



# The Irish Housing Market



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## Strong Immigration and Income Growth to Sustain Demand and Support Prices

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## KEY POINTS

The continuing rise in the over 25 population provides a strong base for housing demand.

Rising immigration is key to sustaining the current pace of house completions.

Immigration seems likely to accelerate because of the freedom of access granted to citizens of the ten new EU countries. Recently, this appears to be running at 11,000 per month.

Housing demand is projected to run at between 50,000 and 70,000 units per annum for the next 15 years depending on the pace of immigration.

Increasing income and wealth are supportive of investment in the existing housing stock and in second homes. We estimate that more than 10,000 second homes are being constructed per annum.

The rise in debt in Ireland appears sustainable because ability to repay is robust, initial levels of debt were low and the wealth and assets against which most of the debt is secured is a multiple of the debt. Mortgage debt is only 25% of the value of the housing stock.

Mortgage repayments are estimated to be about 31% of disposable income in 2005. Even if interest rates rise to 4%, this percentage would still be less than 35% of disposable income.

Mortgage debt as a proportion of the value of a house declines rapidly even with modest house price inflation.

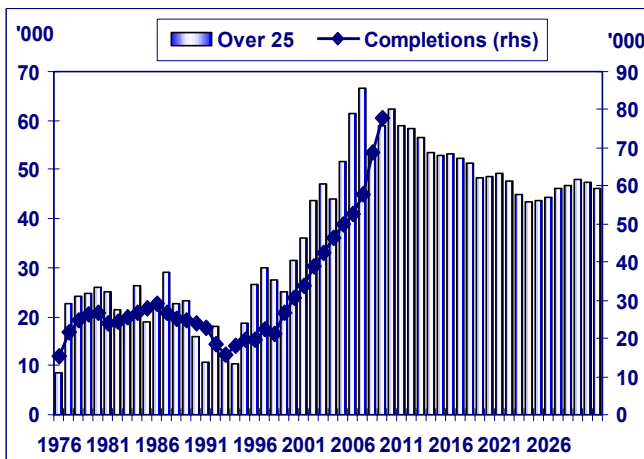
## THE IRISH HOUSING MARKET

### Strong Immigration and Income Growth to sustain demand and support prices

#### Completions Running at a Fast Pace, Prices Still Rising

New house completions in 2004 rose to almost 77,000 from around 50,000 per annum three years earlier. With data available for the first three quarters of this year it looks as if completions in 2005 will be around the same as last year's peak. This would mean an average rate of new house completions in the three years to 2005 of 74,000 per annum. This is well above earlier estimates of the sustainable pace of demand. The expectation was that house price inflation would moderate in the face of the rise in supply and, in fact, in the first half of this year it ran at an annualized pace not much above 4%, compared to 11% in 2004. In Q3, however, there has been a re-acceleration to a 10% annualized pace. This is not indicative of oversupply nor indeed are data on private rents which, having declined between late-2002 and April 2005 have been rising at a 2% year-on-year pace since August. There is no evidence of speculative building since nearly all developments appear to be booked for purchase prior to commencement.

Chart 1 - House Completion and the Rise in the over 25 Population



The demographic sources for the continuing strength of demand for housing are the continued rise in the population attaining the age of household formation and immigration. Moreover incomes continue to rise and wealth is increasing, leading to upgrading of the housing stock, reductions in household size and the acquisition of second homes. While mortgage debt has been rising sharply, this would not appear to pose any problems for the housing market, as we outline below.

#### Growth of the Population in the 25 plus age group

Chart 1 shows the broad relationship between changes the numbers in the population aged over 25 and new house completions. The projections for the population aged over 25 are based on the assumption of a net inflow of immigrants of 40,000 per annum in the years to 2026.

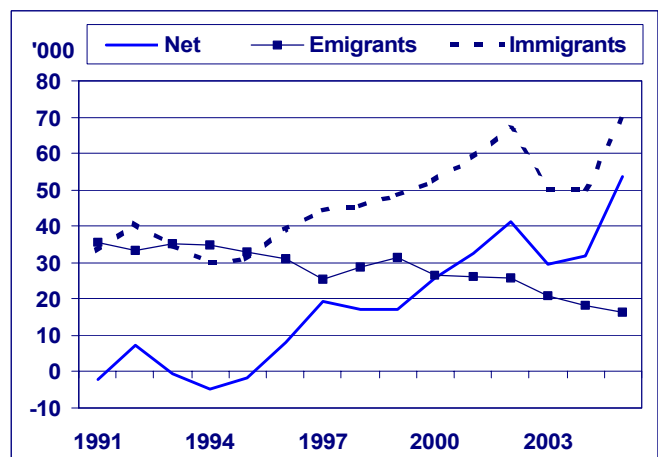
(We explore the immigration issue in more detail below.) It is clear from this Chart that the large increase in new house completions from 30,000 per annum in 1995 to 77,000 per annum currently was associated with an acceleration of the growth in the over 25 population from just above 30,000 per annum then to above 60,000 per annum currently. Since the baby boom in Ireland peaked in 1981, the numbers in the over 25 age group will grow more slowly from here on but by 2011 the pace will still be above 50,000 per annum, but could be higher if inward migration rises.

### Immigration

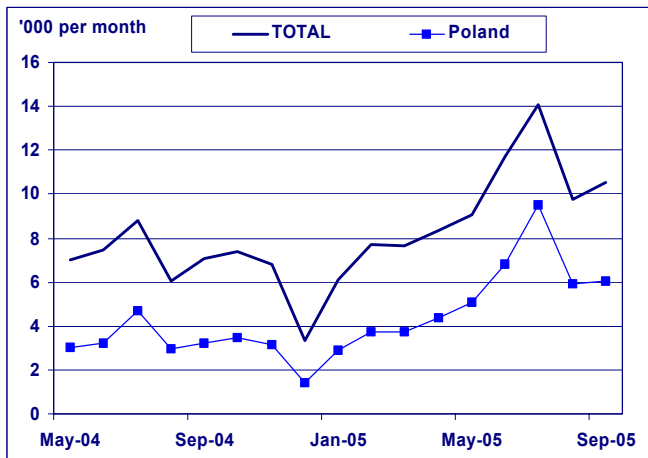
Migration is a key variable determining the demand for housing. Net inward migration tends to fall or turn negative when the economy is performing relatively poorly and to rise when the economy is growing relatively strongly. The housing market tends to be strongly correlated with both economic growth and migration. Thus in the 1980s there was poor growth, net emigration and, for most of the period, a weak housing market. House prices rose on average by less than 4% per annum between 1983 and 1988. Emigration averaged almost 30,000 per annum over that period. Since 1996 there has been the opposite experience. Economic growth has been strong. House prices began their ascent in earnest in 1996 when prices rose 12%. Perhaps not coincidentally, 1996 saw the first net inflow of migrants since 1981. Since then, net immigration has averaged 28,000 per annum. In the year to April 2005, net immigration was more than 53,000 and the last three years have averaged 38,000 pa.

Our central medium-term view is that the Irish economy is likely to achieve its potential growth of 5%-6% to 2011 and to moderate somewhat thereafter. This pace of growth is likely to be far above what will be achieved in most other EU countries. Unemployment is much lower than in most of the rest of the EU. Therefore, the net inflow of migrants should continue but the exact pace is

Chart 2 - Immigrants and Emigrants



**Chart 3 - Applications for Personal Public Service Numbers (PPS) - 10 new countries**



hard to judge. The accession of the ten new countries to the EU in May 2004 added 75 million people, mostly on low incomes, to the pool of those with fairly ready access to the Irish labour market, so we may see a surge in immigration from these countries in the next few years. Ireland, the UK and Sweden are the only countries to have allowed citizens of the ten new countries free access to their labour markets. It seems likely that it will be 2009 or even 2011 before the labour markets of the other 10 members will be open to these countries.

In the official data on immigration, the net inflow to Ireland in the year to April 2005 from the ten new countries was 26,000. However, the number of applicants for PPS numbers in the period May 2004 to September 2005 totalled 139,000. Such applications are currently running at more than 11,000 per month (Chart 3). This would suggest that net immigration has picked up very strongly in the course of this year.

However, a point to consider in relation to housing demand is that the gross immigration flow may be a more important influence than net immigration. The average net inflow in the last three years represented the difference between a 57,000 gross inflow and a 19,000 gross outflow. It may well be the case that many of the Irish emigrants do not free up much accommodation for immigrants because they are mostly 18-24 year olds leaving family homes for perhaps a brief period abroad. A gross inflow of 57,000 per annum could result in demand for almost 20,000 housing units per annum. This, together with the "second home" phenomenon would help explain why house prices have held up so strongly despite an average rate of new house building of 74,000 per annum in the last three years.

**Table 1 - Persons Per Household**

<b>Ireland</b>	<b>2002</b>	<b>3.0</b>
Sweden	2001	2.9
Luxembourg	2001	2.5
Greece	2001	2.6
Finland	2001	2.1
Austria	2001	2.4
Denmark	2002	2.2
Belgium	2001	2.4
France	2001	2.4
Germany	2001	2.2
Italy	2001	2.6
Netherlands	2001	2.3
Spain	2001	2.9
United Kingdom	2001	2.3
United States	2000	2.6

### Household Size

Household size in Ireland at 3.04 persons per household in the 2002 census is high compared to the 2.4 average in the EU 15 and 2.6 in the US. The number of persons per household fell to 3.04 in 2002 from 3.23 in 1996. Most of this change came from changes in the age composition of the population rather than alterations to household formation behavior for any given age group.

We know from the 2002 census in Ireland that the rate of reduction in household size for each individual five-year age group changed little either between 1991 and 1996 or 1996 and 2002. It is unlikely there has been acceleration in the pace at which average household size is falling for individual age cohorts in the period since 2002.

## Second Homes

It is reasonable to expect that the building of second homes is likely to be growing in importance as GDP per capita rises together with the equity built up in the existing housing stock. Rising incomes and wealth enable much greater "consumption" of housing in the form of second homes.

There are no data on how many house completions represent second homes and, thus, little means of estimating future demand. However, we have used the 2002 census information to compare the growth in population by county with house completions by county since 1996. (Table 2) This showed that there were nine counties, mostly on the west coast and in the midlands, where the increase in the population was less than the number of new house completions. This is, a priori, an indication of the construction of second homes in counties where second home construction is likely to be large relative to total completions. We calculated that if the ratio of population change to house completions in these counties had been the same as in the remaining seventeen counties, it would have implied that at least 4,000 houses per annum were built in these nine counties as second homes between 1996 and 2002. This is clearly an absolute minimum estimate of second home construction since, of course, second homes were built in other counties where the change in population was greater than the number of house completions. In particular, there are likely to be many new second homes in Dublin. If we were to make the cut off point 1.5 persons per house completed between 1996 and 2002 then the estimated number of holiday homes would be 11,000 per annum. As our working assumption we use 10,000 per annum for the pace of second home construction.

Table 2 - Changes in Population & House Completions 1996-2002

	A 1996-02 Change in Population	B 1996-02 House Completions	A/B
MEATH	24,204	9,679	2.5
KILDARE	29,003	11,805	2.5
TIPP S	3,699	1,684	2.2
DUBLIN	64,336	32,038	2.0
LAOIS	5,787	3,418	1.7
WICKLOW	12,036	7,118	1.7
KILKENNY	5,085	3,339	1.5
CLARE	9,327	6,908	1.4
OFFALY	4,585	3,408	1.3
WESTMEATH	8,713	6,617	1.3
CARLOW	4,229	3,326	1.3
WEXFORD	12,172	9,685	1.3
GALWAY	19,972	15,946	1.3
LOUTH	9,636	7,802	1.2
LIMERICK	10,487	8,597	1.2
CORK	27,671	22,701	1.2
WATERFORD	6,838	5,838	1.2
CAVAN	3,472	3,018	1.2
KERRY	6,294	7,337	0.9
ROSCOMMON	1,828	2,245	0.8
SLIGO	2,357	2,983	0.8
MONAGHAN	1,459	1,873	0.8
MAYO	5,904	8,373	0.7
DONEGAL	7,389	11,334	0.7
LONGFORD	961	1,841	0.5
TIPP N	3,047	6,170	0.5
LEITRIM	758	2,609	0.3
<b>Total</b>	<b>291,249</b>	<b>207,692</b>	<b>1.4</b>

**Table 3 - Potential Demand for New Housebuilding on Different Migration Assumptions**

Immigration	Unchanged HH size		Falling HH Size
	25K	75K	75K
2011	50	67	71
2016	49	70	75
2021	48	71	76

**Allows 20 k p.a. for replacement and second homes combined**

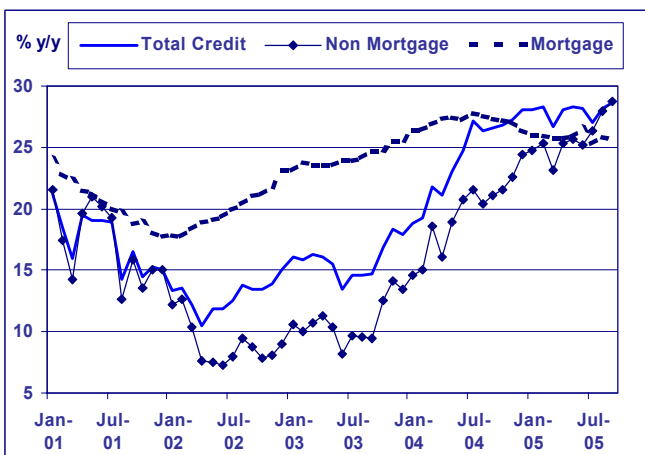
### Projections of the Demand for Housing

In Table 3, we show estimates for the sustainable pace of house building in the years ahead assuming immigration rates of 25,000 and 75,000 per annum and in addition, for the 75,000 immigration example, the implications of allowing household size for each age cohort to fall at the trend rate of decline between 1991 and 2002. The numbers in the Table include second home building, based on the estimates outlined, a flat guesstimate of 10,000 per annum. In addition, we have allowed for replacement house building of 10,000 per annum, or less than 1% of the existing stock. Looking at the estimates in the first column, with immigration at 25,000 pa, we can see that about 50,000 houses per annum would be the sustainable pace until 2021. Replacement and second homes would be about two fifths of the total in this scenario. For the 75,000 pa immigration assumption, the demand level would be around 70,000 per annum until 2021. Finally, allowing household size to fall, for each age cohort, at its recent trend would add a further 5,000 per annum to demand, as can be seen looking at columns two and three together.

### The Issue Of Rising Indebtedness

The pace of growth of debt in Ireland in recent years is giving cause for concern in some quarters. Between the first quarter of 2000 and Q2 2005 total private sector credit rose by €126bn of which €68bn was personal credit. Of the rise in personal credit, mortgage credit accounted for €57bn. The rate of growth in personal debt in Ireland has been more than 20% per annum since the millennium, mainly on foot of growth in mortgage debt, which represents four-fifths of personal lending. Credit card lending accounts for 2% of personal debt, while other non-housing related debt accounts for the remaining 19%. The Central Bank estimates that personal debt, which was 92.6% of aggregate disposable income in 2003, may rise to 133% by the end of 2005. The Euro area average level of personal debt to disposable income in 2003 was 72% while that in the UK was 129%. On the face of it such a steep rise in debt in

**Chart 4 - Credit Growth**



Ireland may be a cause for concern. Some commentators question the sustainability of such fast rates of credit growth. However, there are good reasons to be sanguine.

### **Under-Investment in Housing in the 1980s and early 1990s**

The Irish economy went through a very tough period in the 1980s when there was neither the cash nor the confidence to invest in the housing stock. House completions averaged 22,000 per annum in that decade. When confidence was beginning to return in the early 1990s it received a renewed setback from the significant and sudden rise in interest rates associated with the ERM crisis and attempts to keep the Irish pound in the EU fixed exchange rate system in 1992. When the investment climate finally improved in the mid-1990s, as interest rates fell, there had probably been under-investment in housing for the best part of fifteen years. It was not then surprising that the ratio of household debt to disposable income in Ireland in 1993 was only 43%, compared to 86% in the US and over 100% in the UK. Thus, the rapid growth in debt in the last decade was from a low base.

### **Rapid Growth in the Population of Household Formation Age Compared to the Rest of Europe**

The very different profile of the demographics in Ireland is also important in understanding why credit in Ireland has been rising rapidly. The pace of growth in the population of household formation age has been much more rapid than in the rest of the EU in the past ten years. This will continue to be the case for a considerable time to come as may be seen from Chart 1. The corollary is that the pace of household formation and investment in housing has been very much faster in Ireland and will continue to be so for some time. The relatively young Irish population and the related better earnings capacity and ability to generate wealth argue that a more rapid growth in debt is warranted and even desirable to make the necessary investment in the housing stock.

Table 4 - Owner Occupancy Rates

Country	Home Ownership (%)	
	1990	2002
Spain	78	85
Greece	76	83
Italy	68	80
<b>Ireland</b>	<b>79</b>	<b>77</b>
Belgium	67	71
Portugal	67	64
Finland	67	58
Austria	55	56
France	54	55
Netherlands	45	53
Germany	39	42
Luxembourg	n/a	n/a

*Source: European Commission (2005)*

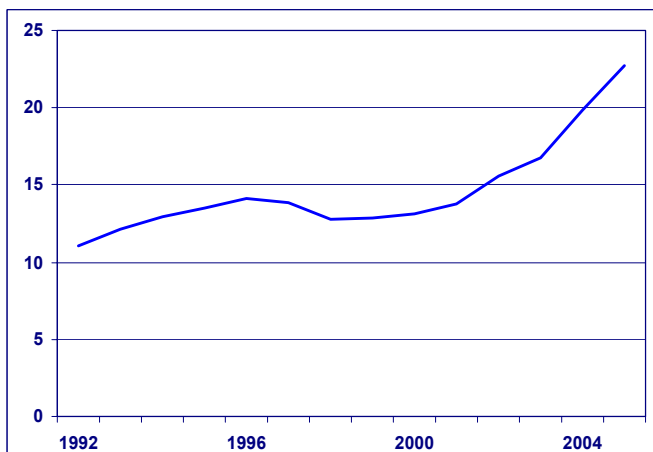
### The Culture of Home Ownership in Ireland is Greater than in the Rest of the EU

The home ownership rate in Ireland at 77% is high by the standards of most other EU countries as may be seen from Table 4. Only Spain, Greece and Italy have higher rates of ownership. In France the rate is 55% and only 42% in Germany. The predilection to house purchase rather than rental as the long-term basis for household formation implies that mortgage debt will tend to rise faster in Ireland than in most other EU countries for any given number of new households formed. This tendency has been augmented by the relatively more rapid rise in house prices in Ireland compared to elsewhere in the EU.

### Average Income and Wealth in Ireland is Growing Faster than in the rest of the EU

Until recent years, Ireland's per capita income was below that of the EU and, as a result, we would presume that wealth per capita was and, is still, very much lower in Ireland. These income and wealth differences would tend to have reduced the quality and floor area of family homes in Ireland and also the incidence of ownership of second homes relative to richer countries. Relatively faster income and wealth growth in Ireland is now tending to bring about a catch-up effect, possibly leading to more rapid new household formation, improvements in the quality of the housing stock and increases in the consumption of housing generally through growth in the ownership of second homes.

Chart 5 - Ratio of Mortgage Debt to Value of Housing Stock



### Debt should be judged on Individual Ability to Repay, the Value of the Asset and not Aggregate Incomes

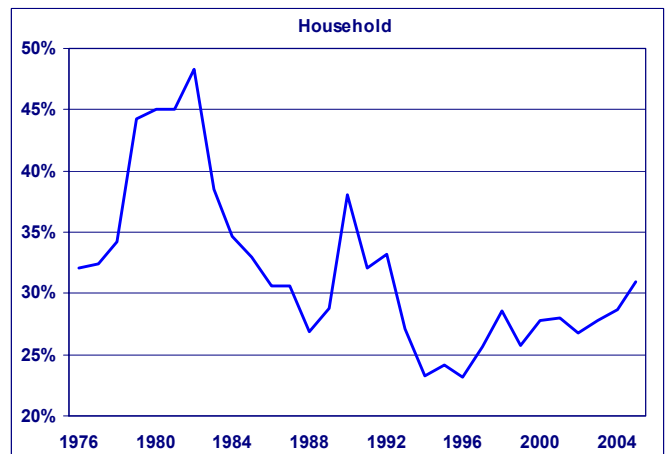
The rise in debt should not be discussed in relation to income, other than to assess the repayment burden. At least an equally important comparator for the debt level is the level of wealth. As may be seen from Chart 5 mortgage debt relative to the value of the housing stock was very low, at below 15%, up until 2003. While there

has been an increase in the last two years, the ratio is still low, at 23%. This measure does not take account of increases in wealth held in other asset classes.

### Affordability

While house prices have risen significantly in Ireland in recent years, declining interest rates and rising incomes have offset most of the impact on the burden of servicing mortgage debt. In order to estimate the burden of mortgage repayments, we have taken the extreme case where the marginal buyer takes out a 90% mortgage, repayable over a twenty-year term, on a house of average price. (In fact, as noted below, the average loan-to-value ratio for new mortgages this year is about 70%.) We calculated household income by dividing national disposable income by the number of households. Then we expressed the repayments as a percentage of household disposable income. It should be stressed that this is not the average repayment burden but represents the burden for the marginal purchaser. The result in Chart 6 shows that the repayment burden has remained broadly stable in Ireland for most of the last ten years. It is estimated to be almost 31% in 2005. Though Ireland experienced rapid house price inflation, mortgage interest rates declined from 5.5% in 2001 to 3.6% in 2004. In 2005, we expect house price inflation to have moderated to 7%. The repayment burden should change little this year since disposable income should rise by about 5%, interest rates have remained stable and house prices have not risen much more than incomes. A 1% rise in interest rates would raise the repayment burden by over 2 percentage points of disposable income. Thus, were EU interest rates to rise to 4%, the repayment burden in Ireland would be almost 35% of disposable income. This would be above the levels of the 1990s but would not appear, a priori, to be onerous.

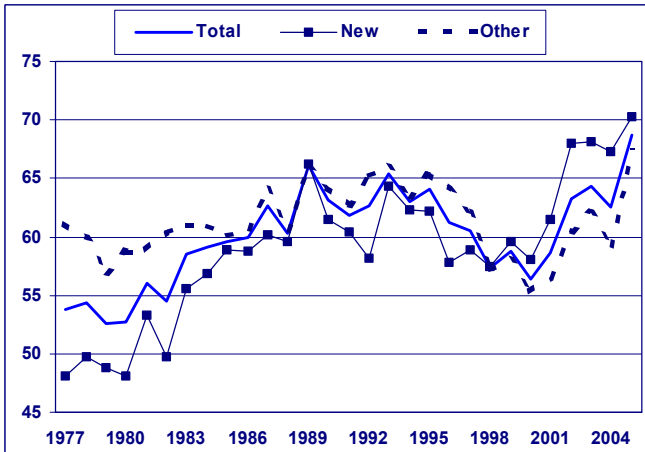
**Chart 6 - Repayments on a 90% Mortgage as a Percentage of Household Disposable Income**



### The Growth of Mortgage Debt in Ireland

The fact that mortgage credit accounted for over 80% of the growth in personal credit in the period since 2000 is

Chart 7 - Loan to Value Ratios on New Mortgages

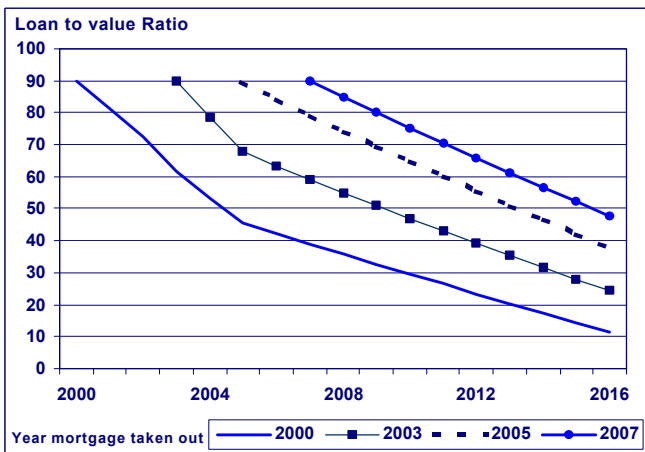


itself reassuring in that the debt is asset-backed rather than unsecured. Department of the Environment data on gross mortgage lending show that mortgage credit rose an estimated 22% per annum between 2000 and 2005. This was made up of a 7% annual rise in the number of loans and a 15% rise in average loan size. House prices rose by an average of 11% per annum over the same period. While this indicates that there was some rise in loan-to-value ratios, it was concentrated in the last two years and the loan-to-value ratio is now estimated to have reached 70% for new loans taken out in 2005. (Chart 7)

### Mortgage Debt to Value Declines Rapidly

While the loan to value ratio for the individual mortgage holder is high initially, it tends to decline rapidly as repayments are made, even if house price inflation is mild. As this stylized illustration shows, if we take the marginal 90% loan-to-value mortgage, based on the average house price prevailing, drawn down in each of the years 2000, 2003, 2005 and 2007 we can see from Chart 8 how the ratio declines, assuming it is a straight repayment mortgage over twenty years. In the case of a 90% mortgage taken out in 2000 it would have fallen to only 45% of the 2005 house price. A 90% mortgage taken out in 2003 would have fallen to 67% of the average house price in 2005. If we assume that house price inflation slows to 3% per annum from 2006 onwards and that interest rates rise by 1% in both 2006 and 2007 and then remain at that level, we can see that a 90% mortgage taken out in 2005 should fall to 69% of the value of the house in 2009 and a similar mortgage taken out in 2007, with interest rates 2% higher, should have fallen to 70% of the value of the house in 2011.

Chart 8 - Loan to Value Ratios on 90% Repayment Mortgages over time



Thus, even at the extreme assumption that all new mortgages are 90% of the house price, equity in the property builds up quickly, (debt declines) despite modest house price inflation of only 3% per annum and interest rates raised to 4% by the ECB. (We are assuming that a 4% refinancing rate would put mortgage rates at about 5.5%.)

## Conclusions

The continuing rise in the over 25 population provides a strong base for housing demand.

Rising immigration is key to sustaining the current pace of house completions.

Immigration seems likely to accelerate because of the freedom of access granted to citizens of the ten new EU countries. Recently, this appears to be running at 11,000 per month.

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