the share of this potentially most volatile element in the housing stock

A second best solution would be to charge the full economic costs of infrastructure to second dwellings located outside traditional villages or towns. It would be a second best solution as it would generally only be paid on new building. This would still meet two objectives. It would promote more balanced regional development and it would also reduce the pressure on the building industry generally, cutting the cost of reducing the infrastructural deficit.

Finally, the fact that headship rates (the proportion of the population who are heads of independent households) remain low in Ireland relative to experience elsewhere in the EU suggests that there will be a continued need for significant new building in Ireland over the coming decade. If there were to be a fall in real house prices it is likely that many individuals would respond to the lower prices by seeking to establish independent households. This suggests that there is a floor on how far house prices could fall in the event of a shock to the housing market.

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APPENDIX

Dwellings may disappear from the housing stock for a number of reasons. They may be knocked down – as in the case of apartments in Ballymun; they may be abandoned, possibly being replaced in rural areas by a new building nearby; multiple dwellings, for example bed-sitters, may be converted back into a single dwelling.

The Census gives the number of occupied dwellings at each Census classified by age of dwelling. By checking in successive Censuses it is possible to measure the decline in numbers of each cohort of dwellings, especially the decline in numbers of dwellings that are over twenty years old. Where there is a reduction between two Censuses in houses over twenty years old it is assumed that they have been abandoned or demolished, for whatever reason. There is always the possibility that the dwellings that “disappear” become second or vacant dwellings. However, as discussed in the article, until very recently the number of such vacant dwellings was not very large and the estimates of depreciation will not be greatly biased by ignoring them.

Table A1: Permanent Private Housing Units by Period Built, Number

	1961	1971	1981	1991	2002
Housing Units Census < 1919	391,766	315,811	261,186	205,722	167,033
Housing Units Census 1919 to 1940	126,953	139,074	144,453	132,091	114,304
Housing Units Census 1941 to 1960	152,982	141,157	143,725	144,140	146,206
Housing Units Census 1961 to 1970		108,577	111,459	112,783	114,010
Housing Units Census 1971 to 1980			228,296	226,249	216,497
Housing Units Census 1981 to 1990				184,260	170,403
Housing Units Census 1991 to 2002					291,333
Housing Units Census Not Stated	4,701	561	6,935	14,478	59,831
Total	676,402	705,180	896,054	1,019,723	1,279,617

Source: CSO Census of Ireland.

Table A1 shows the distribution of permanent private housing units (excluding vacant and second dwellings) for the Census years 1961, 1971, 1981, 1991 and 2002. The decline in the stock of houses built before 1919 occurred in every intercensal period since 1961. The decline in each period is assumed to be because the dwellings ceased to be occupied. In the case of houses built between 1919 and 1940 their numbers began to decline after 1981. This decline is also assumed to be due to depreciation. The big increase in houses where the age was “not stated” in the 2002 Census makes the data for the 1991-2002 period difficult to interpret.

Table A2: Estimate of Depreciation in the Stock of Dwellings

	1961-71	1971-81	1981-91	1991-02
Implied:				
Number	7,980	3,742	6,059	6,981
Annual Rate, %		0.41	0.58	0.53
Actual				
Number				8,200
Annual Rate, %				0.6

Source: ESRI Estimate.

The depreciation or obsolescence of dwellings between 1991 and 2002 is derived directly from the Census stock data and the housing completions. These data would imply depreciation of over 8,000 over the period 1991-2002. If, instead, the data on houses by age (which tries to capture the loss of dwellings which are ten or more years old) were used the estimate for the 1990s would be somewhat lower. This implies that some of the houses lost were actually built since 1991.

For the period prior to 1991 the total depreciation in each intercensal period is derived using the change in the stock of dwellings of each vintage. For years before 1991, in the case of the dwellings where the age was “not stated”, they are taken to be at least 10 years old. The depreciation is converted into an annual rate by dividing by the number of years between the two Censuses. The resulting estimated depreciation rate is shown in Table A2 for each of the last four intercensal periods. The directly estimated depreciation rate for the 1991-2002 period is also shown for comparison purposes.