

Where have all the houses gone?

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- Up to one-third of Irish housing output is satisfying demand for second homes
- Further rapid increases in house prices are unlikely, and the risk of a price correction has increased
- Current housing supply is unsustainable; positive demographic factors will begin to moderate in the medium term
- Housing demand will be adversely affected by either higher borrowing costs or weak labour demand and consumer confidence

Disclosures

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Contents

Summary	3
Section 1: Recent trends in house completions	6
1.1: House-building activity	6
1.2: Construction employment	7
Section 2: Can demographics alone explain the housing boom?	9
2.1: Average household size fell	9
2.2: Modest growth in number of new households	11
2.3: Static headship rates	11
2.4: First-time buyers not dominant in market	15
2.5: Limits of demographic explanations	16
2.6: Demographics of housing in last three years	18
Section 3: Affordability dynamics	22
3.1: DKM affordability index	22
3.2: Sensitivities for housing affordability	24
3.3: Interest rate outlook	25
Section 4: Predicting housing demand	26
4.1: Forecasts of housing demand in Ireland, 2002–2011	26
4.2: Medium-term demand for housing	30
4.3: Comparison with ESRI predictions of housing demand	32
Appendix: Shortcomings in Irish housing statistics	34
A.1: Completions and starts	34
A.2: Household formation	35
A.3: Headship rates	35
A.4: Housing stock/vacancy/second homes	35
A.5: Obsolescence	35
A.6: European comparisons	36
A.7: Recommendations for Irish housing data collection	36

Summary

The past decade has seen record-breaking growth in the Irish construction industry, in particular in the house-building sector. The most frequently cited explanation for the housing boom is the growing population, aided by large-scale immigration.

Total demand for new houses can be broken down into:

- the number of houses needed to accommodate new households; *plus*
- the number of houses built to replace obsolete dwellings; *plus*
- the demand for second homes; *plus*
- changes in the number of vacant homes.

Purely demographic changes can only partially explain developments in the housing market. We will argue that too much has been made of purely demographic explanations for what has happened in Ireland recently, and that it is dangerous to extrapolate a growth story reliant exclusively on demographic patterns. Excessive concentration on demographic explanations, to the exclusion of the dynamics behind the other variables in the equation, is encouraged by the dearth of data available on the housing stock. In this report we utilise the most recent data from Census 2002, and we employ up-to-date population forecasts. We also draw attention to the unquantified elements in the dynamics of housing demand.

The report is organised as follows.

Section 1: Recent trends in house completions

- House completions in Ireland have been running at an exceptionally high rate in recent years. Between 1990 and 2003 there will have been more than half a million new houses built. We expect completions to be close on 67,000 this year alone.
- At current levels house completions per 1,000 of the population in Ireland are more than three times the European average and more than 40% higher than Spain, the second highest.
- In 2002 the UK built three times as many houses as Ireland, but had 15 times the Irish population.

Section 2: Can demographics alone explain the housing boom?

- Average household size in Ireland has fallen from 4.2 in the mid-1960s to 2.94 in 2002. But it is still above the EU average of 2.40.
- At the same time the population has been growing; hence the number of new households being formed has increased. In the six years from 1996 to 2002 new household formation averaged 27,500 per annum. That was up from less than 19,000 per annum in 1991–1996.
- Surprisingly, headship rates in the different age groups increased hardly at all, notably in the important 25-to-35-year-old cohort, between 1996 and 2002.
- In recent years new house-building has increased at a much more rapid pace than household formation. New completions averaged 45,000 per annum in 1996–2002 compared with less than 25,000 per annum in 1991–1996.

- Over the most recent six-year period new household formation accounted for only 61% of new house completions. This year it is likely to account for less than 50% of house completions. Replacement of obsolescent stock, any increase in the number of vacant houses and acquisition of second homes (OVS) account for the remainder. This year these three categories will account for almost 32,000 of the expected 67,000 completions.

Section 3: Affordability

- The ratio of house prices to average incomes has risen sharply in recent years.
- However, affordability — measured as the proportion of incomes required to meet mortgage repayments — has improved, reflecting the impact of falling mortgage rates and improving incomes.

Section 4: Predicting housing demand

- We looked at three scenarios. The optimistic scenario assumes headship rates will rise to UK levels by 2011 and the pessimistic one assumes no change in headship rates. Scenario 3 is an average of the two. In each case we assume OVS demand will fall to 15,000 per annum in the current inter-censal period and to 10,000 per annum beyond 2006.
- The optimistic scenario generates a demand for 63,000 houses per annum for the current inter-censal period, falling to 47,000 per annum in 2006-2011. The recent ESRI medium-term forecast predicted a demand of 53,000 houses per annum to 2006.
- The pessimistic scenario gave rise to a forecast of a mere 28,000 per annum out to 2011.
- We favour an average of the two extremes, which implies that the demand for housing will fall to around 45,000 per annum over the next number of years. This, in turn, implies a significant downward adjustment in the level of activity in the housing market from the 67,000 completions that are now forecast for the current year.
- Indeed, even the more optimistic ESRI forecast implies a significant downward adjustment from current levels of activity.

Appendix: Shortcomings in housing-related statistics

Finally in the appendix we draw attention to certain shortcomings in the availability and reliability of data relating to the Irish housing market, starting with the most basic measure of house completions. We offer recommendations for improvements in these fundamental statistics. In the absence of reliable data to help explain the present, predictions of future demand are especially hazardous.

Principal conclusions

- The European interest rate cycle seems to have bottomed out. Mortgage costs are likely to rise, and could rise substantially if the eurozone economy enjoys a healthy recovery. Housing demand will be adversely affected as mortgage costs rise.
- But if interest rates were to stay low, this would likely be associated with a protracted economic downturn in the eurozone, which would also have a negative impact on housing demand.

- Thus in either scenario there would be some adverse development for housing: either higher borrowing costs or weak labour demand with weak consumer confidence. It is difficult to envisage a scenario with both strong consumers and low interest rates.
- The volume of housing output, likely to approach 67,000 in the current year, will not be maintained at these levels. In the medium term, the positive demographic factors will begin to moderate.
- Further rapid increases in house prices are most unlikely. The risk of a price correction has increased. Locally, any relaxation of restrictive zoning policies, especially around Dublin, should see price pressures reduced sharply.
- As much as 40% of housing output recently has been going to satisfy demand from a category dominated by second homes. The data suggest that this segment of demand, about three-quarters of which is second-home demand,¹ has recently been running at levels approaching 20,000 per annum. We agree with the suggestion in the recent ESRI Mid-Term Review of the National Development Plan that the policy treatment of second-home demand should be reviewed, given the pressure on house-building resources.
- Our forecast is for an early end to the recent house price inflation, and for a reduction in the volume of new housing output.

¹ The non-demographic element of housing demand consists of demand for second homes, replacement demand and changes in the number of vacant homes.

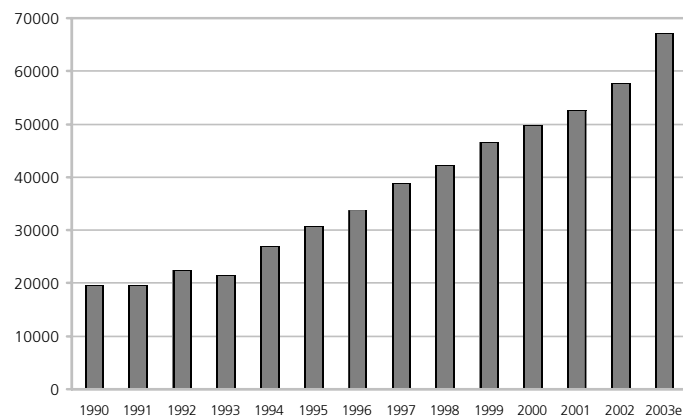
Section 1: Recent trends in house completions

The 1990s saw unprecedented levels of house-building activity. From 1990 to the end of 2003 more than half a million (529,000) new houses will have been built. One-third of these will have been completed between 2001 and 2003. One important consequence is that the average age of the Irish housing stock has fallen sharply. The annual average number of new houses built between 2001 and 2003 was 59,100, an increase of 180% over the equivalent three years at the beginning of the last decade.

1.1: House-building activity

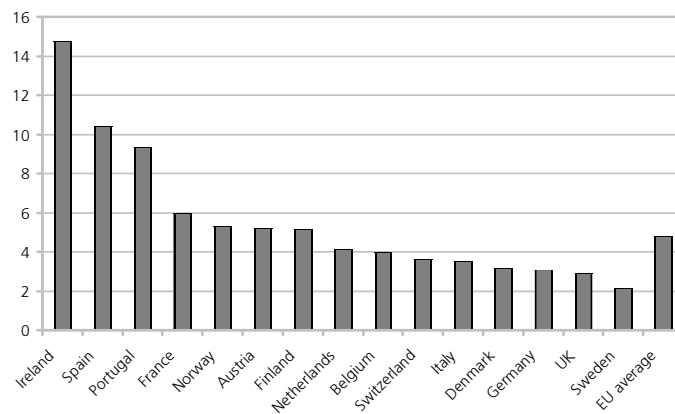
Figure 1.1 gives the completion figures for the years 1990 to 2003 (they include an estimated 400 conversions per annum). We estimate that in 2003 close to 67,000 houses will be built, an all-time record. The number of completions will have trebled since 1993, and will have risen for ten straight years.

Figure 1.1: Total house completions, 1990–2003



Source: Department of Environment, Heritage and Local Government

Figure 1.2: House-building activity per '000 of population, 2002



Source: EUROCONSTRUCT, June 2003

The current level of house-building activity, as well as being unprecedented in Irish experience, is also unparalleled anywhere else in the European Union, as Figure 1.2 shows.

- House-building activity per 1,000 of population in Ireland in 2002 was easily the highest among the western European members of EUROCONSTRUCT² and 41% higher than in Spain, which was second highest. Irish housing output has risen sharply again in 2003.
- On a per-capita basis, Irish housing output in 2002 was over four times higher than in the United Kingdom, a neighbouring country with a rising population, historically low interest rates and a strong labour market. (In 2002, the UK built three times as many houses as Ireland, but had 15 times the Irish population.)
- House-building per 1,000 of population in Ireland was more than three times the average European level in 2002.

House-building activity per 1,000 of housing stock also shows a similar picture, but this comparison is much less reliable due to difficulties with stock measures, which we will discuss in detail later.

Table 1.1 examines the regional distribution of this phenomenal building activity for the years 2001, 2002 and up to Q2 2003. It shows that:

- The Dublin region accounted for 21% of the total new build in the country during the period.
- The Dublin and Mid-East regions together accounted for 35% of house-building activity in the state.
- The Midlands registered the lowest percentage share, but we know that the increase of activity in this region was considerable, albeit from a low base.

Table 1.1: Regional distribution of newbuild, 2001–Q2 2003

	Completions	% Distribution
Border	19,644	14%
Dublin	28,892	21%
Mid-East	18,648	13%
Midlands	9,757	7%
Mid-West	11,941	9%
South-East	15,314	11%
South-West	18,809	14%
West	15,914	11%
Total	138,919	100%
incl. conversions	139,919	

1.2: Construction employment

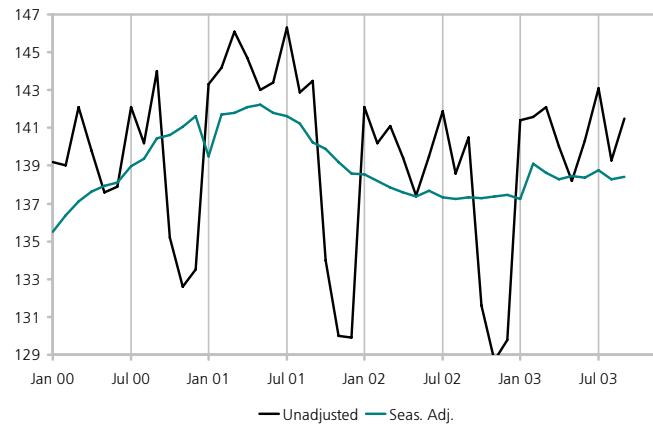
It is clear that overall construction employment is being held up by the buoyant house-building sector. Total construction employment has soared over the last eight years, from around 94,000 at the beginning of the boom period to around 193,400 in April this year.

Over the last seven months, construction employment, as per the short-term construction employment index, has been flat in seasonally adjusted terms, in circumstances where house-building activity has consistently exceeded previous record levels of activity each quarter. With the house-building sector

² EUROCONSTRUCT was set up in 1975 by a number of research organisations as a study group for construction research and forecasting. It now comprises most western European countries (the European Union and EFTA), as well as a number of Eastern European countries. DKM is the Irish member of EUROCONSTRUCT.

accounting for over half of the total employed in construction, any weakness in house-building activity will affect the aggregate construction employment picture. Thus overall employment remains vulnerable to any reduction in house-building, unless the non-residential sector recovers.

Figure 1.3: Construction employment index, 2000–2003 (1990 = 100)



Source: CSO unadjusted; DKM seasonally adjusted

The index peaked in spring 2001 and weakened steadily to autumn 2002, but has clearly been buoyed up this year to date by the extraordinary pace of house-building.

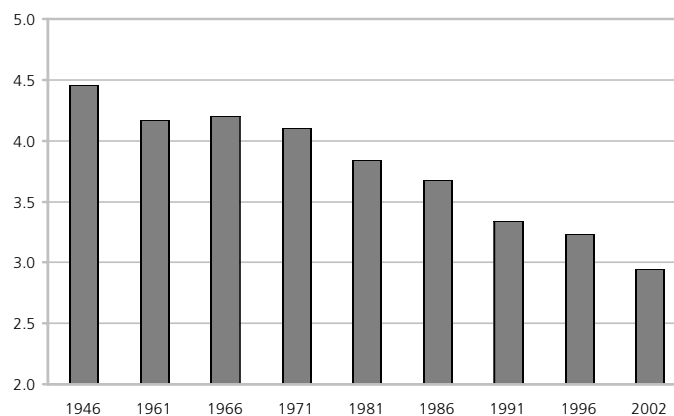
Section 2: Can demographics alone explain the housing boom?³

Demographic developments in Ireland have frequently been cited as the main driving force behind the exceptional scale of house-building activity in the country. In this section we will examine the demographic indicators that are most important to the housing market and question whether they alone can provide a full explanation for the Irish housing boom. We will utilise the data provided by the 1996 and 2002 censuses, and will focus particularly on developments in the past three years.

2.1: Average household size fell

Average household size in Ireland has dropped dramatically since the second world war, as Figure 2.1 indicates. Between 1946 and 2002, the average number of persons per private household fell by 34% to reach 2.94 in 2002.

Figure 2.1: Republic of Ireland: average size of private households, 1946–2002



Source: Various censuses of population

This decline in household size reflects a fall in average family size as fertility rates declined, and continued "household fission" as more younger people set up independent households and more elderly people retained their separate households. The decline in household size was evident across the regions over the last six years, as Table 2.1 shows.

- Dublin had the lowest average household size of all regions in 1996 and in 2002.
- The Mid-East region had the largest average households.
- Household size in the West region experienced the most pronounced fall, and is now at the national average.

³ This section takes into account the latest releases of Census 2002 (Principal Demographic Results, Census Volumes 1 to 3, and Principal Socio-Economic Results).

Table 2.1: Developments in average household size in Ireland, 1996–2002

	1996	2002	% Change
Border	3.27	2.97	-9%
Dublin	3.08	2.86	-7%
Mid-East	3.41	3.14	-8%
Midland	3.34	3.03	-9%
Mid-West	3.26	2.93	-10%
South-East	3.29	2.96	-10%
South-West	3.24	2.92	-10%
West	3.30	2.94	-11%
State	3.23	2.94	-9%

Source: Census 1996, 2002

Average household size is the ratio of persons residing in private households to the number of private households. Table 2.2 shows that marginal household size (new people divided by new households) for 1996–2002 was, at 1.8, well below the average.

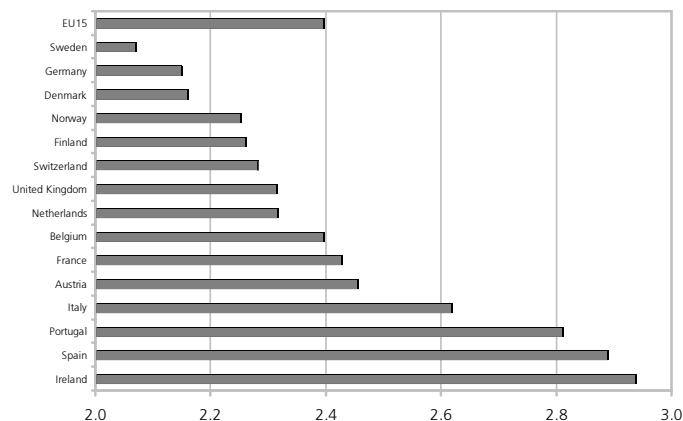
Table 2.2: Marginal household size, 2002

Increase in population	290.703
New households	164.720
Marginal household size	1.77

Source: Census 1996, 2002

Despite the dramatic fall over recent decades, the average Irish household is still considerably larger than is the norm in Europe, as Figure 2.2 shows.

Figure 2.2: Average household size, 2002



Source: EUROCONSTRUCT, June 2003

- Ireland had the largest average household size among the EU 15 in 2002.
- The average household size in Ireland in 2002 (2.94 persons per private household) was 23% above the European average.
- The average household size in the UK was 2.31, just below the EU average.

Household size is, however, greatly affected by the age distribution, and comparisons of these national averages can be misleading. We consider age-specific headship rates, which we think are more meaningful, below.

2.2: Modest growth in number of new households

In 2002, there were 1.29m private households in the State. During 1996–2002, an average annual total of 27,500 new households was formed. Table 2.3 gives household formation for the past six years, broken down by region, as measured by the census.

Table 2.3: Household formation by region, 1996–2002 ('000s)

	No. of households 1996	No. of households 2002	% Increase	Avg annual household formation
Border	124.7	142.0	14%	2.9
Dublin	343.2	379.4	11%	6.0
Mid-East	101.9	128.7	26%	4.5
Midlands	61.6	72.4	18%	1.8
Mid-West	97.2	111.4	15%	2.4
South-East	118.9	138.9	17%	3.3
South-West	168.9	191.3	13%	3.7
West	106.8	123.8	16%	2.8
State	1,123.2	1,288.0	15%	27.5

Source: Census 1996, 2002

- In the past six years, the percentage growth in the number of households was strongest in the Mid-East (+26%) and in the Midlands (+18%).
- Interestingly, the Dublin region (+11%) showed the lowest percentage increase in household numbers.
- Contrary perhaps to popular perception, growth in the number of households was above the national average in the West region.

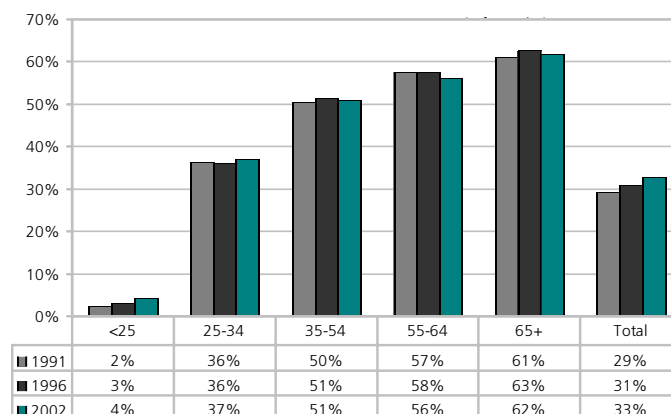
2.3: Static headship rates

Changes in the size, age and marital status of the population are the dominant factors in determining net household formation. Age-specific headship rates⁴ measure the tendency of individuals in different age brackets to form independent households.

Given the exceptionally strong demand for housing, the most striking finding in the latest census, as shown in the following chart, is the relative stability of headship rates over recent years. Given the strong house-building activity of the last decade, most observers would have expected a more pronounced increase in headship rates. In reality, according to the census, some age groups have seen a falling propensity to head households.

⁴ In a break with all previous censuses, the 2002 report does not refer to "heads of households", but rather to the (more politically correct but surely less elegant) "reference persons" — we assume they refer to the same concept.

Figure 2.3: Proportion of Irish population who are heads of households, 1991–2002



Source: Various censuses of population

The main features displayed in Figure 2.3 are:

- Overall, age-specific headship rates have moved very little over the past decade.
- The proportion of the total population who are heads of households has increased by four percentage points between 1991 and 2002. But this is due principally to changes in age composition, rather than to an increasing propensity of people in specific age groups to head households.
- The prime household-formation age group is 25–34 years; these represent the principal first-time-buyer segment. A mere one-percentage-point increase in the headship rate occurred for this age group.
- The largest increase occurred in the under-25 age group (up two percentage points), but the absolute numbers are very small.
- The proportion of 55-to-64-year-olds who are heads of households has fallen, even below the 1991 level.
- The proportion of the over-65s who are heads of households also fell slightly between 1996 and 2002.

The results from Volume 3 of Census 2002⁵ throw some light on the reasons for these more or less static headship rates. The first points relate to the age groups that contain the crucial "first-time buyer" cohort.

- The number of "children" in their twenties living at home with both parents⁶ has increased by 14%. However, the total number of persons in this age group has increased by 16%, leading to a small fall in the proportion of all 20-to-29-year-olds who live at home (38% down from 39%).
- For "children" in their thirties, the increase is much more marked: 39% more lived with both parents than at the previous census. This is more than twice the increase in the numbers in this age cohort, leading to a rise in the proportion of people of this age who live with both parents. Males accounted for nearly two-thirds of persons in their thirties living with both parents. Dublin estate

⁵ Household Composition and Family Units, Table 33, August 2003.

⁶ A certain (smaller) number of persons in this age group live with a lone parent. This could be in a caring capacity and has only increased marginally.

agents (and parents!) have recently coined the term "boomerang" to describe thirty-something returnees to the parental nests of the capital.

Table 2.4: Children staying with parents longer

	Census 1996	Census 2002	% Change
Total number aged 20–29	552.4	641.0	16%
People aged 20–29 living with both parents	216.1	245.7	14%
<i>% living with both parents</i>	39%	38%	
Total number aged 30–39	516.7	595.6	15%
People aged 30–39 living with both parents	30.6	42.5	39%
<i>% living with both parents</i>	6%	7%	

Source: Census 2003, Volume 3, Table 33

The high price of houses would have been a factor in this development,⁷ but not the only one. Other changes in society may have contributed, for example:

- The smaller average family size means that there is room for grown-up children and parents to continue living together.
- In urban areas, high house prices and congestion would mean that children would have to move to the periphery to set up home, which many are reluctant to do. It is difficult for many to remain in the same neighbourhood as their parents, in effect, without staying in the same home.
- The current generation of parents of 30-year-olds exhibit diminished lifestyle dissonance to their offspring than may formerly have been the case. The average age of a woman in Ireland bearing her first child reached an all-time low about 30 years ago, so the age gap between parents and children is low for this generation. The increasing levels of marriage break-ups, both for parents and children, mean that children will move into their parents' home for an extended period — they may even have the choice between the father's and mother's house if the parents have split up too.
- The age at which people marry and at which women have their first child have both increased, an additional factor in living at home for longer. Single motherhood is also more prevalent, perhaps creating greater reliance on parents for accommodation.

The proportion of persons aged 65 years and over who live in private households has fallen by one percentage point between 1996 and 2002, from 91% to 90%, as Table 2.5 shows. This coincides with the decline in headship rates for that age group, as we have noted above.

Table 2.5: Ireland's 65+ population, 1996 and 2002 ('000s)

	Total no.	No. in priv. households	No. in institutions	% in institutions
1996	414	378	36	9%
2002	436	393	43	10%

Source: Census 1996, 2002, Volume 3 Table 14

⁷ We discuss affordability dynamic in Section 3.

The number of persons in the 65-plus age group in institutions reached 43,000 in 2002, an increase of just over 7,000 from 1996.

Comparing Irish and UK headship rates

Headship rates in the UK have been higher than Irish rates, but have also stabilised in recent years, as Table 2.6 shows for some sample years. The total headship rate in the UK (i.e. the proportion of the total population that is head of a household) has remained at 41% throughout the late 1990s,⁸ a period of good economic performance and falling mortgage costs in the UK, and had only increased to 42% in 2002. This is nine percentage points above the Irish rate of 2002.

Table 2.6: UK headship rates, 1992–2002

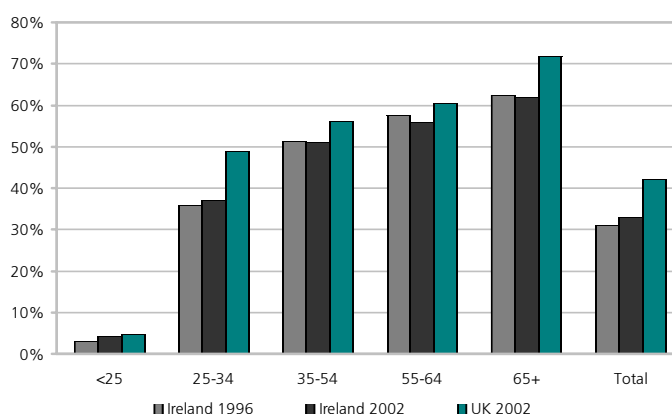
Age group	1992	1996	2000	2001	2002
<25	5%	5%	4%	4%	5%
25-34	48%	49%	49%	49%	49%
35-54	55%	56%	57%	57%	57%
55-64	60%	60%	60%	60%	60%
65+	71%	72%	72%	72%	72%
Total	40%	41%	41%	41%	42%

Source: UK LFS, Office of National Statistics

Figure 2.4 compares the headship rates for both countries for 2002. It also gives Irish rates for 1996. It is somewhat surprising to find that Irish rates still lag well behind UK rates, even after years of boom in the house-building industry.

- In 2002, there was very little difference between UK and Irish headship rates for the under-25s.
- The most important difference in 2002 was in the 25-to-34-year age group: in the UK, 49% were heads of households, while in the Republic the figure was 37%.
- There was also a very significant divergence of rates for the oldest age group in the chart: in 2002 there was a ten-percentage-point gap between Irish and UK headship rates for that category.

Figure 2.4: Comparison of UK and Irish headship rates, 1992–2002



Source: Censuses of population, 1996 and 2002; UK LFS 2002

⁸ Between 1981 and 1991 (a period of boom in the UK property market), the total headship rate increased by four percentage points. This is identical to the four-percentage-point increase in the Irish rate between 1991 and 2002.

2.4: First-time buyers not dominant in market

Even though the proportion of persons in the first-time-buyer age group who head households has not increased significantly over the past six years, the number of people in the 25-to-34 age bracket has — and is projected to increase even further. Table 2.7 gives the developments over the past decades for this crucial age group:

- Average annual growth in the first-time-buyer age bracket has been particularly strong in the last six years, at 16,000 per year.
- Between 1986 and 1991, in contrast, this cohort fell by an average of about 1,000 per annum due to strong emigration in these age groups.

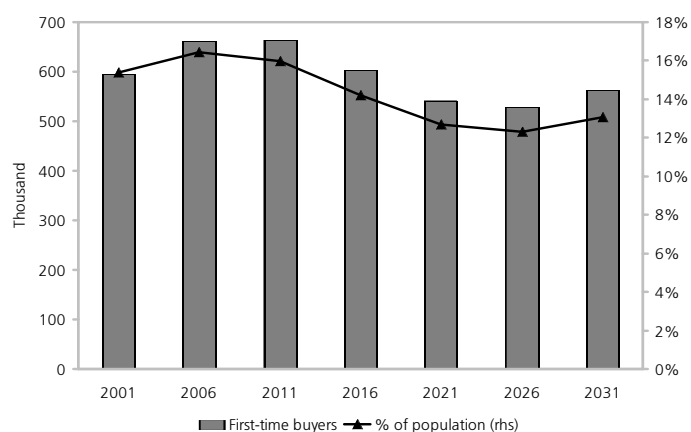
Table 2.7: Developments in first-time-buyer age bracket (25–34 years old), 1971–2002

Census	Level	Annual average change
1971	324,344	
1979	459,542	16,900
1981	478,011	6,156
1986	501,128	4,623
1991	495,392	-1,147
1996	519,974	4,916
2002	617,369	16,233

Source: Census 2002, Volume 2, Table 1A

Figure 2.5 gives the developments in this crucial age segment of the housing market for 2002–2031. Nationally, the number of first-time buyers will peak in 2011, when it will reach 662,000 persons or 16% of the total population. The 25-to-34 age cohort will bottom out in 2026, when it will have fallen to 528,000 (12% of the total population). We predict that by 2031 that number will have risen again slightly, to 563,000 persons or 13% of the total population.

Figure 2.5: Developments in first-time-buyer age bracket (25–34 years old), 2001–2031



Source: DKM Economic Consultants M2F2 Population Projections

2.5: Limits of demographic explanations

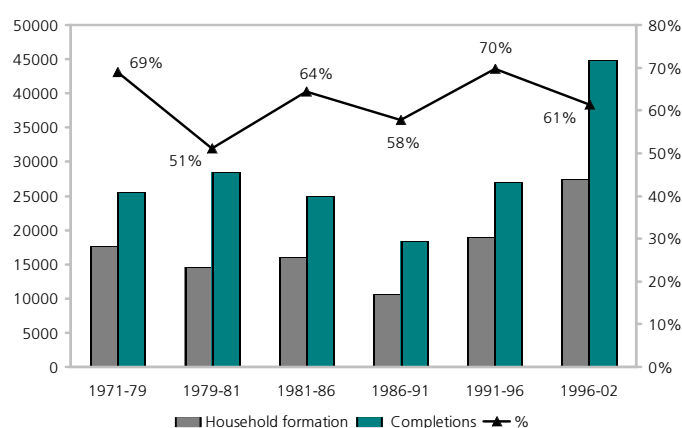
Some (but not all) of the demographic indicators explored above have moved in the same direction as the demand for housing:

- Average household size has fallen consistently over the past decades. However, the size of an average household in Ireland is still well above the UK and the European average.
- The number of persons in the traditional first-time-buyer age cohort (25–34 years) has increased strongly over the past six years.
- However, we found that the propensity of persons in specific age groups to head a household has not increased as much one would have expected, given the unprecedented demand for houses.

Figure 2.6 gives average annual household formation and average annual new house completions for the past three decades. The dotted line indicates the proportion of completions that was accounted for by household formation.

In order to facilitate a direct comparison between annual average completions and annual average household formation (as measured by the census), we give April-to-April figures for completions as well.⁹

Figure 2.6: Household formation and completions (annual averages), 1971–2002



Source: Various censuses of population, Department of the Environment, Heritage and Local Government

In every period in the chart, on average, more houses were built than were needed to cater for new households alone. This difference is accounted for by replacement (or obsolescence) demand and vacant dwellings and second homes. Let us call them OVS (for Obsolescent, Vacant, Second). We will return to this issue in detail below.

- The proportion of completions accounted for by household formation (as expressed by the line in the chart) has varied significantly over the past three decades.
- In 1979–1981 household formation on average only accounted for 51% of all completions.
- Household formation in 1991–1996 accounted for 70% of completions.
- However, in 1996–2002 only 61% of new houses were built to satisfy demographic demand; the remaining 39% were either vacant/second homes or were built to replace obsolete stock.

⁹ The full-year figures for 1996 and 2002 are 33,725 and 57,695 respectively, as shown in Figure 1.1.

Earlier periods may have had a big replacement demand, with many buildings becoming obsolete (it has conventionally been estimated that 0.5% of the total housing stock becomes obsolete and is replaced every year). This replacement demand must have fallen in recent years as a direct result of the high levels of house-building and consequent reduction in average age of the stock.¹⁰

So the difference between the number of houses built and the number of houses needed to accommodate new households between 1996 and 2002 must in the main consist of (the change in the number of) vacant dwellings and second homes. We believe that the change in the number of vacancies is much the smaller of the two: the main difference is second homes. We can break down the national figures shown above into the eight regions.¹¹ Table 2.8 gives total number of house completions and of new households formed between 1996 and 2002.

The table shows that between 1996 and 2002, 104,000 more houses were completed than were needed to accommodate new households. The table also exposes some interesting regional differences:

- The Border region had the highest proportion of OVS built in the country, with just above half of completions accounted for by the sum of these categories.
- The Midlands, a region of exceptional house-building activity, had close to the national average rate of OVS demand.
- In the Mid-East region, on the other hand, household formation was the dominant force in the demand for newbuild, with less than a fifth of the total due to OVS homes.

Table 2.8.: Composition of regional housing demand, 1996–2002

	(A) Completions	(B) Household formation	(C)=(A)-(B) OVS	(C)/(A)
Border	35,172	17,334	17,838	51%
Dublin	57,090	36,167	20,923	37%
Mid-East	32,914	26,863	6,051	18%
Midlands	17,125	10,806	6,319	37%
Mid-West	25,038	14,192	10,846	43%
South-East	29,794	19,936	9,858	33%
South-West	38,644	22,409	16,235	42%
West	30,427	17,013	13,414	44%
Total	266,204	164,720	101,484	38%
incl. conversions	268,604	164,720	103,884	39%

Source: Various censuses of population, Department of the Environment, Heritage and Local Government

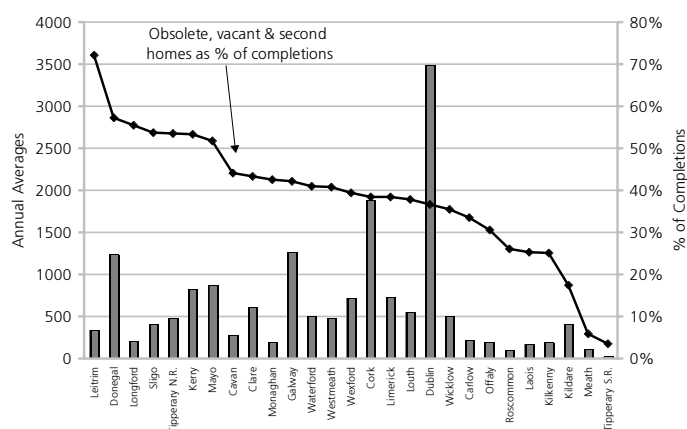
¹⁰ Census 2002 revealed that 53% of the permanent housing units in the state were built since 1971, and no less than 15% since 1996.

¹¹ At national level, new house completions include an annual estimate of 400 conversions. There is no regional breakdown available of this figure.

It is possible to continue this analysis at the county level.¹² Figure 2.7 shows that there are significant differences between the counties. The data are sorted by the proportion of annual average completions that is not accounted for by household formations (measured on the right-hand axis). These are OVS homes: mainly, we believe, second homes.

- Dublin clearly had the highest absolute number of OVS homes in the country due to the large number of houses built in the region. However, as a proportion of total completions, OVS accounts for 37%, which is below the national average. We believe that many of these are city apartments maintained by out-of-town permanent residents.
- Leitrim leads the counties with 72% of all completions either adding to vacancies, a second home or built to replace an obsolete dwelling.
- Donegal and Longford (57% and 56% respectively) are also rural counties with very large OVS components in their housing demand.

Figure 2.7: Obsolete, vacant and second (OVS) homes by county, 1996–2002



Source: Various censuses of population, Department of the Environment, Heritage and Local Government

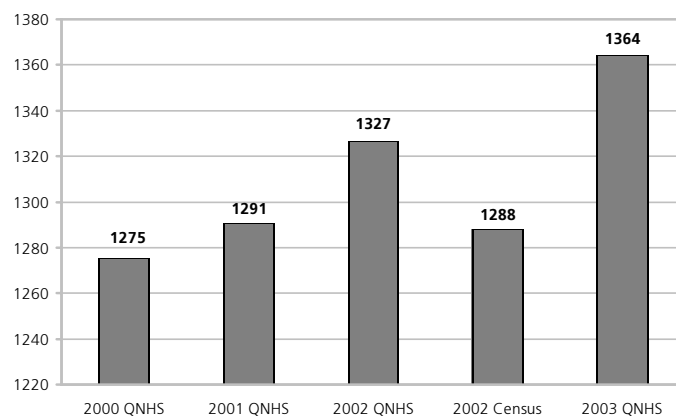
2.6: Demographics of housing in last three years

If one wants to narrow down the above analysis to the last few years, regional and subregional data are not available (except for house completions). However, the main problem is that the number of households as measured by Census 2002 is not compatible with the household data collected on an annual basis by the Quarterly National Household Survey (QNHS).

The QNHS seems to have consistently overestimated the number of households in the state, as Figure 2.8 shows. Thus we do not feel comfortable in using the QNHS data for recent years.

¹² We did not break down the Dublin region into its constituent counties.

Figure 2.8: Comparison of private household numbers, 2000–2003



Source: CSO Census 2002; Quarterly National Household Surveys

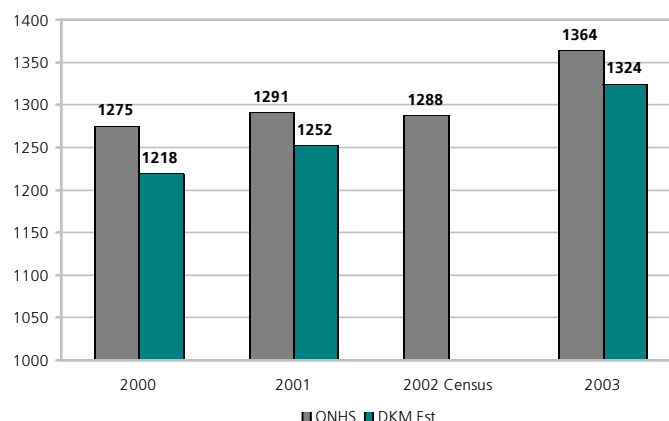
To overcome this difficulty, we have devised the following methodology for estimating the number of households for the years 2000 and 2001 (for 2002 we can use the Census data):

1. We have annual population estimates by age cohort from the Central Statistics Office (CSO) for the years in question.¹³
2. Given the stability of age-specific headship rates over the past decade, we can safely assume that the age-specific headship rates in 2000 and 2001 would not have been significantly different from the ones measured by the Census for 2002.
3. By applying these headship rates to the annual population estimates, we get an estimate of the number of households for these years. Household formation is derived by looking at the growth in households from one year to the next.
4. We can then compare the estimated number of new households in each of the years to the number of new houses completed and derive a measure of OVS demand.
5. For 2003 the annual population estimates are not published yet.¹⁴ We therefore increased the number of households as measured by Census 2002 by the percentage growth in the QNHS household estimates between 2002 and 2003. This gives us an estimate for the number of households in 2003 that is compatible with the census figures.

¹³ CSO Annual Migration and Population Estimates, relating to April of each year.

¹⁴ Expected in December 2003.

Figure 2.9: Estimated household numbers, 2000–2003



Source: CSO Census 2002; Quarterly National Household Surveys; DKM estimates

Figure 2.9 gives the number of households estimated using the methodology outlined above and compares the results with the number of households as per the QNHS and Census 2002. It shows that the household numbers we estimated for the years 2000, 2001 and 2003 (shown in green) are lower than the QNHS figures, but more in line with Census 2002 results. We thus feel confident that the trend in the estimated household numbers is consistent with Census 2002.

As before, we can derive that proportion of housing demand not explained by demographic trends by comparing the growth in the number of households from year to year with the number of new houses completed.¹⁵

Table 2.9 is laid out in the same way as Table 2.8, which dealt with the inter-censal period 1996–2002. We found that during that time 104,000 OVS homes, which we can safely assume were mostly second homes, were built.

Table 2.9: Composition of housing demand, Q2 2000–Q1 2003

	(A) Completions	(B) Household formation (DKM Est)	(C)=(A)-(B) OVS	(C)/(A)
2000Q2–2001Q1	50,175	33,138	17,037	34%
2001Q2–2002Q1	53,510	36,431	17,079	32%
2002Q2–2003Q1	59,426	36,466	22,960	39%
2003Q2–2004Q1e*	67,291	37,000	30,291	45%
Total	230,402	143,035	87,367	38%

Source: CSO Population and Migration Estimates; QNHS; various issues, Department of the Environment, Heritage and Local Government Housing Statistics Bulletin; Census 2002

* DKM estimate

¹⁵ Adjusted for the census year (April to April).

The table shows that:

- In the past three years, an estimated 57,000 newly completed houses were either added to vacancies, used as second homes or built to replace an obsolete dwelling. We feel that it would be safe to say that 45,000–50,000 second homes are in this total.
- 23,000 more houses were built than were needed to meet demographic demand in the year to April 2003, out of a total of 57,000.
- For the year to Q1 2004 we predict that new completions will be around 67,000. New households are estimated at 37,000, leaving 30,000 more houses built than are needed to accommodate demographic demand.

Second homes and the age of housing stock based on principal socio-economic results of Census 2002¹⁶

In a question about the age of the dwelling they lived in, 197,134 persons stated that their house was built between 1996 and 2002. However, we know that over this period

269,000 houses were completed (including conversions) 45,000 annual average

minus

165,000 new households were formed 27,000 annual average

gives

104,000 obsolete/vacant/second (OVS) homes 18,000 annual average

Thus:

197,000 houses built and lived in

minus

165,000 new households formed gives

32,000 houses built to replace obsolete stock 5,000 annual average

so the remaining new houses (i.e. 104,000 OVS minus 32,000)

72,000 second/vacant homes 12,000 annual average

Note: averages do not quite add up due to rounding.

Despite a small problem of reliability of responses to the age of building question (5% did not answer), the outcome above matches our independent calculation in the text, and thus gives a crosscheck on what we say about second homes.

16 Source: Census 2002, Principal Socio-Economic Results, Table 33A.

Section 3: Affordability dynamics

3.1: DKM affordability index

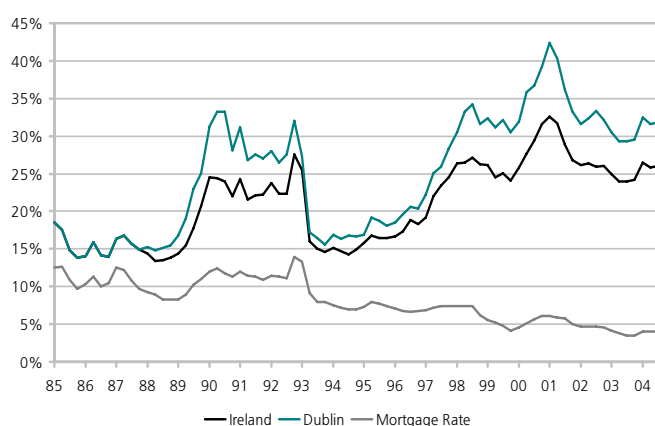
Affordability plays an important role in determining the individual's willingness to enter the housing market at a particular point in time. Potential housebuyers are only likely to purchase a house if they can afford to do so and if they have confidence in the market at that time. Affordability has a number of dimensions for the potential house buyer, such as:

- the ability to raise the initial deposit;
- the ability to obtain a mortgage loan as measured by income multiples;
- the ability to repay that loan, measured by existing debt to income ratios; and
- the ability to finance other house purchase costs (stamp duty, removal costs, solicitor's fees, etc.).

Affordability is a function of the house price, the borrower's disposable income, the mortgage rate and housing taxation, such as mortgage interest relief. The DKM Housing Affordability Index is a measure of the proportion of after-tax income required to meet first-year mortgage repayments for an "average" first-time-buyer working couple, each on average earnings. It takes into account changes in mortgage rates, changes in the level of mortgage interest relief, and is based on average industrial earnings and new house prices for Dublin and the national average.¹⁷ The average industrial wage, as published by the CSO for June 2003, was around €31,000. For Dublin the average earnings figure has been inflated by 10% from 1997 onwards to reflect higher earnings in Dublin.

The index can be thought of as an indicator of the buyer's mortgage-paying capacity in the early years, at around average income. It is not a measure of whether houses are cheap or dear: the ratio of average price to income may be a better indicator here, and it has risen sharply. Expensive houses can be affordable at sufficiently low interest rates. Indeed they clearly are affordable, since they are being built and sold in record numbers.

Figure 3.1: DKM housing affordability index, 1985–2004



The chart shows how the affordability of new houses has moved over the period since 1985 with a projection up to the end of 2004. The data is presented on a quarterly basis along with trends in mortgage rates. The index suggests that the proportion of net income required to meet net mortgage repayments is currently around 30% for first-time buyers in Dublin and around 24% for first-time buyers across the country as a whole. However, some interesting points are worth noting.

¹⁷ Using new house price data as published in the Annual Housing Bulletin of the Department of the Environment, Heritage and Local Government.

The required percentage peaked in Q1 2001 at 42% of net income for first-time-buyer couples in Dublin and 33% nationally. At that time mortgage rates were at 6% and the average new house price in Dublin was €248,000. The improvement in affordability since Q1 2001 reflects the consistent downward trend in mortgage rates, currently at around 3.5%, and increases in disposable incomes. In contrast, average new house prices in Dublin rose by 16.5% between Q1 2001 and Q2 2003 and by 22% nationally.

Thus despite escalating house prices, housing affordability has actually improved over the last few years, due to reductions in mortgage rates and rising disposable incomes.

The previous peak during 1990, when 33% of disposable income was required to meet first-year mortgage repayments for first-time-buyer couples in Dublin, coincided with a period of relatively high mortgage rates of around 12%. The average new house price at that time was only €82,500. During the subsequent period up to Q1 1993 required net mortgage repayments remained above 26% of net income, but were back up to 32% by the end of 1992, at the time of the currency crisis. First-time-buyers experienced a severe dent to affordability over that period, which resulted in a reduction in first-time-buyer demand and buyer confidence. As a result the average new house price in Dublin fell by 16% between Q3 1990 and Q1 1993, while average house prices nationally were almost unchanged over the same period. Figure 3.1 visibly illustrates how the upward pressure on house prices since 1994/1995 has adversely affected housing affordability over the boom years, despite the sustained low interest rate environment.

3.2: Sensitivities for housing affordability

The projections for housing affordability in Figure 3.1 assume that mortgage rates rise in 2004 to 4%, while house prices continue increasing by 3% per quarter for the remainder of 2003 and by 1.5% per quarter during 2004. By the end of 2004 the proportion of net income required to fund a mortgage has risen to 32% for a first-time-buyer couple in Dublin and to around 26% on average for first-time buyers across the country as a whole. Thus housing affordability by Q4 2004 worsens only slightly from current levels.

Recent house price data from the Permanent TSB show average house prices fell by 0.6% in the month of September in Dublin but were up by 3.7% in Q3 2003 compared with Q2 2002. The corresponding changes for average national house prices were +0.5% in the month and +3.1% in the quarter. If the downward trend in Dublin gathers momentum over the next 12 months, the proportion of net income required to fund a mortgage would fall below current levels, as average earnings are assumed to continue rising modestly. Some sensitivities are considered in Table 3.1.

Table 3.1: Housing affordability sensitivities

Current levels	Dublin	Whole country
Housing affordability	30%	24%
Average new house prices	€289,345	€222,532
Average mortgage rates	3.5%	3.5%
Sensitivities		
Case A: Q4 2004	31.6%	25.9%
Case B: Q4 2004	27.8%	22.7%
Case C: Q4 2004	25.2%	20.4%
Case D	36.1%	29.7%

Notes:

1. Housing affordability is a measure of the proportion of net income required to meet net mortgage repayments for a first-time-buyer couple each on average earnings.
2. Average new house prices are based on the latest published data from the Department of the Environment, Heritage and Local Government for Q2 2003.

Sensitivities:

Case A assumes new house prices rise by 3% per quarter in Q3 and Q4 2003 and by 1.5% per quarter in 2004; average earnings rise by 5% in 2004; and mortgage rates rise to 4% in 2004.

Case B assumes new house prices remain unchanged; average earnings rise by 5% in 2004; and mortgage rates rise to 4% in 2004.

Case C assumes new house prices fall by 1.5% per quarter; average earnings rise by 5% in 2004; and mortgage rates rise to 4% in 2004.

Case D assumes continuation of current house price and average earnings levels with the mortgage rate at 6%.

Only in Case D, with static average earnings and a sharp rise in the mortgage rate, is there a material worsening in affordability.

3.3: Interest rate outlook

The likelihood is that mortgage rates will rise again over the next few years, as a European economic recovery gets underway. Central banks in the United Kingdom and in Australia have already raised interest rates from their cyclical trough. Thus longer-term mortgage rates, which fell back from 8% at the beginning of 1995 to around 3.5% currently, could well creep back up to 6% or 7% again over the next full interest rate cycle. Movements of this magnitude would adversely impact on housing affordability, unless house prices fall sharply. An increase in the mortgage rate to 7%, for example, would require a fall in average new house prices of 22%, assuming no change in average earnings, if housing affordability was to remain at current levels. But even a smaller increase, say to 5% or so, would have a significant negative impact on the housing market.

Perhaps it is no surprise that the IMF, the European Commission, the Central Bank of Ireland, other institutions and some economists have all recently argued that the probability of a disruptive correction in the Irish housing market has risen. Moreover, the longer house prices carry on rising, the higher that probability. The duration of the current economic slowdown will also impact on this probability. If the economy is weaker than expected in 2004 and 2005, the housing market will be vulnerable, and the probability of a disruptive correction over that time period would be higher, even without higher mortgage rates.

To the extent that the recent run-up in house prices and the very strong demand for new homes have been driven by cheap mortgage finance, both are vulnerable to rising mortgage rates.

Section 4: Predicting housing demand

4.1: Forecasts of housing demand in Ireland, 2002–2011¹⁸

Economic forecasting is a pretty inexact undertaking, particularly in the case of the housing market, where data weaknesses mean that we cannot even be sure of the current position. However, we can make a systematic attempt at predicting the demographic element of housing demand, and this we present below. The other components of demand are more speculative.

We present two polar scenarios based on very different assumptions about headship rates. When one combines age-specific headship rates with forecasts for the population broken down by age group,¹⁹ one can calculate the total number of households in the country in any given period. The change in the number of households (i.e. household formation) is, as we have seen, the biggest single contributor to housing demand.

- Scenario 1 represents the optimistic case and produces high household formation figures in the forecast periods 2002–2011.
- Scenario 2 represents a pessimistic outlook and produces very low household formation rates.
- Our final scenario is a simple average of the two, and naturally gives an intermediate outturn. We feel that Scenario 3 is a plausible outlook for the Irish housing market.

Tables 4.1–4.3 give our projections to 2011. Due to the predicted ageing of the population (and the drop in the first-time-buyers bracket), the different scenarios converge towards the end of the forecast period as the demographic changes overwhelm any headship rate differences in the assumptions.

Scenario 1 – Optimistic

As we have seen already, the difference between Irish and UK age-specific headship rates has fallen slightly over the past decade. Given the extraordinary growth in the Irish market in recent years, an obvious assumption is convergence in age-specific rates in the future. However, we do not feel that this is likely before 2011, and the lack of rapid convergence through the boom years is significant.

We base Scenario 1 on the assumption that Irish age-specific headship rates will reach the 2002 UK rates by 2011 and will remain steady thereafter.

Table 4.1: Projected total number of households, 2002–2011 ('000s)

Scenario 1	2002	2006	2011
Households	1288.0	1471.0	1654.1
Average annual change	27.5*	45.8	36.6

Source: UK LFS; Census 2002; DKM Population Projections (M2F2)

* 1996–2002

¹⁸ The latest definitive figures on household formation and headship rates come from Census 2002. We have no easy way of interpolating 2001 from the published data. We therefore use the period from 1996 to 2002 as our baseline for the projections.

¹⁹ We will use our central M2F2 regional population projection totals. These are discussed in detail in a forthcoming report from DKM Economic Consultants.

Table 4.1 gives the outcome.

- The average annual household formation would rise from the 27,500 which was observed between 1996 and 2002 to 46,000 per annum between 2002 and 2006 as UK rates are approached and the proportion of first-time buyers in the population peaks. However, this annual rate of increase would diminish over the following period due to the predicted changes in the age distribution.
- This scenario would imply very high levels of housing output for many years to come.

Scenario 2 – Pessimistic

We have seen that Irish headship rates have changed only a little over the past decade.

We base Scenario 2 on the assumption that Irish age-specific headship rates will remain at their 2002 level over our forecasting period.

As before, we apply these age-specific headship rates to our population forecasts to arrive at estimates of household numbers and household formation, shown in Table 4.2.

Table 4.2: Projected total number of households, 2002–2011 ('000s)

Scenario 2	2002	2006	2011
Households	1288.0	1338.3	1429.6
Average annual change	27.5*	12.6	18.3

Source: Census 2002; DKM M2F2 Population Projections

* 1996–2002

- If Irish age-specific headship rates were to remain at their 2002 level, then annual average household formation would fall off dramatically to below 13,000 over the next four years. The number of households would grow by only about 4% over the four years, similar to the type of population growth rate now in prospect. Under Scenario 1, the number of households would grow 14% over the same short period.
- Constant headship rates, combined with the shifting age composition of the population, have strongly negative implications for housing demand. More generally, small shifts in the headship rate (a stock) will tend to be large relative to the flow of housing output or the demographic component of that flow.

This appears to be a very low outturn for household growth, compared to the last six years' average of 27,500 new households. However, this scenario is driven by demographic changes in the projected population, since headship rates are assumed to stay constant. We must bear in mind that the population is predicted to grow less quickly and the population is getting older. As we have seen, headship rates among the older age groups declined between the last two census dates.

However, at the time of writing we are already in the last quarter of 2003, and we know that the level of house-building has continued to be strong. This indicates that — if the headship rates for 2002 are correct, as we must assume — the strong house-building activity is driven by factors other than the demographic ones.

The assumptions underlying Scenario 2 are not totally implausible, even if the outcome yields a very low demographic demand impulse. But it is clear that the pace of activity this current year is well ahead of what this scenario implies.

Scenario 3 – Average of Scenarios 1 and 2

We have seen in Section 2 that Irish headship rates have not changed significantly between 1996 and 2002. Therefore it is unlikely that they will reach UK rates, which are significantly higher, by 2011 (our assumption for Scenario 1). On the other hand, we do not expect the no-change assumption underlying Scenario 2 to hold until 2011: headship rates have room to rise, even in a less favourable economic climate.

Scenario 3 is a simple arithmetic average of Scenarios 1 and 2.

Table 4.3: Projected total number of households, 2002–2011 ('000s)

Scenario 3	2002	2006	2011
Households	1288.0	1404.6	1541.8
Average annual change	27.5*	29.2	27.4

Source: Census 2002; DKM M2F2 Population Projections

* 1996–2002

- Under Scenario 3, average annual household formation between 2002 and 2006 would be slightly higher than it was over the recent inter-censal period, with 29,200 new households every year.
- Thereafter, annual average household formation will return to a level similar to what we saw over the past six years.

Applying the estimated total number of household under Scenario 3 to the total population as projected by DKM gives, we feel, more plausible headship rates than the two previous scenarios.

Table 4.4: Implied total headship rates, 2002–2011

Scenario 3	2002	2006	2011
	33%	35%	37%

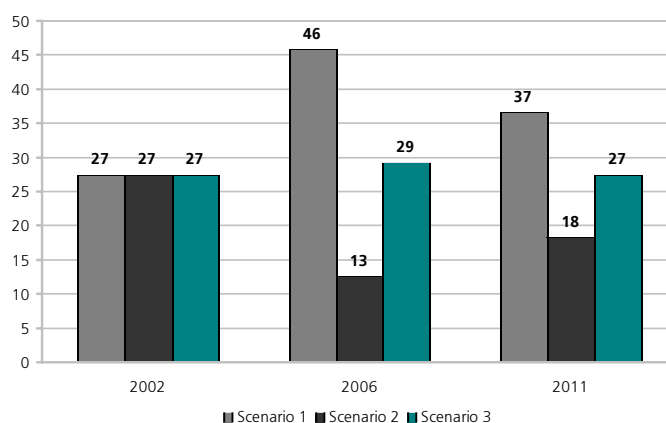
Under Scenario 3, the overall Irish headship rate²⁰ would reach 37% by 2011, an increase of four percentage points over the census measure of 2002. This coincidentally equates to the four-percentage-point rise recorded between 1991 and 2002 (see Figure 2.3).

By comparison, the UK rate in 2002 was 42%. We feel that Scenario 3 provides a plausible medium-term forecasting basis for housing demand, but are conscious that it requires a significant move in what have thus far been sticky Irish age-specific headship rates.

Figure 4.1 and Table 4.5 pull together the outcomes of our three scenarios. The range of predictions over the two forecasting periods is very wide, an illustration of the huge impact on demand from variations in assumptions about headship rates.

²⁰ Defined as the proportion of persons out of the total population who are head of a household.

Figure 4.1: Summary of predicted annual average household formation



Source: Census of population 2002; DKM Projections

Applying the number of households predicted by each scenario to the total population (as per DKM M2F2 projections) gives the estimated average household size in Ireland up to 2011.²¹

Table 4.5: Forecasts of average household size, 2002–2011

	Scenario 1	Scenario 2	Scenario 3
2002	2.94	2.94	2.94
2006	2.73	3.00	2.86
2011	2.51	2.90	2.69

Average household size in 2011 would be down to 2.5 under Scenario 1, close to the current European average, but would remain at 2.9, not much below today's Irish figure, under Scenario 2. Scenario 3 sees average household size fall to 2.7. The failure of age-specific headship rates to rise very much through the recent boom (equivalently, the failure of average household size to fall much) is cautionary. In more difficult economic conditions, and particularly if interest rates in the eurozone were to rise significantly, headship rates might rise little if at all from current levels.

We think the most likely outcome is somewhere between the two extreme scenarios shown; but it is difficult to articulate a basis for any more definitive forecast. An increase in Irish headship rates to UK levels over such a short period, as in Scenario 1, is unlikely — if it were on the cards, there would be more evidence for it in Census 2002.

There is a dearth of empirical research on the dynamics of headship rates in Ireland, which we believe are driven by complex social as well as economic factors, and this inhibits understanding of the demand side of the housing market.

²¹ This differs from the usual definition (number of persons in private households divided by number of private households) as we only have total population projections available. However, the differences should be small, as in the last two censuses 97% of the total population lived in private households.

4.2: Medium-term demand for housing

The period from 1996 to 2002 saw unprecedented economic growth. Together with generous tax incentives for building holiday homes, this has led to record housing output. We do not believe that this trend will continue in the longer term. Reduced economic growth will affect the demand for houses, as will unemployment rates, which will be somewhat higher than in the immediate past. Table 4.6 sets out the most recent forecasts until 2004 from Davy Stockbrokers. The most recent medium-term economic forecast for Ireland is contained in the latest ESRI Medium Term Review.²²

Table 4.6: Medium-term GNP forecasts

Year	Real growth, %
2002	0.1
2003	1.7
2004	2.0
2000–05*	3.1
2005–10*	5.4

* Annual averages

Source: Davy Stockbrokers; ESRI Benchmark Scenario

While the ESRI is more optimistic about the short term than DKM and some other economic commentators, its medium-term outlook nevertheless implies much reduced growth compared to 1995–2000, when average annual growth in real GNP reached 9%. Our forecast of housing demand for the medium term (up to 2011) takes this more subdued economic outlook into account.

At this stage we want to re-emphasise the assumptions we made in order to arrive at the projected housing demand figures presented below:

1. Our housing demand projections are dependent on our projections of the total population and its breakdown into different age groups, which themselves are based on a set of assumptions.²³
2. The future number of households is dependent on the assumptions made in relation to future developments in headship rates. We presented three different headship scenarios in Section 4.1, and these yield very different figures for the demographic component of housing demand.
3. We assume that the level of replacement demand will stay at around 5,000 per year, a rate which industry players believe is realistic but which lacks a firm statistical base.
4. We believe that the level of second-home building estimated for 1996–2002 was unprecedented and is most unlikely to continue at that pace, particularly given the economic slowdown compared to recent boom times. The future demand for second homes is dependent on a number of factors, including the economic climate, tax incentives, and the level of implementation and impact of the National Spatial Strategy. Given the strong OVS component in the completions in Q2 2002 to Q1 2003 (see Table 2.9), when 23,000 homes were built which were either for obsolescence demand, vacant or second homes, we think that 15,000 OVS homes per annum in the short term to 2006 is a likely outcome. Thereafter we envisage a fall off to 10,000 such dwellings per year on average.

²² ESRI Medium Term Review 2003-2010, July 2003, p.28.

²³ We use the CSO's M2F2 assumptions as described in Section 4.1.

Table 4.7: Housing demand projections*Based on Scenario 1 (Irish headship rates reach UK 2002 levels by 2011):*

	1996–2002* ann. av. '000s	2002–2006 ann. av. '000s	2006–2011 ann. av. '000s
Household formation	27	46	37
Obsolete/vacant/second homes	18	15	10
Total completions	45	63	47

Based on Scenario 2 (headship rates to remain at Irish 2002 levels):

	1996–2002* ann. av. '000s	2002–2006 ann. av. '000s	2006–2011 ann. av. '000s
Household formation	27	13	18
Obsolete/vacant/second homes	18	15	10
Total completions	45	28	28

Based on Scenario 3 (average of Scenarios 1 and 2):

	1996–2002* ann. av. '000s	2002–2006 ann. av. '000s	2006–2011 ann. av. '000s
Household formation	27	29	27
Obsolete/vacant/second homes	18	15	10
Total completions	45	44	37

* actual

In summary:

- Under Scenario 1, there would be continuing strong completions to 2006, with historically high levels on to 2011, fuelled by the increase in headship rates.
- With household formation as predicted by Scenario 2, completions would fall quite dramatically to around 28,000 per annum, the type of figure experienced prior to the Celtic Tiger boom.
- The most likely outcome in our view is predicted by Scenario 3, with completions to 2006 very close to the 1996–2002 experience, falling off thereafter.
- All other being things equal, we expect the demand for second/vacant homes and replacement demand to drop significantly to 10,000 per annum over the forecast period. However, this component of demand would readily respond to developments in the taxation/incentive climate in the country.

Finally, given the very strong housing output of 2002 and 2003, the Scenario 3 average for 2002–2006 is likely to be over-achieved, with consequent negative carry-over into the subsequent five-year period.

4.3: Comparison with ESRI predictions of housing demand²⁴

The ESRI benchmark scenario predicts a continued decline from the exceptional economic growth of the last five years. This relatively benign scenario projects average GNP growth over 2000–2005 of 3.1% per annum.

Against this background of falling growth and rising unemployment (peaking at 5.7% of the labour force in 2004), it makes additional assumptions, which help to sketch out the developments of the housing market in the medium term, notably:

- The age-specific headship rates are assumed by ESRI to continue to rise towards current UK levels and to reach them by 2016.
- Net inward migration will average 15,000 per annum between 2000 and 2010 (which is higher than the M1 migration assumption of the CSO, 12,500 per annum).

These assumptions result in the following outcomes for housing demand:

- Housing demand will continue to grow in the next five years (53,300 completions per annum) — exceeding the record levels of the previous five years — driven mainly by population growth and the demand for second dwellings/replacement demand.
- Second homes and replacement demand average 18,500 per annum over the next five years (up from an estimated 11,000 per annum between 1996 and 2001).
- From 2006 onwards growth would slow somewhat, according to ESRI.

Table 4.8 compares the DKM and ESRI²⁵ forecasts over the period common to both. It shows that:

- The ESRI forecasts for total housing demand are higher than our Scenario 3 figures for 2002–2006, mainly accounted for by ESRI's higher demographic component.
- For 2006–2011, ESRI's predictions are close to our Scenario 1, which exceed our Scenario 3 outcomes by 10,000 per annum.
- The estimates for obsolescence, vacant and second homes are very similar if averaged over the whole forecasting period.
- Both sets of forecasts agree on a gradual decline of the total housing market in the medium term.

²⁴ ESRI Medium Term Review 2003-2010, July 2003, p.60ff.

²⁵ The ESRI used 1996–2001 as its base line. However, since annual averages are used, a comparison is still possible.

Table 4.8: Comparison²⁶ of forecasts of housing demand, annual averages, 1996–2001 ('000s)

	1996–2002	2002–2006	2006–2011
Household formation/demographics			
DKM Scenario 1	27	46	37
DKM Scenario 2	27	13	18
DKM Scenario 3	27	29	27
ESRI*	34	35	37
Second dwellings/obsolescence/vacant dwellings			
DKM Scenario 1	18	15	10
DKM Scenario 2	18	15	10
DKM Scenario 3	18	15	10
ESRI	11	19	10
Total			
DKM Scenario 1	45	63	47
DKM Scenario 2	45	28	28
DKM Scenario 3	45	44	37
ESRI	45	53	47

* ESRI Medium Term Review 2003-2010

26 It must be borne in mind that ESRI did not have Census 2002 data to hand when it prepared the forecasts reproduced in the table. This accounts for the discrepancy in the breakdown of the actual housing demand for the first period in the table.

Appendix: Shortcomings in housing-related statistics

Throughout this report, we have voiced reservations about a number of key measures for developments in the housing market. In this section we describe these shortcomings and look at the experience of other European countries. Finally, we make recommendations as to how the compilation of these statistics could be improved.

A.1: Completions and starts

Completions data used by commentators in Ireland (based on the Department of the Environment, Heritage and Local Government publication, Housing Statistics Bulletin) are derived from ESB connections.²⁷ The official statistics also include an annual national estimate of 400 "conversions" in the completion figures — a number for which there is no regional breakdown and whose basis is uncertain.

In discussions with the ESB we have established that the connections data are confined to residences only. This was a concern, particularly in the case of large developments involving apartments, etc. Typically, connections would also be purchased for car parks, basements, outside lights, etc. These connections are mainly classed as commercial and we do therefore not think that they inflate the number of house completions significantly.

However, domestic accounts currently also cover farming activities ("domestic and farming"). In a farming context, there are typically multiple connections, e.g. living quarters, stables, outfarms. The ESB estimates the effect of this practice on the stock of "residential" connections in the state to be in the region of tens of thousands. Therefore the total number of residential connections may overstate the housing stock considerably. However, no figures are available to quantify this phenomenon.

The opening of the domestic electricity market to competition will provide an opportunity for the improvement of the range of data collected. In 2002, 49% of the market — as measured by sales — was to have been open to competition. By 2004, this proportion is set to rise to 56%, and 100% should be achieved in 2005.

ESB Networks will retain control of the grid and will therefore be the body supplying the connection figures — up to now it was Supplies. We have ascertained the following:

- ESB Networks will retain control of the grid and the installation and reading of meters. Applications for a new electricity connection will have to be filled in by the applicant in the usual way. This information will be compiled for the Department of the Environment, Heritage and Local Government as before. In addition, there is an agreement with the Commission for Energy Regulation (CER) to publish certain data as a public service. Additional information will be available for a fee.
- Because ESB Networks will continue to read meters, information on electricity usage, etc. that could be used as an indicator for vacancy/second homes will still be available from one source. (A new office will pass on the meter readings of accountholders to the appropriate supplier so that they can be billed.)
- There are plans to clearly monitor the number of terminations of electricity connections — as distinct from "disconnections", which are usually only temporary. This would enable commentators to get an idea of the number of obsolete dwellings that leave the housing stock every year.

²⁷ The Department of the Environment, Heritage and Local Government is currently assessing a pilot scheme run by the Dublin local authorities intended to improve the capture of commencement notices. It is envisaged that the scheme will be extended nationwide.

No data are available in Ireland on housing starts, a potentially valuable leading indicator for activity. Registrations under the house-building guarantee scheme, an insurance product, as well as planning permissions data, are used by analysts as proxies for housing starts. We understand that local authorities could, however, within existing arrangements, collect data directly on commencement of building operations.

A.2: Household formation

In a break with previous practice, the CSO has excluded households whose inhabitants stated that they were not normally resident at the address of the night of Census 2002. Thus, 10,300 households have been discounted as holiday/second homes and are not counted in Census 2002. This, of course, deals with only a fraction of the existing holiday/second homes in the country.

A.3: Headship rates

Census 2002 has broken with the methodology of previous censuses in that it did not ask for the head of the household to be identified. Instead, the census form asked for members of a household to be listed as "Person 1, 2 3" etc. In the census results, the first person listed on the census form is classified as "reference person" (like in the QNHS).

While we do not have any reason to believe that this new practice has caused a distortion in age-specific headship rates (if anything, they have remained remarkably steady, as we have seen above), it represents a break in the series.

A.4: Housing stock/vacancy/second homes

"There were 1.28 million housing permanent housing units containing usual residents at the time of the 2002 census."²⁸ The term "usual" in the sentence indicates the main shortcoming of this census measure: it excludes all residences where persons are not usually resident, i.e. second/holiday homes or homes which are vacant. We therefore do not know the extent of the total housing stock in the state, nor its condition (which would give us an indication of future replacement rates).

This dearth of information is in stark contrast with the situation in Northern Ireland. The Northern Ireland Housing Executive (Regional Strategic Housing Authority) has undertaken seven Northern Ireland House Condition Surveys since 1974. The latest dates from 2001.²⁹ Thus, up-to-date figures on the total housing stock, demolitions, dereliction, change of use, conversions (mergers and splits), vacant dwellings and holiday homes are available. In addition, the report contains detailed observations on the condition of the housing stock as well as socio-economic figures.

A.5: Obsolescence

One element of the demand for housing consists of the replacement of existing but obsolete housing stock. This obsolescence demand has been estimated at around 0.5% of housing stock by industry observers. However, as we have noted above, we do not have an official housing stock figure. Thus we have no idea what percentage of houses are built to replace existing ones.

28 Census 2002 Principal Socio-Economic Results, October 2003, p.27.

29 NIHE, Northern Ireland House Condition Survey 2001, March 2003.

Possible sources of data on obsolescence demand are the local authorities. They process planning applications and those involving the demolition of existing housing could be classified as replacement demand. However, while this information may be on the paper forms filed, it is not extractable for statistical use, because the Department of the Environment, Heritage and Local Government does not require the authorities to itemise it for their returns to the Department.

A.6: European comparisons

We have reported on the Northern Ireland experience above. A recent DKM survey regarding the methodology of housing data collection in the 19 members of EUROCONSTRUCT resulted in eight responses to date. The following information emerged.

Completions

- Some countries have good start-up data, but poor completion figures (France uses electricity connections as a proxy for start-ups with a one-year lag).
- Some Scandinavian countries have good completion data because new homes are inspected before they can be occupied. (Norway, Finland).
- Others rely on collection of data by the local authorities.

Housing stock

- A housing census (usually every 10 years, which includes data on second homes and vacant stock) is held in most countries.
- In France this is supplemented by a six-yearly housing survey of 50,000 dwellings based on the census. The French Statistical Institute has now decided to have an annual census on a lower base.
- In Denmark, the physical census has been dropped, because the level of error in the official register was negligible.

A.7: Recommendations for Irish housing data collection

Completions and starts

Given that the collection of electricity connection data is presently handed over from the Supply to the Networks branches of the ESB, it would be a good time to improve the detail of the information available from this source. One obvious improvement would be to require householders to indicate on the connection application form whether the property is their first or second/holiday home. This would allow us to assess the proportion of second homes among new connections.

Applicants could also be asked whether the connection is in respect of a dwelling that replaced an existing one, giving us a measure of replacement demand. Applicants should state whether the new connection is for a dwelling or for a farm outbuilding.

Local authorities might be asked (by central government) to collect data on housing starts for publication by the Department.

Housing stock/second homes/vacancy

The housing section of the census should include questions on primary residency and ask whether the household owns a second/subsequent homes in the State.

Changes in the use of a building should also be recorded: from commercial to residential use and vice versa; and from second to first residence and vice versa.

The frequency of the collection of housing data could be improved by including housing-stock-related questions (as above) into the QNHS.

A combination of these statistics from the ESB Networks and CSO sources would allow researchers to assess the extent of the total housing stock and changes in the stock of second/holiday homes in the country.

Obsolescence

If house-completion and second-home data were collected in a satisfactory way, the level of replacement demand would be the residue:

$$\begin{aligned} &(\text{total completions} = \text{household formation} \\ &\quad + \text{demand for second homes} \\ &\quad + \text{replacement demand} \\ &\quad + \text{vacant homes}) \end{aligned}$$

However, we should not be too optimistic. In order to get a handle on the number of houses built to replace obsolete dwellings, the range of statistics collected by the local authorities would have to be widened. This should be done at planning application stage as mentioned above. The applicant would have to state clearly whether the new proposed dwelling(s) was/were replacing some existing dwelling(s).

If that information were gathered, it could feed into the housing starts statistics compiled by the local authority. One would think that data of this kind would be of interest to planners at county/regional/national levels.

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