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Research Report: Irish economy

Beyond the housing shock

Why Ireland will grow faster than the euro area in the medium term

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Productivity to grow at trend rate of at least 2%

- Investment in the capital stock (i.e. excluding housing) has been heavy over the past decade.
- That investment will continue in order to bring Irish primary infrastructure up to European standards.
- Ireland has lighter business regulation, a more flexible labour market, a better educated young workforce and a smaller public sector than most European countries.

Demographics remain more favourable than anywhere else

- The population has been expanding faster in Ireland than anywhere else in the EU-27 over the past decade.
- We assume that net inward migration will slow and yet we project that Ireland's population will grow about 1.5% on average until 2011.
- But the labour force may grow faster than 1.5% because the female participation rate in the 25-54 age group is far below average and labour taxes are low.

Policy will assist Ireland in reaching its potential growth rate of 3.5-4% in 2009-2011 versus 2-2.25% in euro area

- We expect the housing market to bottom in H2 2008. After a year of below-trend growth of 2%, the economy may bounce back to growth of 3.5-4% as the housing drag fades.
- Fiscal policy will underpin demand. Ireland's debt to GDP ratio is 25% versus the EU-27 average of 61%. That provides scope to borrow for capital investment.
- Monetary policy will be supportive to the economy because Ireland will operate closer to its potential than will the euro area.

Disclosures

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Summary

- Ireland's potential growth rate is 3.5-4% until 2011, comprising trend productivity growth of at least 2% and labour force growth of 1.5%.
- Productivity increased 2.2% on average annually in 2001-2006.
- Trend productivity growth of at least 2% can be maintained due to:
 - the huge increase in the capital stock over the last decade;
 - consistent investment in education;
 - light regulation of business;
 - the flexibility of the Irish labour market; and
 - a relatively small public sector.
- Ireland is at or near the top of the European league table for capital expenditure; number of students with third-level education aged 25-34; lack of bureaucracy/red-tape; weak employment protection legislation and low public sector employment as a share of the total.
- Population growth has been faster in Ireland than anywhere else in Europe over the last decade due to healthy indigenous demographics and rapid immigration.
- Ireland's demographics will remain the most favourable in Europe despite our assumption that immigration will slow.
- The labour force will grow by at least 1.5% on average until 2011. It may expand at an even quicker rate as female labour force participation rates rise in the 25-54 age group. Ireland's participation rate in the 35-44 age group is the lowest in the former EU-15.
- Ireland's implicit tax on labour is 10 percentage points below the EU-27 average. That will continue to foster employment growth.
- Fiscal and monetary policy will aid the economy to reach its potential.
- Ireland's government finances are among the healthiest in Europe. Its debt/GDP ratio is 36 percentage points below the EU-27 average.
- The low debt/GDP ratio provides scope to borrow to invest heavily in infrastructure in the medium term. The government will meet its commitments under the National Development Plan to 2013.
- Monetary policy may support the economy if Ireland's lack of spare capacity justifies a higher equilibrium real interest rate beyond 2008.

Potential growth still higher in Ireland than in the euro area

Productivity growth trend of at least 2%

Productivity growth has remained strong in Ireland despite the shift of resources in recent years to more labour-intensive sectors such as house-building. As the economy becomes more balanced again in the next couple of years, we expect productivity performance to improve.

- Trend productivity in Ireland is at least 2% in the medium term

We maintain that trend productivity is at least 2% due to the combination of a large and rising capital stock (with particular emphasis on primary infrastructure); heavy investment in education over many years; light regulation and a flexible labour market; and a lower-than-average public sector employment share.

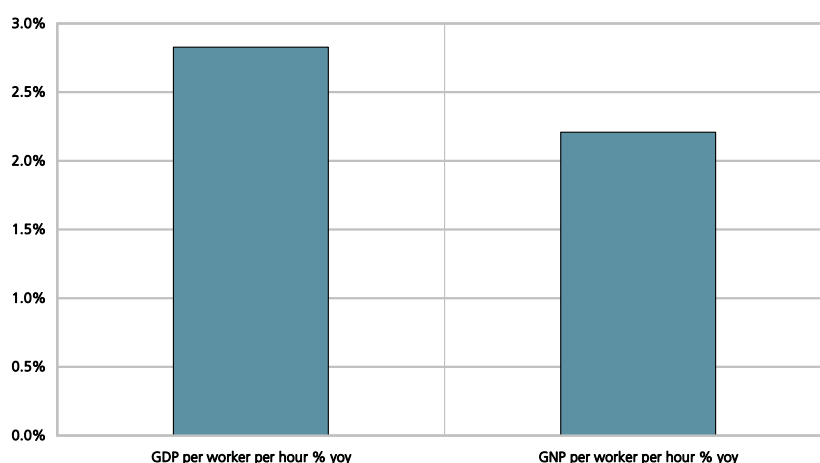
Potential GNP growth can be split into two components: the increase in productivity and the rise in the labour force. In this section, we focus on productivity. We will turn to demographic factors later.

Productivity increased by more than 2% per annum in 2001-2006

Irish productivity growth has remained healthy in the past five years even though the expansion was far more domestic, rather than export-led (as it had been in the second half of the 1990s). In 2001-2006, annual average growth in GNP per worker averaged 1.5%. But the average number of hours worked in Ireland actually fell from 38 hours per week in 2001 to 36.7 in 2006. So productivity, as measured more purely by GNP per man hour worked, rose at a much faster pace of 2.2%.

- GNP per man hour worked increased 2.2% per annum on average in 2001-2006

Figure 1: Ireland's productivity growth (2001-2006, annual average)



Source: Davy; CSO

We prefer to use GNP per worker rather than GDP per worker because GDP has overstated Irish output growth in recent years. GDP per man hour worked increased at an annual average pace of 2.8% in the five years to 2006. Our preference for GNP – which measures national

Reasons for productivity gains

- Increase in capital stock
- Investment in education
- Light regulation
- Flexibility of Irish labour market
- Small relative public sector share

income – over GDP – which measures national output – is primarily because value added (and therefore output) in a range of activities (such as chemicals to software to treasury services provided by banks) has been overstated due to transfer pricing and royalty payments.

Productivity has improved due to a number of factors:

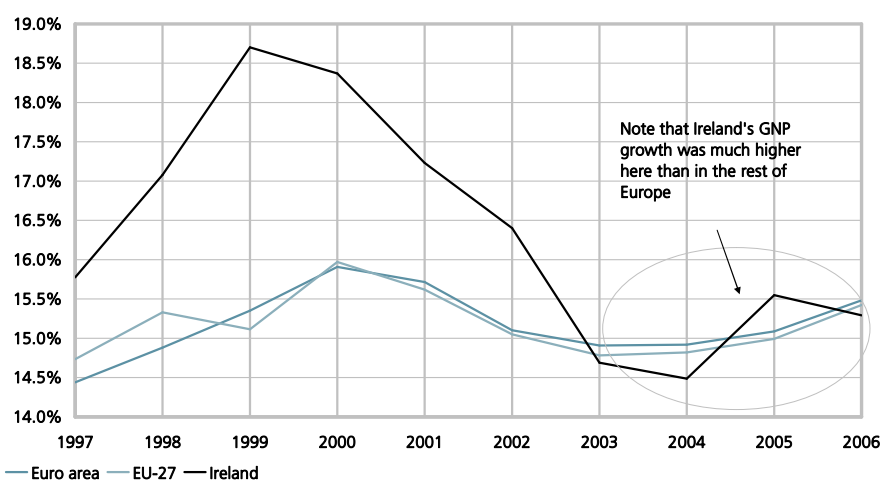
- the huge increase in the capital stock (ex-housing) over the last 15 years;
- consistent investment in education over the last 50 years;
- light regulation of business and the flexibility of the Irish labour market compared with Europe;
- the small public sector employment share in Ireland relative to Europe.

All of these factors will continue to support healthy Irish productivity growth in the medium term. We will discuss each in turn.

Capital stock set to grow strongly, driven by government plans

The ratio of investment (ex-housing) to GNP has been elevated in Ireland over the last decade (housing is excluded from the capital stock by international convention as it is not productive investment).

Figure 2: Investment (excluding housing) as % of GDP



Source: Eurostat; CSO

- Irish capital stock has been growing rapidly and faster than Europe in recent years

That ratio far exceeded the European average in the period 1997-2002 but has been very similar in recent years. However, note that growth in the capital stock has been much more rapid in Ireland in 2003-2006 than elsewhere in the euro area. The ratio of capital investment to GNP has been close to the average only because Irish GNP has been growing even faster than the capital stock, fuelled by strong consumer spending and a housing boom that ended in 2006.

Heavy investment in the capital stock partly reflects convergence as Ireland's primary infrastructure catches up with developed country norms. The government has committed to continuing this process over the next six years in its National Development Plan (NDP) 2007-2013 (we will return to the NDP in more detail in a later section dealing with

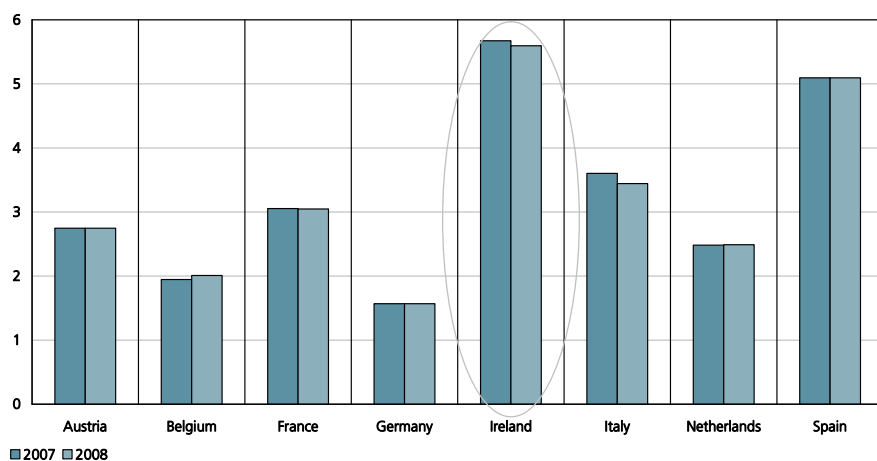
- Capital investment is underpinned by the National Development Plan until 2013

sources of demand growth in the medium term). That plan will invest more than €80bn over six years and keep the capital investment share of GNP above 5% in that period.

But the high ratio of non-residential investment to GNP has also reflected healthy private business outlays in an economy that is growing above trend.

The OECD expects Ireland's capital stock to grow much faster than in the rest of the euro area. It sees the Irish stock jumping by 5.6% in 2008 following 5.7% growth in 2007. That compares with growth in Germany, France, Italy and Spain of 1.6%, 3%, 3.4% and 5.1% respectively in 2008.

Figure 3: Forecast growth in capital stock (% change yoy, smooth value, total economy excluding housing)



Source: OECD

Previous strong capital investment and future plans will benefit productivity growth. Infrastructure investment is particularly needed to clear transport bottlenecks. That will aid our manufacturing sector and possibly lead to an increase in aggregate working hours. In addition, although broadband roll-out is well behind the European average, it is catching up fast. That will help boost productivity in the private services sector.

Broadband and R&D lower than the average, but the gap is closing fast

Broadband penetration and research and development (R&D) are two specific areas where Ireland has significant scope for improvement. We lag behind the EU-27 average for both but are catching up fast. Further strong investment in each area will benefit productivity, particularly in the future growth area of traded services.

- Irish broadband penetration doubled year-on-year in 2007

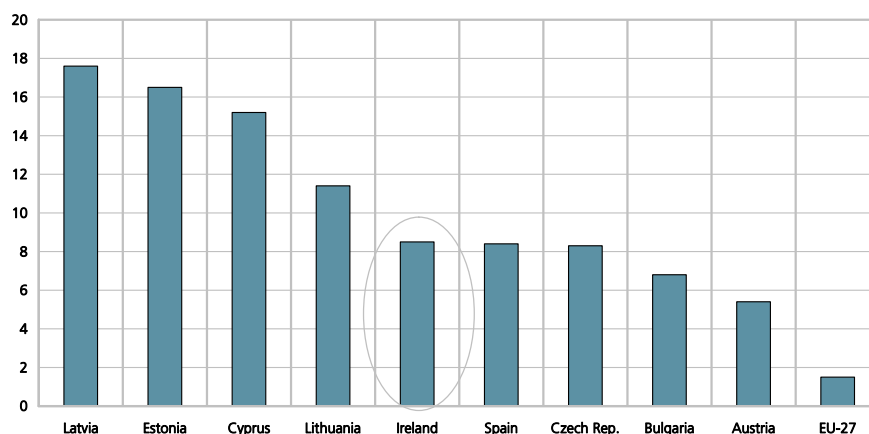
Broadband penetration was 31% in Ireland in 2007, according to the latest statistics produced by Eurostat. That hides huge progress from 2006, when penetration was a pitifully low 13%. That one-year, 18 percentage point (pp) gain was the biggest improvement made by any

EU-27 country. We nonetheless ranked well down the list at 17th out of the EU-27. We expect the gap with the best to be closed further in 2008 – eight EU-27 countries boast penetration rates of 50% or above.

Many rural areas are now having their cables upgraded for broadband access, and competition among private providers is strong. However, it is worth bearing in mind that Ireland's low population density distorts the figures somewhat in comparison to European countries with higher population density such as the Netherlands and Denmark (74% and 70% broadband penetration respectively).

Ireland still earmarks too little for R&D. The share of Ireland's GNP spend of R&D was 1.49% in 2005. That was some way below the EU-15 average of 1.91% and the EU-27 average of 1.84%.

Figure 4: R&D expenditure (% change yoy, annual average 2001-2005)



Source: Eurostat

- R&D spending as a percentage of GNP is rising; Ireland is gradually moving up the European league table

Yet that share has jumped over the last five years. In 2001-2005, Ireland's expenditure on R&D rose at an average annual rate of 8.5%. Only Cyprus, Estonia, Latvia and Lithuania boasted faster growth in investment on R&D. The government has prioritised this issue, although one concern is that the number of female graduates aged 20-29 from science disciplines has fallen slightly in recent years (the number of male graduates has held up well). Notwithstanding that caveat, Ireland ranks favourably in a European context. As long as the ratio of R&D to GNP keeps rising, it bodes well for productivity growth in the future.

Education an investment in future productivity

Over the last 50 years, successive Irish governments have put heavy investment into education. Even during the cutbacks of the 1980s, spending on education was prioritised.

Expenditure on education has accelerated in recent years on a per capita basis, even though the population has been growing rapidly. Real non-capital per-capita public expenditure on first-level education rose 36% in

- Real per capita spending on first and second-level education jumped 30%+ in 2000-2005

- Ireland ranks fourth in the EU-27 for the proportion of 25- to 34-year-olds with third-level education

- Ireland is the third most liberal economy in the world

2000-2005. The equivalent growth rate for second-level was 31%. But spending on third-level did not match that pace, rising only 3%.

Lowish growth in per capita spending on third-level education must be placed in the context of the jump in student numbers over that period. Numbers at third level rose 18,000, or 16%, to 133,691 in 2000-2005. In 2006, they increased another 3,000. In contrast, first-level numbers rose only slightly in those five years, while second-level numbers actually fell – reflecting demographic trends. The sharp rise in third-level numbers is a function of strong growth in incomes over the last decade, the abolition of fees and the bulge in the population aged 18-34.

Rapid growth in numbers and government spending at third-level has substantially increased the human capital of the Irish population. In 1999, only 27.1% of the population aged 25-34 had attained third level; by 2006, that share had jumped to 40.4%. It meant that Ireland rocketed up the European league table to fourth place in 2006. Only France (40.4%), Belgium (40.5%) and Cyprus (43.8%) had a higher proportion of 25- to 34-year-olds with third-level education. The EU-27 average was 28.6%. Furthermore, Ireland ranks seventh of the EU-27 in terms of PhDs awarded per 1,000 of the population aged 25-34.

Lack of bureaucracy/excessive regulation helps sustain productivity

Ireland ranks very well in tables that rank the ease of doing businesses across countries. Excessive bureaucracy and red-tape are not an issue; property rights are well protected; corruption is not a problem; the financial sector is liberal; and government is small. Crucially, the labour market is flexible.

The US Heritage Foundation's index of economic freedom ranks 165 countries across ten categories to produce an overall score for economic freedom. The ten categories are business freedom, trade freedom, fiscal freedom, government size, monetary freedom, investment freedom, financial freedom, property rights, freedom from corruption and labour freedom.

Table 1: Index of economic freedom rankings (165 countries assessed)

	2008	2007	2006
Hong Kong	1	1	1
Singapore	2	2	2
Ireland	3	3	3
Australia	4	4	7
US	5	6	5
New Zealand	6	5	4
Canada	7	10	10
Chile	8	8	8
Switzerland	9	9	9
UK	10	7	6

Source: Heritage Foundation

Ireland's overall score of 82.4 in 2008 is enough to put the economy third overall, behind Hong Kong and Singapore and ahead of fourth-placed Australia and fifth-placed US. Ireland has ranked third for three

straight years now, having moved up a notch from fourth position in 2005.

Ireland has one of the most flexible labour markets in the OECD

Ireland's labour market stands out as one of the most flexible in the OECD. It ranks well both in terms of permanent and temporary contracts. Labour market flexibility is an important factor that boosts productivity growth and increases the incentive for companies to raise employment.

Table 2: Strictness of dismissal legislation (highest score = strictest)

	2003
Portugal	4.17
Czech Republic	3.31
Netherlands	3.05
Sweden	2.86
Germany	2.68
Spain	2.61
Turkey	2.56
France	2.47
Japan	2.44
Greece	2.41
Austria	2.37
Korea	2.37
Slovak Republic	2.30
Mexico	2.25
Norway	2.25
Poland	2.23
Finland	2.17
Hungary	1.92
Italy	1.77
Belgium	1.73
New Zealand	1.70
Ireland	1.60
Australia	1.50
Denmark	1.47
Switzerland	1.16
United Kingdom	1.12
Canada	1.00
United States	0.17

Source: OECD

The latest OECD data pertain to 2003. With regard to regular employment protection legislation, Ireland consistently ranked in the top-ten most flexible and least-protected labour markets. Ireland ranked seventh from bottom for overall strictness of protection against dismissal (i.e. it is relatively easy to dismiss workers in Ireland, see Table 2), fourth-best for notice (i.e. not much required) and severance pay (low), although only marginally better than average for the number of regular procedural inconveniences.

Looking at temporary employment protection legislation, Ireland fared even better compared with other countries. But there had been a slight tightening of legislation compared with 1998. The state imposed no restrictions at all on fixed-term contracts in Ireland ten years ago. But, by 2003, some legislation on these contracts had been introduced. Nonetheless, Ireland was sixth least-restrictive for temporary contract regulation overall out of 28 OECD countries. It was also one of the joint-best economies for allowing temporary work agencies to operate in 2003.

Low public sector employment share vis-à-vis EU is positive for relative productivity gains in Irish economy

Productivity growth tends to be lower in the public sector than in the private sector. That is largely due to the lower use of technological input. Further, a bloated public sector can spawn increased red tape and regulation that limit productivity gains in the private sector.

Ireland's share of employment in the public sector is low in an EU context. It is particularly low when compared with the larger "core" European economies such as France and Germany.

Comparable data on public sector employment are difficult to obtain, but there are official International Labour Organisation (ILO) figures for 17 of the EU-27 countries. The data pertain to the share of public administration, education and health employment as a percentage of the total. It is not a perfectly pure public sector share as (i) health includes the private health sector and (ii) state- or semi-state-owned enterprises in industry will not be captured. For example, large government ownership stakes in industry understate the size of France's public sector share in Table 3.

• Ireland's public sector employment share is well below average in a European context

Ireland's share was 21.2% in 2005, well below the average of 22.9%. Moreover, the only countries below Ireland in the table were EU-accession states, with the exception of Spain and Portugal.

Ireland's GNP per capita at purchasing power parity is now the fifth highest (equal with Sweden) in the EU-27 but has not led to a huge public sector share of the economy in a European context. Its public sector share of employment has risen in recent years but from a favourable base. At the other end of the scale are Sweden (with its large welfare state), the Netherlands, the UK and Finland. Public sector employment figures for France and Germany are understated since they ignore their higher-than-average proportion of state- or semi-state-owned heavy industry, especially in power generation.

Table 3: Public sector employment (% of total employment)*

	2000	2001	2002	2003	2004	2005
Romania	13.6	13.9	15.1	14.8	14.9	14.8
Spain	17.0	17.0	17.4	17.6	17.6	18.0
Slovenia	17.4	17.2	17.6	17.7	17.9	19.1
Portugal	17.1	17.3	17.3	17.9	18.6	19.3
Czech Republic	19.6	19.9	19.6	19.5	19.6	20.0
Poland	19.2	18.8	19.8	20.7	20.3	20.3
Ireland	18.8	19.1	20.5	21.1	21.0	21.2
Estonia	19.4	20.6	21.0	21.9	22.3	21.4
Latvia	21.9	21.4	21.8	20.4	20.6	22.3
Lithuania	24.1	24.5	22.7	21.8	22.4	22.6
<i>Average</i>	<i>21.5</i>	<i>21.7</i>	<i>22.2</i>	<i>22.4</i>	<i>22.6</i>	<i>22.9</i>
France	24.5	24.3	24.4	24.6	24.6	24.5
Germany	23.8	24.1	24.4	25.0	25.2	25.0
Finland	26.5	26.8	27.0	27.3	27.7	27.5
United Kingdom	N/A	N/A	26.2	26.9	27.9	28.4
Netherlands	25.8	27.4	28.0	28.4	28.4	29.1
Sweden	31.8	31.9	32.5	33.1	33.3	33.3
Slovakia	23.3	23.1	22.0	22.3	21.8	N/A

Source: ILO

*Comparable data for only 17 EU countries

Irish demographics healthier than anywhere else

Ireland's population has mushroomed in the past decade, spurring rapid labour force growth. As a result, Ireland's potential growth rate has far exceeded the European average. In the decade to 2007, the Irish population surged almost 20% from 3.66m to 4.34m.

Ireland has had the fastest-growing population in Europe over the last decade

In the old EU-15, Ireland's population has been growing faster than every other country for virtually all of that period (Spain's population growth exceeded that of Ireland in 2003 by 0.1pp). In 2006, Ireland's population increased 2.5%. Only two other EU-15 countries saw population growth of 1% or more: Spain (1.5%) and Luxembourg (1%). On average, population growth in the EU-15 was a meagre 0.5%. Germany's population shrunk (see Table 4).

- Ireland's favourable demographics have been spurred by a later baby boom than the rest of Europe and rapid immigration

- Ireland's labour force will be the second-fastest in terms of growth in the old EU-15 this year

There are two reasons for Ireland's favourable demographics:

- Ireland's baby boom came much later than in the rest of Europe – in 1973-1982 – culminating in a peak year for births at 74,388 in 1980.
- Immigration has been rapid since 2000, especially in 2005-2007. Net migration contributed 1.7pp of 2.4% growth in the population in 2006 and 1.6pp of 2.5% growth in 2007. Not only that, but immigration has been concentrated in the crucial 25-44 age group.

That is the past, but what about the future? The OECD projects that Ireland's labour force will grow faster than the rest of the EU-15 (with the exception of Spain) again this year (note that population growth is the primary driver of labour force growth). Most other EU countries lag well behind (see Table 4).

Table 4: Population (% change yoy)

	2002	2003	2004	2005	2006
Ireland	1.8	1.6	1.6	2.1	2.5
Spain	1.5	1.7	1.6	1.7	1.5
Luxembourg	1.1	0.9	0.7	0.4	1.0
Belgium	0.4	0.4	0.4	0.6	0.7
United Kingdom	0.4	0.4	0.5	0.6	0.6
Austria	-0.6	0.4	0.7	0.7	0.6
France	0.7	0.7	0.6	0.6	0.6
Sweden	0.3	0.4	0.4	0.4	0.6
<i>EU-15</i>	<i>0.5</i>	<i>0.5</i>	<i>0.5</i>	<i>0.6</i>	<i>0.5</i>
Italy	0.2	0.0	0.1	1.0	0.5
<i>Euro area</i>	<i>0.5</i>	<i>0.5</i>	<i>0.5</i>	<i>0.6</i>	<i>0.5</i>
Greece	0.3	0.3	0.3	0.4	0.4
Finland	0.3	0.2	0.3	0.3	0.4
Denmark	0.3	0.2	0.3	0.3	0.3
Portugal	0.7	0.7	0.6	0.5	0.2
Netherlands	0.6	0.5	0.4	0.2	0.2
Germany	0.2	0.1	0.0	0.0	-0.1

Source: OECD

- We project population growth between 1.2% and 1.9% until 2012

Population projection suggests slower growth but enough to keep Ireland top of the European league table

But we have done more detailed forecasts out to 2012. The salient conclusions are as follows:

- Indigenous (Irish-national) population growth in the key labour force cohort of 15-64 will be healthy but not as strong as in recent years.
- Immigration is the crucial variable. Those who project potential growth in Ireland of 5% or more in the medium term assume that immigration will continue at the pace of recent years. However, we see net inward migration declining steadily in the next few years before settling somewhat above its late-1990s pace.
- As a result of our demographic projections and assertion that trend productivity growth will be sustained at around 2%, we think potential growth in Ireland is 3.5-4% until 2012.

Our forecasts see population growth of 1.9% in the year to April 2008 (the population year runs from April to April in Ireland), slowing to 1.5% in 2009. Then population growth averages 1.2% until 2012. That means Ireland is likely to have the fastest-growing population in Europe. Spain is the only potential challenger.

To get to those bottom-line figures, we had to make assumptions about the wild card: net migration (the difference between immigration and emigration). Yet the rest of the forecast is relatively straightforward. We have a reasonably good idea of the likely trend in births and deaths, and we know the age structure of the indigenous population.

Table 5: Population projections (000s, 12 months to April of each year)

	<i>Natural increase</i>	<i>Net migration</i>	<i>Population</i>	<i>% chg yoy</i>
2008F	38	45	4422	1.9
2009F	38	30	4490	1.5
2010F	38	20	4548	1.3
2011F	36	20	4604	1.2
2012F	36	20	4660	1.2

Source: Davy

- The natural increase – the excess of births over deaths – matters more for housing than it does for labour force growth

For the Irish economy's short-term path, the trend in births and deaths is not as important as the immigration question. Yes, the natural population increase from births and deaths has an impact in terms of household formation and therefore housing demand. But births and deaths are at the extremes of the age spectrum and have no effect on labour force growth.

We expect immigration to slow in the next few years from 109,500 in 2007 to 90,000 in 2008. Immigration may ease somewhat to 80,000 in 2009 and to 70,000 thereafter before levelling off. That would still be a rapid rate of immigration and much higher than the experience of 2000-2004.

• Immigration will not be sustained at the current pace partly because the housing boom is over

• Net inward migration will slip from 67,300 in 2007 to 45,000 in 2008 before settling at 20,000 in 2010-2012

• How population growth translates into labour force growth is what really matters for the economy – the news here is still promising

We think that kind of rate can be maintained because:

- Ireland's GNP per capita is now fifth in the EU-27 league table.
- We are one of only three countries to fully liberalise our labour market.
- Learning English remains a big attraction.

One salient reason that we do not think immigration can be maintained at the torrid 2006-2007 pace is that Ireland's housing boom is over. We are likely to build only half as many houses in the medium term as we did at the peak. That reduces the demand for well-paid construction labour (15% of construction sector employment is made up of non-Irish nationals).

Emigration has already begun to rise more quickly (as immigrants return home), although, following another acceleration in 2008, we expect that rate to be maintained in 2009 and 2010 before a slight drop (associated partly with slower immigration in preceding years) in 2011 and 2012.

Due to that rise in emigration and a fall in immigration, we expect the net migration figure to slip from 67,300 in 2007 to 45,000 in 2008. It may gradually trend lower to settle at 20,000 in 2010-2012 (see Table 5).

Even if immigration dries up, the labour force will grow robustly

It is crucial to the economy how that population growth translates into labour force growth. Let us assume the worst-case scenario where net migration falls to zero. What happens to labour force growth then?

Table 6 shows recent growth in the population split into key age cohorts, excluding net migration. We focus on the 15-64 age group, yet it is important to mention that the labour force constitutes those available for work aged 15 and over and there are 35,000 people aged 65+ in the labour force. But numbers in this group have not moved much and do not have a big impact on growth (although a case could be made that this may change in the longer term as people delay retirement).

Table 6: Population (% change yoy, excluding net inward migration)

	10-14	15-24	25-44	46-64	15-64
2003	-3.6	-0.5	0.7	2.4	0.9
2004	-2.9	-1.4	0.9	2.2	0.8
2005	-2.8	-1.9	1.1	2.3	0.8
2006	-4.2	-1.5	1.0	2.0	0.8
2007	-3.3	-2.9	1.2	2.4	0.7

Source: CSO; Davy

In the table above, we disaggregate the population aged 15-64 – ex-net inward migration – into its four key constituent parts¹. It is clear that the trends are not that favourable in the two groups at the entry point of

¹ The ratios can be categorised as a reliable estimate of indigenous population growth in these vital age cohorts. Note that net migration for Irish nationals may not be exactly zero, but in the indigenous population emigrants have largely matched immigrants in recent years.

the labour force: 10-14 and 15-24. The potential labour force is those persons aged 15 and upwards, but most people enter at 15 (after the Junior Certificate), 18 (after second level) or 22-24 (after third level).

The first gateway point to the labour force is for those who leave school very early, i.e. at 15. The numbers in this category are low and fortunately heading lower as the number of early school leavers decline. Nonetheless, it is worth looking at the 10-14 age cohort – the pipeline for the 15-24 age group. Here, the population has been declining by at least 3% per annum in recent years.

The trend in the 15-24 age group is much more important. In that cohort, the population excluding net migration has also been declining but at a slower pace. It decreased 2.9% in 2007. However, that slippage was concentrated more in the younger than older part of that age group.

• Indigenous population growth in the 25-64 age group remains robust

Indigenous population growth has been skewed towards the 25-44 and particularly the 45-64 group. Last year, the 25-44 cohort rose 1.2%, while the 45-64 year-olds expanded at twice that rate. Crucially, the indigenous population aged 15-64 grew 0.7% overall last year, close to the pace seen in recent years.

We estimated that growth in the indigenous population of labour force age, i.e. the 15-64 age cohort ex-net inward migration, will remain steady at about 0.6% until 2011 (concentrated in the 25-64 group) before decelerating to 0.4% in 2012.

We add in our forecasts for immigration from the previous section (Table 5) to come up with a projection for the population aged 15-64 until 2012. We assume that the proportion of net migration in the 15-64 group as a percentage of total net migration remains constant at the 2007 ratio. The results are presented in the table below.

Table 7: Projected population 15-64 age group (% change yoy)

	<i>Indigenous</i>	<i>Net migration</i>	<i>Total</i>
2008	0.6	1.3	1.9
2009	0.6	0.9	1.5
2010	0.6	0.6	1.2
2011	0.6	0.6	1.2
2012	0.4	0.5	0.9

Source: Davy

• The labour force has the potential to grow by 1%+ until 2011 without acknowledging the possible boost from rising participation rates

The results do not differ too much from our overall population projections and imply that the labour force has the potential to grow 1%+ until 2011. Moreover, these projections may understate the true potential for the labour force to grow. Note that the labour force has been growing a lot faster than the overall population in recent years. The gap is explained by increased labour force participation from the existing population, particularly older females.

Female labour force participation rates in the 25-54 age group have scope to catch up with the rest of Europe

There is significant potential for a further increase in overall labour force participation via an increase in prime-aged female participation rates. Ireland's female participation shows up pretty well on a relative basis in the younger (20-24) and older sections (55+) of the labour force. But there is a glaring disparity in the 25-54 age group, particularly among 35-44 year-olds.

- Ireland's female participation rate among 35-44 year-olds is the lowest in the old EU-15

Ireland's female labour force participation in the 35-44 group was the lowest in the old EU-15 at 66.7% in 2006. The equivalent rate in the 25-34 group was fifth lowest and was fourth-lowest in the 45-54 cohort.

Table 8: Labour force female participation rates (% of population aged 35-44)

	2000	2001	2002	2003	2004	2005	2006
Sweden	87.8	88.0	87.8	87.3	87.3	88.7	87.7
Finland	87.8	87.4	87.6	87.2	86.3	86.4	86.7
Denmark	88.9	86.7	86.5	85.1	86.9	87.0	86.6
Portugal	79.9	79.8	79.5	81.5	82.8	82.9	84.7
Austria	78.9	79.5	81.5	82.1	82.1	82.5	83.8
France	79.9	80.4	80.5	82.2	82.5	82.1	82.9
Germany	79.1	79.5	80.1	81.2	81.4	81.2	82.2
Belgium	76.5	73.5	75.2	76.8	77.0	80.4	81.1
Netherlands	74.0	75.7	75.7	76.3	77.3	78.6	79.1
United Kingdom	77.3	78.0	77.8	77.7	77.5	77.4	77.8
European Union 15	74.3	74.5	75.0	76.0	76.8	77.0	77.8
Luxembourg	64.0	65.9	67.1	67.0	70.8	72.9	...
Greece	65.0	64.4	65.9	67.8	71.7	72.2	72.2
Spain	64.0	61.9	64.0	66.8	68.8	69.3	71.7
Italy	61.7	62.8	63.2	63.6	66.5	66.6	67.1
Ireland	63.1	65.0	65.7	66.5	65.9	66.5	66.7

Source: OECD

The explanation is clear: 23.1% of women aged 25-54 opted out of the labour force in Ireland due to family responsibilities in 2006. Only in Malta was the inactivity rate for females higher. This figure compares with the EU-27 average of 10.2%. The contrast with Scandinavia could not be more acute. In Sweden, only 2.1% of 25-54 year-old females are inactive. This figure is 2.3% in Denmark and 6.2% in Finland.

- Participation rate among 35-44 year-olds may rise as a result of falling childcare costs, women's superior educational qualifications and changing cultural norms

Low female activity in Ireland is concentrated largely in the 35-44 age group. Ireland's population bulges in that cohort, and we know that strong growth in numbers aged 35-44 will continue for at least the next five years due to the demographic structure alluded to earlier. In short, the Irish labour force would get a big bang for its buck from a rise in activity rates in the 35-44 group.

Three factors may raise the participation rate of females in this group:

- Childcare costs will fall as more crèches are built by private operators. Increased government subsidies are likely in this area.

- Females are increasingly achieving better grades than males in second and third-level education. The opportunity cost of working at home is therefore much higher than before.
- Cultural norms are gradually changing in Ireland, making it more likely that females will choose to continue their careers rather than working at home as full-time mothers.

As the female participation rate rises in prime age-groups, the labour force may continue to grow faster than the population of working age.

Implicit tax on labour is low, encouraging employment growth

Our baseline forecasts for labour force growth (in line with population projections in Table 7) may prove conservative due to the potential for higher labour force participation. Another factor – the low implicit tax on labour in Ireland – encourages labour force participation and employers' incentive to convert labour force potential into employment.

Low personal income tax rates and employee social security contributions (SSC) encourage increased labour force participation. Low employers' SSC and payroll taxes raise the incentive to hire workers. Low personal income tax rates may also help to increase productivity.

- Ireland's overall tax on labour is well below average in the EU-27 and has scope to fall further

Ireland's overall low implicit tax on labour² (ITR) ranks favourably in an EU context. In 2005, Ireland's ITR was 25.6% or 30.0% of GNP. That compared with an EU-27 average of 35.2% and a euro-area average of 36.8%. Moreover, Ireland's ITR fell 4.1pp in 1995-2005. Only Estonia and Slovakia experienced bigger falls in their ITR over that period.

Table 9: Implicit tax on labour (% of GDP)

	1995	2000	2005
United Kingdom	25.8	25.3	25.5
Ireland GDP	29.7	28.5	25.6
Luxembourg	29.3	29.9	29.5
Portugal	28.1	27.0	29.5*
Ireland GNP	33.6	33.5	30.0
Spain	28.9	28.1	30.1
Netherlands	34.4	34.3	30.7
<i>European Union 27</i>	<i>N/A</i>	<i>N/A</i>	<i>35.2</i>
<i>Euro area 13</i>	<i>36.0</i>	<i>36.8</i>	<i>36.8</i>
Denmark	40.1	40.9	37.3
Greece	34.1	38.2	38.0
Germany	39.4	40.7	38.7
Austria	38.7	40.2	40.9
Finland	44.3	44.1	42.0
France	41.2	42.1	42.1
Belgium	43.8	43.9	42.8
Italy	37.8	43.2	43.1
Sweden	48.4	49.2	46.4

Source: European Commission

² The implicit tax on labour is total labour tax (personal income tax, employees' SSC and employers' SSC and payroll taxes) as a % of GDP; we also use GNP comparisons for Ireland given that GNP is the better measure of Irish income.

One caveat is that pensions arrangements are somewhat different in Europe compared with Ireland. In continental Europe, most pension contributions are made through SSCs rather than to private pensions schemes. That may exaggerate the extent of the difference in the ITR between Ireland and the rest of the EU-27.

Nonetheless, the aggregated ITR masks two points that are favourable for Ireland's medium-term potential growth:

- Ireland's SSCs are the second-lowest in the EU-27 after Denmark and equal with the UK.
- Ireland's personal income tax rates are still slightly above average. That is partly due to progressivity (caused by higher-than-average inflation and strong real per capita GNP growth). Ireland's demographic structure and low dependency rate mean that it has scope for further income tax cuts in the next few years.

Government's strong fiscal position is the insurance policy

Ireland's fiscal position is the envy of Europe. Its government debt to GDP ratio³ is the lowest in the euro area after Luxembourg (see Table 10). That ratio of 25% compares with a euro area average of 69% and an EU-27 average of 61% (data are for 2006, comparable 2007 data are not yet available). Yet that figure is not even a true reflection. Stripping out the National Pensions Reserve Fund (to meet the future pensions needs of public servants), valued at €18.9bn (end-2006), Ireland's debt to GDP ratio slipped to 14%.

There is a wide disparity across Europe. Italy, which has an aging population, is already in trouble: its ratio was a whopping 107% in 2006. Austria, Belgium, Cyprus, France, Germany, Greece, Hungary, Malta and Portugal all exceed the EU-deficit limit of 60% of GDP.

The upshot is that Ireland can run budget deficits for a number of years to meet its heavy infrastructure needs as long as it does not breach the 3% annual deficit limit. Not many other countries have the same luxury.

Despite a slowdown in tax revenue, the Irish budget deficit will remain well within Maastricht limits in 2008 and 2009. We reckon that the general government will record a deficit of about 1.5% of GNP this year, well below the EU limit of 3%. In 2009, the deficit may shrink somewhat as the economy picks up. If the economy reverts to trend growth in 2009 and beyond, as we expect, deficits are not going to be an issue. The government will be able to meet its investment targets without a worry.

³ Note that general government debt/GDP is the standard measure across the EU under the Maastricht treaty. GDP is a better measure of the public finance position than GNP in Ireland because multinational companies, which inflate GDP above GNP, contribute healthily to corporation tax.

Table 10: General govt. debt % GDP

Estonia	4
Luxembourg	7
Latvia	11
Romania	12
Lithuania	18
Bulgaria	23
Ireland	25
Slovenia	27
Slovakia	30
Denmark	30
Czech Rep.	30
Finland	39
Spain	40
United Kingdom	43
Sweden	47
Poland	48
Netherlands	48
<i>European Union 27</i>	<i>61</i>
Austria	62
France	64
Portugal	65
Malta	65
Cyprus	65
Hungary	66
Germany	68
<i>Euro area 13</i>	<i>69</i>
Belgium	88
Greece	95
Italy	107

Source: Eurostat

National Development Plan 2007-2013 provides important demand boost for the economy

The government has specific capital investment plans that will bring Irish primary infrastructure up to European standards. That will provide a crucial demand stimulus to the economy and help to sustain employment in the construction sector. Better quality infrastructure will also relieve bottlenecks and help to boost productivity.

Specifically, the National Development Plan (NDP) 2007-2013 commits almost €80bn (as much as 46% of forecast 2008 GNP) to capital spending over that period. See our note "[National Development Plan 2007-2013](#)", released January 23rd 2007 for more detail of where the spending is going.

- Central government's capital spending will reach 5.6% of GNP this year, up 16% yoy

The latest figures under the multi-annual capital investment framework were released on February 21st. They showed that the state's capital investment will hit 5.6% of GNP in 2008. That rises to 5.8% in 2009. Spending is set to jump 16.1% yoy in 2008, followed by 10%+ increases in 2009 and 2010 (see Table 11).

	2007	2008	2009	2010	2011	2012
Total envelope	8084	9388	10361	11398	11954	13467
% change		16.1	10.4	10.0	4.9	12.7
GNP	161633	168180	178211	N/A	N/A	N/A
% of GNP	5.0	5.6	5.8	N/A	N/A	N/A

Source: Department of Finance

Table 11 actually underestimates total capital spending by all branches of government or semi-state companies. The total Public Capital Programme (PCP) will hit €13.6bn in 2008 – a massive 8% of GNP. The extra outlay on top of the multi-annual framework includes investment spending financed internally by local authorities (e.g. on regional roads and housing) and by semi-state companies such as the Electricity Supply Board (ESB) and Bord Gais (the gas company).

Monetary policy to remain accommodative if the Irish economy remains at or above potential

Inappropriate monetary policy was the most important demand-side driver of Ireland's investment boom in 2003-2007. Interest rates were far lower than they would have been had our Central Bank been in control of them rather than the European Central Bank in Frankfurt. Higher potential growth in Ireland justified much tighter monetary policy than what was actually experienced.

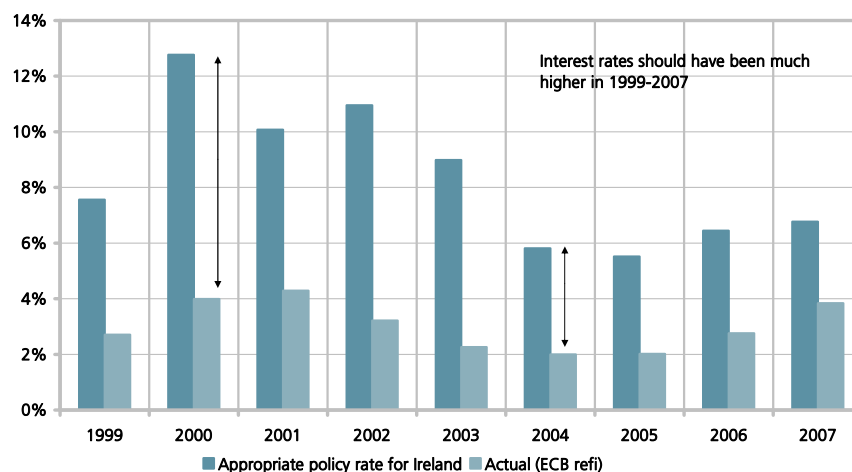
We noted this phenomenon three years ago and warned that it could lead to "a more severe correction in the housing market when rates finally begin their ascent" (see our research note: "[Ireland's interest rate should be 6%](#), January 24th 2005).

- Interest rates were inappropriately low for a long time

The easiest way to prove this point is to again invoke the Taylor rule. We repeat the exercise we conducted three years ago. But this time, we

look at where rates should have been in Ireland versus where they actually stood in *each year* back to the euro launch in 1999. Instead of expected inflation, we substitute actual inflation, along the lines of the original Taylor rule, which was used to explain policy decisions retrospectively. We use actual HICP inflation, OECD output gap data and assume that the Irish HICP inflation target would be 2%.

Figure 5: Taylor rule estimates versus actual ECB refi rate (1999-2007)



Source: Davy

In Figure 5, it is clear that money was very cheap in Ireland over the last nine years. But will interest rates remain stimulative in the future?

- Neutral policy rate for Ireland is around 5%

We reckon that an appropriate overnight interest rate for Ireland is about 5% if the economy grows in line with trend. The equilibrium real interest rate should be higher in Ireland (we assume it is 3%) than in the rest of the euro area (2%) if we start from a position where there is no spare capacity in Ireland or if the economy is at or above potential compared with an output gap (spare capacity) in the euro area.

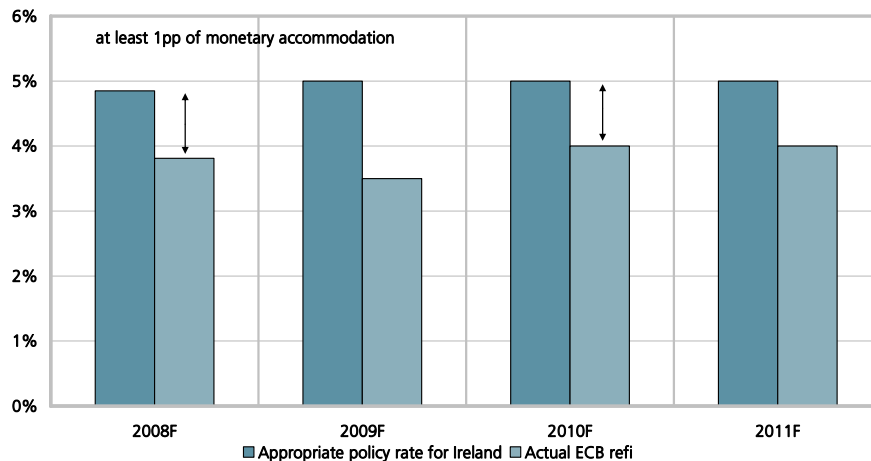
By end-2008, the Irish economy will be bang in line with potential, i.e. the output gap will be zero (we think the economy will grow 1-1.25% below trend in 2008, and the economy was 1.1% above potential in 2007 according to the OECD). Inflation will also be back to 2% – in line with target. In contrast, the euro area had an output gap of -0.4% in 2007 i.e. it was 0.4% below potential and this year it will expand at a rate of more than 0.5% *below* trend. That means the output gap in the euro area will be -1% by year-end compared with an Irish economy in line with potential. As a result, interest rates should be 1 percentage point higher in Ireland than in the rest of the euro area.

A neutral policy rate for the rest of the euro area is somewhere around 4%: the ECB estimates real potential growth at 2-2.25% and the inflation target is "close to, but below, 2%". Over the next year to 18 months, the ECB refi rate may dip below 4%. After that, our baseline assumption is that the refi rate hovers around neutral, i.e. 4%.

- Monetary policy will remain favourable for Ireland as long as the economy is in line with or exceeds its potential compared with a euro area economy that is short of its potential

The bottom line is that monetary policy will be favourable to Ireland as long as the economy is at, or above, potential whereas the euro area is short of its potential, as is the case at present (see Figure 6).

Figure 6: Taylor rule estimates versus actual ECB refi rate (2008-2011, projected)



Source: Davy

- Low real interest rates may boost productive investment and spur above-trend growth in the medium term

Real interest rates may stay higher than they were in 1999-2007, but at least one percentage point lower than they would be if we had control of the policy lever. We foresee a number of possible consequences:

- The low discount will help sustain productive investment. In particular, the government will get a higher real return from its infrastructure programme. Commercial building investment may also benefit once the banking crisis passes.
- As a result, growth may actually revert to an above-trend rate for a time without quite reaching the heights of 2003-2007.
- If the economy exceeds its potential again and capacity is constrained, inflation may pick up once more in 2010-2011. But it will not be as much of an issue as in 2000-2003 and 2006-2007.

- We do not expect a return to 2003-2007 growth rates as the housing boom is over

However, we do not expect growth well above potential as another housing boom is highly unlikely for three reasons. First, credit is likely to be less freely available as the re-appraisal of risk continues. Second, the housing stock has caught up with the European average. Third, tax breaks are no longer there to provide a double-boost to investors.

- The downside of lax monetary policy in 2003-2007 was a loss of competitiveness: that may limit the economy's potential to grow above trend

One other factor may impinge Ireland's ability to grow above trend. Exports are still of vital importance to the economy's future development. Unfortunately, lax monetary policy has a downside. Our consumer price level is now the highest in the euro area, and absolute wage levels have caught up with the European average. The loss of competitiveness from the period of ultra-cheap money in 2003-2007 may drag on exports for an extended period.

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