# Continuing housing surplus in Ireland



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Figure 1: Population and households

Too many residential dwellings were built in Ireland for many years from the start of this century. The large number of assumptions and estimates precludes a precise estimation of the housing surplus in our analysis. But we put the substantial surplus built up to the end of 2009 at more than 100,000 dwellings. If the population decline we expect for 2010 and 2011 occurs, no start will be made in those years on reducing this housing surplus.

#### **Housebuilding recession**

The decline in residential investment has been one of the main drivers of the recent recession in Ireland (see Rabobank Economic Quarterly Report, September 2010). Assessing whether and when construction output will rebound requires estimating how far the housing surplus that has been built up will be reduced in the coming years. To do so we will consider the development of what in our view is the fundamental demand for housing, and compare this with supply.

#### Housing demand: households

As every household needs a home, the number of households governs housing demand. No annual figures are available for the number of households. However, from 1946 a census was carried out almost every five years, as part of which the number of households was ascertained. The most recent census took place in 2006. Data on population size are available on an annual basis, for up to the end of 2009. To obtain an annual series of the number of households, we did not opt for linear interpolation (in which the growth in the number of households in the period between two censuses is distributed evenly over the intervening years) but for a correlation between population growth and household formation.

3.5 3.5 3 3 2.5 2.5 2 2 1.5 1.5 1 1 0.5 0.5 76 81 86 91 01 -Households, estimate Census —Population > 14 yr 5 4 vear-on-vear growth 4 3 3 2 2

1

0

Source: CSO, Reuters EcoWin, ESRI, Rabobank

-Population > 14 yr

-Households

1

0

61 66 71 76 81 86 91 96 01 06 11

Because children do not form separate households, we used the growth of the population aged 15 years and older. The distribution of population growth over the intervening years between two censuses is determined and then used to calculate the annual increase in the number of households between two censuses, producing a time series for the number of households (figure 1a).

For the years after 2006 we couple the growth in the number of households directly to the growth of the population. The growth in the number of households from 1961 to year-end 2005 outpaced the growth of the population by an average of 0.5 percentage points (figure 1b). There is wide variation, however. Net migration is a significant factor in changes in the Irish population. In years of economic prosperity, more people move to than from Ireland, whereas economic adversity reverses this flow (figure 2).

Figure 2: Population growth and migration



Source: Eurostat

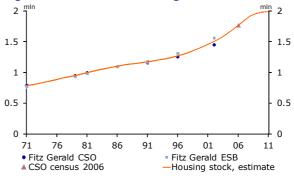
In years of low population growth and net emigration, the difference between population growth and the growth in the number of households is relatively low. We therefore let the difference in population growth and household number growth narrow after 2006 and assume that from 2009 the growth of the number of households matches that of the population in percentage terms (figure 1b).

For 2010 and 2011 we estimate population growth on the basis of the net emigration forecast given by the Economic and Social Research Institute (ESRI) in its Spring 2010 Quarterly Economic Commentary. Net emigration of 60,000 in 2010 and 40,000 in 2011 causes both the population aged older than 14 years and the number of households in those years to contract by 0.9% and 0.4% respectively (figure 1b).

### Housing demand: replacement

Housing demand is affected not just by the growth of the number of households but also by the number of dwellings having to be replaced each year. At a constant obsolescence rate, this replacement demand will grow in line with the housing stock. As for households, no annual figures are available for the housing stock. Again, the censuses provide a solution. Fitz Gerald (2005)<sup>1</sup> constructs, on the basis of published and unpublished data from the

Figure 3: Estimated housing stock



Source: Fitz Gerald, Reuters EcoWin, CSO, Rabobank

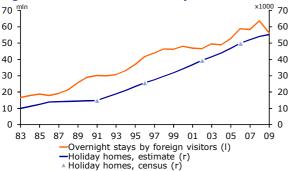
censuses from 1971 to 2002, a time series for housing stock. We have reproduced his estimate on the basis of the housing stock and obsolescence rate as reported by him, and data on annual new house building. For each year we have added new house building to the preceding year's housing stock and deducted the obsolescence rate. Fitz Gerald puts the obsolescence rate for the period 1996-2002 at a higher level than in the preceding decades. In addition, the housing stock reported in the censuses departs increasingly from the figure based on the number of electricity network connections at ESB Networks. We have opted for a lower obsolescence rate, leading to a slightly higher estimated housing stock in 2002 than that of Fitz Gerald. As an added advantage, under this assumption the estimated housing stock in 2006 reasonably approximates the value reported in that year's census. An obsolescence rate of 0.4% is used from 1971 to 2011, except for the years 1982-1985, for which a percentage of 0.55% is applied. Figure 3 reflects our estimate of the housing stock compared to the stated benchmarks. The resulting housing replacement demand rises from over 3,000 homes in 1971 to over 7,800 in 2009.

#### Housing demand: holiday homes

The number of holiday homes as a percentage of the total housing stock rose from 1.3% in 1991 to 2.8% in 2006 (Fitz Gerald 2005 and CSO Census 2006). An estimate of the numbers of holiday homes for the period

<sup>&</sup>lt;sup>1</sup> Fitz Gerald, J. (2005), *The Irish housing stock: growth in the number of vacant dwellings*. ESRI Quarterly Economic Commentary Spring 2005.

Figure 4: Tourists and holiday homes



Source: Fitz Gerald, CSO, Rabobank

1983-2009 shows that its growth is largely in line with the growth in overnight stays by visitors from abroad (figure 4). In addition, the use by domestic tourists of holiday homes they own themselves increased from 5.2% of the total number of overnight stays in 2000 to 11.6% in 2008 (CSO). Although this is not a thorough analysis of the growth in fundamental demand for holiday homes, we assume that it was largely justifiable.

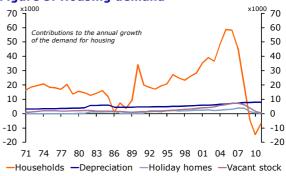
#### Housing demand: vacant stock

The habitable housing stock is used for principal homes or holiday homes but each year a portion is also vacant. This averaged an estimated 9% in the censuses from 1971 to 2006. Vacancies can arise from the normal operation of the housing market, as a result of which a portion of the housing stock is temporarily vacant, including on the day of the census. People may also have a second home that is not counted as a holiday home.

In 2006 the percentage of vacant residential dwellings excluding holiday homes had risen to 14% of the housing stock. This above-average percentage may indicate a housing surplus, as the properties are habitable but not occupied. If these are investment properties, the situation is untenable, since unoccupied houses generate no rental income. The significant annual price increases of residential properties in Ireland from the mid-nineties (averaging 14.5% annually in 1997-2006) may have provided compen-

sation for this lack of direct yields. But this came to an end when house prices stopped rising. We have calculated the demand for vacant dwellings on the basis of a normal vacancy rate of 9%. Owing to the surge in housing stock this source of demand for housing has grown strongly since the midnineties and its increase in 2006-2007 matched replacement demand (figure 5).

Figure 5: Housing demand

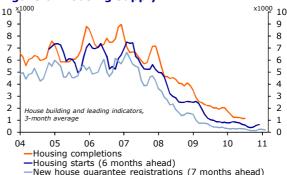


Source: Rabobank

## Housing supply: house building

Because we have already included housing demolitions in replacement demand, we look at gross new building to determine the annual increase in housing supply. Building output has declined sharply since 2006. Leading indicators point to a stabilisation of housing completions at around 1,000 housing units per month in the second half of 2010 (figure 6). On that basis we are expecting housing completions of some 14,000 units in 2010 and of around 12,000 in 2011.

Figure 6: Housing supply



Source: Reuters EcoWin

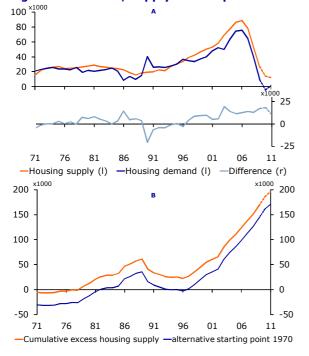
## **Demand and supply**

Figure 7a summarises our estimates of the annual growth in demand for and supply of housing. The difference between the two series is the annual housing deficit or surplus. From 1997, new construction exceeded growth in demand for many years. This resulted in a supply surplus (the accumulated annual construction surpluses, figure 7b) of 167,000 in 2009. That estimate is near the top of the range of 35,000-170,000 found in Irish studies (DoE Housing Market Overview 2009).

Since the analysis is inevitably brimming with assumptions and estimates, we certainly do not wish to attach too much value to the estimated absolute figure for the housing surplus. If we assume, for instance, that there was a housing deficit in the early 1970s, the estimated surplus in 2009 will also be lower by several tens of thousands of units (figure 7b).

But despite all reservations, we can assert that up to the end of 2009 a substantial housing surplus was built up, which is highly likely to be above 100,000.

Figure 7: Demand, supply and surplus



Source: Reuters EcoWin, Bank of Ireland, Rabobank

## **Continuing surplus**

Because household formation is by far the most important factor in the development of housing demand, our analysis provides a basis for estimating how far the housing surplus built up to the end of 2009 will be reduced in 2010 and 2011. As stated above, we expect net emigration to cause the number of households to fall this year and next year. Consequently, no start will be made in those years on taking up the housing surplus. Our analysis in fact points to a further increase of the already substantial surplus (figure 7).

The expectation of further growth of the housing surplus is based on a forecast for population change. If population growth and the change in the number of households differ from that forecast, so too would the conclusion about whether or not the housing surplus will be reduced. However, stabilising the housing surplus requires a doubling of population growth compared to 2009 instead of the decrease in the population we are expecting. Reducing the surplus by more than 10,000 homes a year would in fact require the number of households to grow by over 0.8%, which we consider to be highly unlikely. Therefore, unless the population grows much more strongly than we currently expect, no - or at most only a very slight - reduction of the Irish housing surplus is in the offing up to the end of 2011.

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