TUARASCÁIL ón gComhchoiste Fiosrúcháin i dtaobh na Géarchéime Baincéireachta

An tAcht um Thithe an Oireachtais
(Fiosrúcháin, Pribhléidí agus Nósanna Imeachta), 2013

REPORT of the Joint Committee of Inquiry into the Banking Crisis

Houses of the Oireachtas
(Inquiries, Privileges and Procedures) Act, 2013

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January 2016

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THEME: R4

Appropriateness and effective utilisation of the expert advice

LINE OF INQUIRY: R4a

Appropriateness of the expert advice sought, quality of analysis of the advice and how effectively this advice was used

Written Answers - EU-IMF Programme

Thursday, 26 January 2012

76. Deputy Michael McGrath asked the **Minister for Finance** his estimate, based on all currently available information, including the projected deficits for 2013, 2014 and 2015 set out in the medium term fiscal statement and the maturity of Government bonds, the amount of additional funds Ireland will need to raise beyond the funds currently available in the EU-IMF programme of assistance in 2014 and 2015; and if he will make a statement on the matter. **[4663/12]**

Minister for Finance (Deputy Michael Noonan): The EU/IMF Programme covers Ireland's funding requirements from 2011 to 2013, provided of course that we continue to adhere to the terms and conditions of the Programme and meet targets. The most recent Exchequer deficit estimates for the years 2013-2015 were set out in Budget 2012 last December. *Budget 2012* estimated that the Exchequer deficits in the years 2013-2015 would be €14.1 billion, €10.2 billion and €7 billion respectively.

The National Treasury Management Agency (NTMA) advises me that maturing long-term debt in the years 2013-2015 is currently estimated at €6 billion, €8.4 billion and €10.5 billion respectively. The table takes account of yesterday's successful bond switch which reduced the 2014 bond maturity by €3.5 billion.

Gross Funding Requirement 2014-15 **€ billion**	**2014**	**2015**
Exchequer Deficit	10.2	7.0
Maturing Long-term Debt	8.4	10.5
of which Irish Government Bonds	8.4	3.6
EU/IMF Programme	—	6.9
Total	18.6	17.5

As has been widely stated for some time now, it is the stated intention of the NTMA to return to borrowing in the sovereign debt markets as soon as market conditions permit. The decrease [133]in Irish bond yields since the beginning of the year and the success of yesterday's bond switch by the NTMA indicate increased investor confidence that Ireland is dealing with its fiscal and economic issues. The NTMA is in ongoing contact with market participants and will advise me as and when it feels that the time is right to re-enter the markets.

SECRET
Offig an Aire Airgeadais

Ref No: F515/19/08 Date: 9 March 2009

Memorandum for Government

Covered Institution Remuneration Oversight Committee (CIROC) Report

Decision Sought

1. The Minister for Finance requests the Government

   i. To note the contents of the first Report of the Covered Institution Remuneration Oversight Committee (CIROC);

   ii. To agree to its being made available to both Houses of the Oireachtas and to the general public on Thursday;

   iii. To note that he will be writing to each of the covered institutions directing them to revise existing remuneration packages to bring them into line with the scheme; and

   iv. To decide whether the covered institutions should be told that the Government considers that in order to be in compliance with the scheme the remuneration plans should be revised to terms to reflect the recommendations of the CIROC report **or** remuneration plans in line with those proposed in paragraphs 17 to 23.

Methodology used by CIROC

2. CIROC examined each institution's report on remuneration policies submitted in accordance with the Guarantee Scheme. In coming to its conclusion, CIROC took into account the existence of the Guarantee Scheme and the recapitalisation proposals. It was informed in its deliberations by a number of HR companies regarding senior management remuneration in large Irish private sector companies and in financial institutions in the UK and elsewhere.

3. CIROC has reservations about comparisons with salaries payable in UK financial institutions generally owing to a number of factors including scale. It considers that greater weight should be given to comparisons within Ireland.

4. CIROC reports that for a number of covered institutions, the CEO's base salary in 2007 and 2008 was higher than that payable in companies of a similar size in Ireland and in comparable financial institutions in the UK. It concluded that any comparison should be based on median rates of base salary and should exclude

those companies in which salaries are at the upper levels. Furthermore, base salary should be reviewed annually by reference to the median.

5. CIROC consider base salaries 25% below the relevant median to be justified in the case of the two institutions that have been recapitalised and that a base salary of 12.5% below the relevant median is appropriate in the case of the other covered institutions.

CIROC proposals on remuneration

6. The following table compares existing salaries/fees with those recommended by CIROC.

Financial Institution	CEO salary CIROC	CEO Salary Existing	Chair fee CIROC	Chair fee Existing
AIB	€690,000	€696,300	€276,000	€390,000
Bank of Ireland	€690,000	€1,185,000[1]	€276,000	€393,750
Irish Life & Permanent	€545,000	€890,000	€218,000	€288,000
Anglo Irish Bank	€545,000	-[2]	€218,000	€420,000
INBS	€360,000	€1,000,000	€144,000	€100,430
EBS	€360,000	€441,000	€144,000	€98,100
Postbank	€230,000	€260,000	-[3]	-

7. Paragraph 47 of the Scheme requires each covered institution to prepare a plan to structure the remuneration of directors and executives, with particular emphasis on aligning bonus systems with long term sustainability. CIROC states that it is not yet in a position to assess meaningfully the extent to which the covered institutions comply with the requirements of Paragraph 47 of the Scheme. Nevertheless, CIROC has set out a general approach that it believes should be followed in devising remuneration policies for the covered institutions.

Other remuneration elements

Executives other than CEOs

8. CIROC makes no specific recommendation regarding other executives but expects the revised remuneration packages of chief executives to have knock-on effects for them.

Non-executive Directors

9. CIROC recommends that the annual fee for the non-executive directors should be linked to the base salary of the chief executive. In particular

[1] Salary of outgoing CEO; new CEO salary not yet determined
[2] There is no chief executive in place at present
[3] No recommendation made; Chairperson of Postbank, a senior executive in FORTIS, does not receive an annual fee although the fee paid to the Chairperson of its Remuneration Committee is €17,500

- Chairperson's fee should not exceed 40% of the CEO's base salary;

- Ordinary members' fees should receive 20% of the Chairperson's fee (25% if they head up a major sub-committee);

- No additional remuneration should be payable for membership of a sub-committee nor should there be a separate payment for attendance at meetings.

Bonuses

10. Chief executives and executive directors should not receive bonuses for the duration of the Government Guarantee. However, performance assessment should be retained for senior staff with objectives in line with Business Plans, with the possibility of bonus payments not exceeding 80% of base salary when the longer-term achievement of the objectives can be assessed.

Pensions

11. Pension arrangements for top management should be broadly similar to the generality of the staff and own contributions should be increased.

Long-Term Incentive Plans (LTIPs)

12. CIROC consider that the structure of LTIPs should be revised with particular attention to how shares are denominated, vesting and sale conditions as well as the time-spans over which performance in measured.

Other Points of Note

13. Two exceptions to the general reductions are for the Chairs of INBS and EBS where CIROC recommends a higher fee than is currently paid. This step may not be advisable in the current economic circumstances.

14. CIROC reports as "unacceptable" a practice whereby pension arrangements for top management include the payment of cash allowances to make up for the effects of the "pensions cap" imposed by the Finance Act, 2006. The Minister intends examining this issue in more detail, to see if legislative changes in general are needed. He will make it clear to the relevant institutions that these practices are to cease immediately.

15. The 2009 base salary of the Chief Executive of the INBS, at €1,000,000 per annum, represents an increase of €107,000 on the 2008 base salary of €893,000. Furthermore, at the end of 2008 he was paid an annual bonus of €1,000,000 in relation to his performance that year. Paragraph 47 of the Scheme states that "[b]onuses shall be measurably linked to reductions in guarantee charges, reduction in excessive risk taking and encouraging the long term sustainability of the covered institution". The Minister therefore will be following up as a matter of urgency with the INBS to explain the apparent breach of the Guarantee Scheme and to ask how they intend to rectify this.

CIROC Recommendations on Corporate Governance

16. Regarding remuneration committees, CIROC reports that in some cases, there is room for improvement regarding the balance between the functions of the Chairperson, non-executive directors and the Chief Executive. It is important to prevent the Chief Executive from acquiring undue influence over setting objectives or determining remuneration policies.

Role of Minister for Finance under the Guarantee Scheme

17. Under Paragraph 48 of the Guarantee Scheme, where the Minister for Finance considers, on the advice of CIROC, that a covered institution has not complied with Paragraph 47 of the Scheme, he may direct the covered institution to amend its remuneration plan so that compliance is achieved. The Minister will be exercising this right under the Scheme.

18. The revised packages proposed by CIROC in many instances would be well above the ceiling of €250,000 per annum that has been proposed by various commentators and opposition politicians. CIROC's proposals reflect its assessment of appropriate rates for senior management in today's conditions having regard to salary levels in Ireland and comparable institutions abroad. CIROC also recognises that exceptional situations may require a departure from its recommended approach but states that these would have to be justified on a case by case basis.

19. Setting a ceiling of €250,000 at the very top would have consequential effects on positions right down the reporting chain, making senior and even middle management positions in Irish banks particularly unattractive to individuals who may have the skills essential to bring the banks through the current crisis. Nevertheless, the Minister is cognisant of the widespread concern surrounding the generous remuneration terms enjoyed by senior bankers at a time when ordinary people are suffering severe reductions in their living standards.

20. Notwithstanding this, the Minister is aware that other countries have set lower caps on the salaries of Government aided financial institutions than those suggested by CIROC. For example, the United States has set a cap of $500,000 for the CEOs of Government aided institutions; the German Government has set a cap of €500,000. Bearing these in mind, it could be argued that the salaries set by CIROC are too high. This is particularly true when you consider that further aid is likely to be needed to fully secure the stability of the financial system.

21. Should the Government consider it desirable to seek reductions that extend beyond the CIROC recommendations, the Minister has prepared a proposal of a base salary ceiling of €500,000 for the Chief Executives of the two main banks with pro rata changes to the other remuneration terms proposed by CIROC. This represents an alternative approach to that adopted by CIROC; a cap in line with caps in other jurisdictions.

22. He considers that any reduction below this amount this would not provide an appropriate balance between the need to take account of public concerns and the requirement to set remuneration at a level where positions are reasonably attractive to individuals with the talents and skills to manage the Irish banking institutions in the medium term.

23. The lower remuneration terms for CEOs and Chairs are set out in the table below.

Financial Institution	CEO salary CIROC	CEO Salary Minister	Chair fee CIROC	Chair fee Minister
AIB	€690,000	€500,000	€276,000	€200,000
Bank of Ireland	€690,000	€500,000	€276,000	€200,000
Irish Life & Perm	€545,000	€394,928	€218,000	€157,971
Anglo Irish Bank	€545,000	€394,928	€218,000	€157,971
INBS	€360,000	€260,870	€144,000	€104,348
EBS	€360,000	€260,870	€144,000	€104,348
Postbank	€230,000	€230,000	-	-

24. No change is proposed to the CIROC recommendation for Postbank as they pose no threat to the stability of the system, have no bad loans and no liquidity needs.

25. Ordinary board members fees would still be set at 20% of the Chairperson's fee.

Financial Institution	Ordinary member's fee CIROC	Ordinary member's fee Minister
AIB	€55,000	€39,855
Bank of Ireland	€55,000	€39,855
Irish Life & Perm	€44,000	€31,884
Anglo Irish Bank	€44,000	€31,884
INBS	€29,000	€21,014
EBS	€29,000	€21,014
Postbank	-	-

26. The legal position is that the Minister does not have the express power to direct that the covered institutions adopt a particular salary plan. He can however, ask the institutions to redo their plans in accordance with the scheme. He can also indicate to them what salary levels the Government would consider to be in accordance with the scheme.

27. In the event that the Government decides on this option and the institutions refuse to implement the request, there will be the option to revise the relevant paragraph of the scheme to provide an express power, when the Guarantee is being reviewed this month.

Publication of the Report

28. Given that the Report has personal information to do with individuals, it is recommended that the Report is circulated to those individuals in advance of publication. It is proposed therefore that the Report will be circulated to the relevant institutions this evening and laid before the Houses of the Oireachtas and published on Thursday evening.

S180/20/10/1083

11 Márta, 2009.

An Rúnaí Príobháideach
An tAire Airgeadais

DRAFT

SECRET

I am to refer to the memorandum ref. F515/19/08 dated 9 March, 2009, submitted by the Minister for Finance concerning the Covered Institution Remuneration Oversight Committee (CIROC) Report and to inform you that, at a meeting held today, the Government

(1) noted the contents of the first Report of the Covered Institution Remuneration Oversight Committee (CIROC);

(2) agreed to its being made available to both Houses of the Oireachtas and to the general public;

(3) agreed that the Minister for Finance would write to the Financial Institutions asking them to revise their remuneration plans in such a way as to respect a salary cap of €500,000 or the amount recommended by CIROC, whichever is the lesser. Any deviation from this should be in very exceptional circumstances and with the agreement of the Minister for Finance; and

(4) agreed that in the event that any of the Financial Institutions do not indicate that they are willing to comply with the Government's request, the relevant paragraphs of the scheme would be revised to allow the Minister for Finance impose a cap as part of the six month review scheme.

Ard-Rúnaí an Rialtais

Minister,
from John McCarthy

ESRI Summer 2006 Quarterly Economic Commentary

The ESRI Summer 2006 Quarterly Economic Commentary will be published tomorrow. The ESRI are forecasting growth of 5.6 per cent this year in both GDP and GNP terms. The current forecasts have been revised upwards significantly, and as a result, the ESRI projections are now somewhat stronger than our own (see table 1 below). The ESRI envisage a slight moderation in growth next year, with GDP growth of 5.2 per cent (GNP growth of 5.1 per cent) being projected.

Employment is projected to increase by 85,000 (4.4 per cent) this year, and by 74,000 (3.6 per cent) next year, with net inward immigration accounting for a significant portion of the increase in both years. CPI inflation is forecast to average 3.8 per cent this year and 3.5 per cent next year.

Table 1: Macro-Economic Forecasts for 2006 (growth rates unless otherwise stated)

	ESRI (summer 2006)		**Dept. of Finance** (budget day)	
	2006	**2007**	**2006**	**2007**
GDP	5.6	5.2	4.8	5.0
GNP	5.6	5.1	4.6	4.8
Employment	4.4	3.6	3.1	2.2
Unemployment (rate)	4.4	4.4	4.3	4.4
CPI	3.8	3.5	2.7	2.5

Notwithstanding the relatively favourable outlook for the economy, the ESRI identify a number of underlying concerns regarding the medium term sustainability of growth. These include:

- the **weak productivity performance last year** (labour productivity rose by less than 1 per cent last year, the lowest growth rate since 2001) and the associated rise in the labour cost of producing one unit of output (unit labour costs), which points to a deterioration in cost competitiveness last year;
- an **increasing balance of payments deficit**, indicative of a relatively poor export performance and growing imbalances in the economy;
- the **over-reliance of the economy on domestic demand as a driver of growth and in particular on the residential construction sector**, which cannot continue indefinitely;

The ESRI are assuming an acceleration in the pace of government spending this year and next (they relate this to the electoral cycle). They also suggest that a slowdown in the pace of economic growth could occur in 2008 as the impetus to the economy from the SSIA scheme and increased government spending begins to wane. In these circumstances, the ESRI highlight the counter-cyclical role that "an orderly roll-out" of government spending can play in smoothing the economic cycle.

CC. Secretary General, Mr. McNally, Mr. Moran, Press Office

Speaking Points

- I welcome the publication of the Summer Quarterly Economic Commentary from the ESRI.

- The ESRI view the short-term prospects for the Irish economy as positive, with both GDP and GNP projected to rise by 5.6 per cent this year. Growth in excess of 5 per cent is projected for next year also.

- I share the ESRI's assessment regarding some of the underlying trends in the economy. In particular, growth last year was somewhat unbalanced, with a negative contribution from the external side. This highlights the importance of regaining competitiveness. However, I am encouraged by the improvement in the export performance in the first quarter of this year, with annual growth of 7.7 per cent recorded.

- I note the ESRI's concern regarding the slowdown in productivity growth. Policy is addressing this through a number of measures, including:
    - Specific productivity gains in the public sector;
    - Re-focussing our industrial policy on higher value-added jobs;
    - Removing barriers to competition in the domestic economy, which will improve productivity and innovation;
    - Investing in infrastructure, which will also improve productivity.

- In relation to the over-exposure of the economy to construction, I share the ESRI's concern. A reversion to more sustainable levels of output and employment will, at some stage in the short- to medium-term, necessitate a sectoral re-allocation of labour. I have highlighted this risk on many occasions, including on Budget day last year.

Minister,
from John McCarthy

ESRI Spring 2007 Quarterly Economic Commentary

The ESRI Spring 2007 Quarterly Economic Commentary (QEC) will be published tomorrow. The ESRI are forecasting growth of 5.4 per cent in both GDP and GNP terms this year (these figures do not take into account quarterly data published by the CSO yesterday). Employment is forecast to rise by 78,000 (3.8 per cent), resulting in an unemployment rate of 4.4 per cent. CPI inflation is projected to average 4.6 per cent, while a general government surplus of 1.7 per cent of GDP is forecast.

The economic and labour market outlook is broadly similar to our own, although the forecasts for inflation and the general government surplus are somewhat higher than our projections (see table below). The ESRI are projecting a moderation in growth to 3.9 per cent (both GDP and GNP) next year.

Macro-Economic Forecasts for 2007 (per cent growth rates unless otherwise stated)

	ESRI (Spring 2007)	**Dept of Finance** (December 2006)
GDP	5.4	5.3
GNP	5.4	5.3
Employment	3.8	3.5
Unemployment (rate)	4.4	4.4
CPI	4.6	4.1
GGB (per cent of GDP)	1.7	1.2

The ESRI identify what they see as the key vulnerabilities:

- **Firstly**, (as we have outlined on a number of occasions) growth is being driven by domestic demand, which is not sustainable over the medium term.
- **Secondly**, the widening of the current account deficit is seen to be the result of rapid housing investment (on a technical level, the current account deficit in any country is the difference between national savings and investment). In these circumstances, our indebtedness to non-residents has increased in order to fund investment in an asset with a low rate of return (housing has a low rate of return relative to most other asset classes such as investment in plant and machinery).
- **Thirdly, and most importantly**, the ESRI argue that house prices last year were over-valued relative to the fundamental factors (the estimated over-valuation is 15 per cent).
- **Finally**, it is argued that increases in Irish inflation tend to feed through into wage demands fairly quickly. From a policy perspective, this means that the recent pick-up in inflation could result in higher wage demands.

CC. Secretary General, Mr. McNally, Mr. McGrath, Mr. Gallagher, Ms. Cunningham, Press Office, Mr. Hunt

Speaking Points (if required)

Growth prospects

- The ESRI view the short-term prospects for the Irish economy as positive, with both GDP and GNP forecast to rise by 5.4 per cent this year. These projections are in line with those of my own Department, published on Budget day. We see growth in both (in both GDP and GNP terms) of 5.3 per cent this year.

- I agree with the ESRI's analysis that the current growth path (i.e. driven by domestic demand) is not sustainable over the medium term. This is why we need to improve our cost competitiveness.

Housing market

- I do not share the ESRI's view regarding the housing market. House price increases in recent years have been underpinned by many factors including a strong economy, increases in employment and earnings, reductions in taxation and lower interest rates resulting from participation in monetary union.

- House price inflation has moderated in recent months. This is not unsurprising given the rising interest rate environment. More modest house price developments mean that a soft landing remains the most likely scenario for the housing market.

Balance of payments

- The widening of the current account deficit is indicative of a loss in competitiveness, which has lowered the rate of export growth. This highlights the need for measures to improve our cost competitiveness.

- On a technical level, the widening of the current account deficit partly reflects increased investment in housing in recent years. However, with housing output gradually easing back to more sustainable levels, the current account deficit should ease.

Minister,
from John McCarthy
13th May 2008

ESRI Medium Term Review (MTR) 2008 – 2015

Background
Every second year, the Economic and Social Research Institute (ESRI) brings forward a review of medium term economic prospects for Ireland. The Review covering the period 2008 – 2015 will be published tomorrow - Wednesday 14th May and it is likely to receive considerable media attention. On balance the MTR gives a positive assessment of our medium term prospects noting that Ireland's standard of living is expected to show further relative improvements versus the EU as the current infrastructural investment comes on stream.

Economic outlook
Notwithstanding the short-term economic difficulties, the ESRI believes that the Irish economy is resilient, and that the economy should return to its "medium term growth path" by the early years of the next decade. It cautions that focusing solely on short-term problems will damage our ability to achieve this favourable outcome.

In terms of the housing market, the Institute says that the market is currently undergoing a correction from the unsustainable high levels of the last few years, but that underlying demand of just under 50,000 per annum into the medium term is likely.

In terms of its medium term growth path, the Institute believes that the economy has the capacity to expand at an annual average rate of around 3¾ per cent between now and 2015. Achieving this rate of growth is predicated on the assumption that "appropriate polices" are pursued (e.g. efficient delivery of the National Development Plan and of other public services).

However, because of the uncertainty attached to all medium-term economic projections, the Institute also considers a number of alternative scenarios – one in which growth is 0.7 per cent higher each year because of enhanced competitiveness and one in which growth is 0.7 per cent lower each year because of lost competitiveness. The Institute says that it is hard to say when the current international uncertainties will end and set out a third scenario where the global downturn is more prolonged than assumed. Even in this more depressed scenario the results suggest that if appropriately managed, a recession in the US would not unduly affect the long term prospects for the Irish economy.

Move to a services based economy
The Institute believes that the Irish economy has entered the next phase of its development. While manufacturing sector will remain important, economic growth will increasingly be driven by knowledge-intensive tradable services such as business and financial services.

Changes in terms of the Labour Market

The Institute notes that the migration pattern of non-Irish nationals is now a key determinant of the future size of our labour force. This in turn has significance for any potential domestic stimulus to the economy, such as a fiscal policy stimulus, which the Institute says would tend to raise domestic wages and prices, crowding out the domestic tradeable sector. It goes on to say that this has been the experience in recent years. The Institute also notes that given the changes in the labour market, any change in the incidence of labour taxation will impact on the employees rather than the employer as was the case in the past meaning that if labour taxes were increase employees would bear the cost with more limited impact on the competitiveness and employment than experienced in the past.

Policy implications

On foot of this analysis, the Institute makes a number of policy recommendations, including:

- The Government's planned immediate fiscal deficit is appropriate, but the recent pro-cyclical fiscal policy stance has left the economy "less well prepared to deal with the current problems than might otherwise have been the case".
- In terms of the future, given the labour market situation, operating countercyclical fiscal policies in the coming decade are required to keep the economy close to its potential growth rate; and fiscal policy should be used to manage the housing market;
- Better quality public services are required to improve living standards and to attract highly skilled labour; in this regard the recent OECD report warrants careful consideration and that specifically it is "very important to reform the administrative system in health to ensure that it will produce the demanded quality health service at a realistic cost".
- Continued investment in physical infrastructure and in education and skills is required; but the Institute remains "concerned" about the implementation of some aspects of the NDP, questioning whether the necessary planning has been undertaken and whether public administration has the ability to manage and implement such large scale projects over such a tight timescale.
- Planning issues and congestion charges need to be considered to promote 'sustainable city living'
- The Institute says that the current EU proposals for limits on emissions of greenhouse gases will prove "extremely difficult to achieve" in our case and that there is considerable uncertainty about how costly it will be to meet the EU limits by 2020.
- Increasing pressure will be put on public services in the years after 2020, noting that once the bulk of the infrastructural deficit is met, more than the current 1% of GNP will be required to be saved in the period 2015 – 2030 to help fund the cost of ageing.

Speaking Points (if required)

- I welcome the publication of the ESRI's Medium Term Review.

- It is encouraging to see that the ESRI believe that the medium term prospects for the economy remain positive. We can, on the basis of this analysis, achieve sustainable GDP increases of 3¾ per cent per annum over the medium term; this is much higher than elsewhere in the euro area.

- The key message that we can take from this report is that Ireland's economy is flexible and resilient. Because of the fundamentals factors that are in place, our economy has the ability to absorb shocks in an efficient manner; to limit the economic fall-out and to revert to its trend rate of growth fairly rapidly.

- Despite the pessimism that currently abounds, the Institute shares the Department of Finance view in that we should see a return to trend growth from 2010 onwards.

- The report highlights a key structural change in the Irish economy which has been ongoing for some time. I am talking about the increasing importance of knowledge-intensive, tradable services such as business and financial services. My own view is that Ireland's future economic development lies in producing these high value-added, high paying services.

- I welcome the analysis of the long-term ageing of the population in this report, although I think the pressures on the public finances are somewhat stronger than suggested. Nevertheless, it is clear that the choices we make now must be cognisant of the ageing of the population and the pressures such as higher age-related spending and lower growth in revenues that this will create.

Minister, for information
from John McCarthy
13th May 2009

ESRI Publication: Recovery Scenarios for Ireland

Summary: the ESRI will publish a fairly benign assessment of the medium term economic and fiscal outlook on Friday. The short-term outlook is based on the recently published quarterly economic commentary. However, the main focus of the paper is on the medium term. The central thesis is that with an improvement in the global economy, economic conditions in Ireland will recover fairly rapidly, so that less fiscal correction will be required than we have assumed. While this could be viewed favourably, we have concerns that it is too optimistic.

The Economic and Social Research Institute (ESRI) will publish a paper on Friday (in time for the morning media) entitled '*Recovery Scenarios for Ireland*' which is likely to receive some attention (a copy is attached). This paper is the final version of work that has been underway for some weeks. As you may be aware, there has been considerable interaction between ourselves and the ESRI about this; some of our observations have been incorporated, although our main concern (i.e. regarding the optimistic nature of the assessment) has not been addressed.

Economic growth…
The short-term outlook (i.e. for the next two years) is based on the recently published quarterly economy commentary which envisages income per capita falling to 2001 levels.

For the medium term, the paper presents fairly benign prospects for the Irish economy. The analysis suggests that once the global recovery sets in from 2011, rapid improvements in competitiveness will mean that the Irish economy can achieve annual growth rates of 5½ per cent per annum over the period to 2015.

Labour market…
The ESRI believes that unemployment will fall rapidly, from a peak of nearly 17 per cent next year to about 6 per cent by the mid-part of the next decade. The increase in employment is seen as occurring in the traded sector of the economy.

Public finances…
The paper acknowledges that the Supplementary Budget represents an appropriate fiscal policy response for 2009 and 2010 to the very serious public finance problems and that it is very important that there is no slippage in the main parameters of the Budget planned for 2010.

The paper argues that the objective of fiscal policy should be to eliminate the structural deficit by 2015. The Institute's assessment of the structural deficit is different to our own (our own being the internationally accepted method, as applied by the EU Commission, IMF, OECD and the Central Bank); the Institute's estimate is for a smaller structural deficit and allows for this to be corrected over a longer time period. Essentially this means that the ESRI believes that the stance of fiscal policy could be less restrictive than is currently allowed for in the Department of Finance projections.

The paper is also critical of fiscal policy in the past, arguing that some of the current difficulties are related to inappropriate policies pursued since the turn of the decade.

Banking issues…
At a macro-level, the ESRI argue that the long-term costs of actions to deal with banking sector issues may be small relative to the debts resulting from borrowing to fund normal government activity. It is also argued that the full resolution of difficulties in this sector will take considerable time and that, in the interim, the overhang of debt needed to fund a banking sector solution will add to uncertainty.

Policy Responses…
The paper identifies four main challenges:

- Restoring order to the banking system;
- Eliminating the structural deficit;
- Improving competitiveness;
- Tackling unemployment.

Assessment
Our own short-term economic assessment is similar to the analysis in the paper – under both scenarios, GNP is projected to contract by a cumulative 13½ per cent over the period 2008-2010. However, the medium scenario outlined in the ESRI analysis appears too benign. For instance, growth of 5-6 per cent per annum requires a rapid run-down in unemployment. Given that a significant part of the increase in unemployment is structural (due to the 'shake-out' in the unsustainably large construction sector), a rapid reduction in unemployment appears unlikely – as evident from the Finnish experience. In addition, export-led growth (as assumed by the ESRI) is less employment-intensive and less tax-rich than domestically-driven growth, which has implications for the structural deficit (you may also wish to note that the recent Commission projections are for a structural deficit of 9.8 per cent of GDP this year).

In summary, therefore, while a more rapid recovery would clearly be welcome, this scenario would appear to be less likely than our own (and indeed those of the Central Bank and IMF – both of these organisations see our potential growth rate being in the region 2½-3 per cent per annum) and it does not seem sensible to plan on the basis of the ESRI analysis.

In fact, the paper suggests that "the uncertainties about the timing of the recovery mean that planning should still continue for quite a tight fiscal policy over the years 2011-13, as currently envisaged by the Department of Finance" in the Supplementary Budget. This statement is qualified by arguing for a less stringent (though still deflationary) fiscal policy over the period 2011-2013 (p.45) if, over the course of the next eighteen months, the scenario for economic recovery that they have outlined proves to be correct. This is not to lose sight of the fact that the next year or so is crucial – both in terms of "getting off to a good start" and to send a positive signal to the international community.

While the Supplementary Budget set out detailed plans for 2010 and 2011 and noted that additional measures would be needed in 2012 and 2013 (based on the current forecasts) to ensure that the deficit is below 3% of GDP by 2013, it stated that scale and nature of the measures needed would depend on the strength of the economic cycle.

The ESRI paper envisages running General Government deficits in excess of -3% of GDP beyond 2013, the time-scale agreed with the EU Commission. Such an approach is not responsible financial management. In this regard, it should be noted that recently the EU Commission have been complimentary about the budgetary approach being followed by the Irish Government.

In terms of banking sector issues, we have difficulties with large parts of the text. The Department provided comments on the draft report indicating that the assessment on banking did not seem balanced, assumptions on non payment of dividends by the recapitalised banks and the roll up of interest by NAMA were incorrect, that it was wrong to assume that NAMA will have no current income and that there would be no payment of charges for the bank guarantee.

The ESRI acknowledged our points by saying that their assumptions were 'extreme' but did not change their figures or conclusions. We remain of the view that the assumptions made, even if described as extreme, are in fact misleading and only lead to support a conclusion that the bank guarantee scheme and NAMA will not be successful. Such a conclusion which is based on extreme, unrealistic assumptions will undoubtedly be quoted out of context to the detriment of the Irish economy, and is not what would be expected of balanced reporting by the ESRI.

CC Secretary General, Mr. O'Brien, Mr. McNally, Mr. Cardiff, Mr. Connolly, Mr. McGrath, Mr. Gallagher, Mr. Higgins, Mr. Hogan, Mr. Carrigan, Ms. Cunningham, Mr. Dorgan, Ms. Herbert, Mr. Ahearne

Speaking Points (if required)

- I have noted the medium term assessment of the economy published by the ERSI today.
- In terms of short-term projections, there is little substantial difference between the Institute's assessment and that of my own Department – in both cases, the cumulative decline in national income is of the order 13 per cent over the period 2008-2010.
- The medium term outlook presented by the ESRI is certainly benign, and we would all hope that this is indeed the case. However, I believe that the structural adjustments in the Irish economy will take longer to be completed and as such we must plan accordingly.
- Therefore, I do not believe it to be appropriate to plan the public finances on what I see as a 'best case' scenario. Of course, if things turn out better, then all well and good.
- In terms of the public finances, the Institute endorses the measures taken in the Supplementary Budget, and recommends that there is no slippage in the main parameters of the Budget planned for 2010. I strongly agree with this assessment.
- Beyond 2010, the Institute argues that fiscal policy may not need to be as stringent as outlined in the recent Budget. This, however, ignores the large structural deficit which we must tackle in order to maintain the public finances on a sustainable path.

Re. Banking speaking points, a separate note will be provided by Banking section

Minister,
from John McCarthy

Central Bank Quarterly Bulletin

The Central Bank Quarterly Bulletin will be published today. The Bank is forecasting GDP growth of 5.0 per cent this year, a slight acceleration from the 4.7 per cent outturn last year. GNP this year is also forecast to rise by 5.0 per cent, compared to the 5.4 per cent outturn last year. These overall growth rates have been revised upwards slightly from the previous Bulletin and are now marginally higher than our own forecasts published on Budget day (see table 1 below). The Bank is projecting employment to increase by 64,000 (3.3 per cent), resulting in an unemployment rate of 4¼ per cent this year. CPI inflation is forecast to average 3.0 per cent.

While the Bank views the prospects for the economy this year as being broadly favourable, it does identify a number of areas for concern, including:

- A deterioration in the competitiveness of the exporting sector;
- The recent increase in the rate of CPI inflation (to 3.3 per cent in February);
- An over-reliance on the construction sector (especially the house building sub-sector);
- The pick-up in house price inflation since last Autumn.

The Bank makes a number of observations on fiscal policy, most notably in relation to Budget 2006. In particular, the Bank suggests that the Budget was expansionary, mainly due to discretionary increases in spending. The Bank suggests that when the economy is performing well, the public finances should be in surplus in order to provide for unforeseen events. Moreover, the Bank expresses concern regarding the tax-take from the construction sector, given the current unsustainably high level of construction activity.

In relation to house prices, the Bank expresses concern regarding the acceleration in house price inflation since last Autumn. This is seen as increasing the risk of a sharp correction at some stage in the future. The Bank argues that some of the pick-up in house price inflation is attributable to an easing of credit conditions, particularly the introduction of 100 per cent mortgages. Finally, the Bank also notes that strong credit growth in the second half of last year resulted in an average personal debt to disposable income ratio rising to 132 per cent by end-2005 compared to 115 per cent a year earlier. These developments (i.e. in price and indebtedness) are seen as further raising the exposure of the economy to the property sector.

Table 1: Macro-Economic Forecasts for 2006 (growth rates unless otherwise stated)

	Central Bank	Dept. of Finance
GDP	5.0	4.8
GNP	5.0	4.6
Employment	3.3	3.1
Unemployment (rate)	4¼	4.3
CPI	3.0	2.7

CC. Secretary General, Mr. McNally, Mr. Moran, Mr. Hegarty, Press Office

Speaking Points

- The Central Bank views the prospects for the Irish economy as broadly favourable this year. In overall terms, the Bank is forecasting growth of 5 per cent in both GDP and GNP terms.

- The Bank envisages a further strong performance in the labour market this year, with employment growth of 3.3 per cent projected (the equivalent of 64,000 net new jobs).

- I share the Bank's assessment regarding the outlook for the economy. On Budget day, I forecast GDP growth of 4.8 per cent this year (GNP growth of 4.6 per cent). At the same time, I identified several risks – both domestic and external – to this relatively benign outlook.

- I note the Bank's concern regarding the recent acceleration in the rate of house price inflation.

- On balance, it still appears that a soft landing remains the most likely outcome for the housing market. The large increase in housing supply in recent years can reasonably be expected to restore balance between housing demand and supply and have a moderating impact on house price inflation. Nevertheless, there are risks and we must be cognisant of these.

Tánaiste,
from John McCarthy and Anne Donegan

OECD Autumn 2007 Economic Forecasts

The OECD published their economic forecasts this morning, including their forecasts for Ireland. These forecasts are 'pre-Budget' in the sense that they were completed in mid-November and do not take into account of changes in the Budget.

In summary, the OECD is forecasting a growth rate of around 3 per cent next year, with a slightly stronger pickup than we have assumed in 2009. However, the language regarding Ireland is somewhat 'sensationalist'; we proposed (on a number of occasions) a number of textual changes but these have not been taken on board. The comments on the property market pre-date the Budget confidence-building measures. In addition, the public finance numbers appear very strange.

International Environment
Internationally, growth is projected to slow in the OECD area (which can be thought of as in effect the worlds 'advanced countries'). However, for most OECD countries the slowdown is "not that bad" given the scale and number of shocks which have hit the world economy over the past year.

Importantly, the OECD sees the housing-related adjustment in the US as dragging growth downwards in the short-term but not triggering a recession.

Nevertheless, the risks to the international outlook are skewed to the downside, with the key risks including:

- A more pronounced cooling of housing markets;
- The possibility of additional financial market turbulence;
- Further upward pressure on commodity prices such as food and oil. .

Irish Economy
In Ireland, the growth rate is projected to slow to around 3 per cent next year. A pick-up to over 4 per cent is forecast for 2009; while the direction is correct, the scale of the pick-up appears a bit sharp.

The OECD sees housing levelling out at sustainable levels by 2009, broadly similar to our own analysis. However, the commentary regarding the housing market is somewhat sensationalist, and may receive some attention. It also pre-dates the confidence-building measures introduced in the Budget.

In terms of the public finances, the OECD is recommending limiting expenditure growth in order to maintain a sound position and prioritising public investment. Both of these are measures are, of course, being implemented.

CC. Secretary General, Mr. O'Brien, Mr. McNally, Mr. McGrath, Mr. Gallagher, Press Office

Speaking Points

- In terms of where the economy is going, I broadly share the OECD's assessment – I also see growth of around 3 per cent next year.

- The OECD makes a number of recommendations regarding fiscal policy, which don't take yesterday's Budget into account. I have always said that investment is a priority.

- I do not share the OECD's analysis of the housing market. The reforms of stamp duty which I introduced yesterday and the rise in the ceiling on mortgage interest relief will help to restore confidence to the market.

- The OECD identifies many risks to the global economic environment. As a small and open economy, we must be cognisant of these risks and plan accordingly. Yesterday's Budget is an appropriate response. We are investing in enhancing the productive capacity of the economy and ensuring flexibility in order to maintain high growth rates into the future.

Minister,

Economic Forecasting and Analysis Section

26th January 2006

Central Bank Quarterly Bulletin

Economy in 2005: The Central Bank Quarterly Bulletin will be published today. The Bank is estimates the economy grew in 2005 close to its medium term potential with GDP growth of between 4.5 per cent and 5 per cent this year, slightly down from the 4½ per cent outturn in 2004. GNP in 2005 is forecast to rise by the same as GDP, compared to 4.0 per cent in 2004. These overall growth rates are broadly in line with our own estimates. Employment is estimated to have increased by 85,000 (4.5 per cent) in 2005, resulting in an unemployment rate of 4.25 per cent. The bank highlights that economic growth in 2005 was mainly accounted for by increases in employment, with increased productivity contributing little to economic growth.

Economy in 2006 and International Risks: The Bank views the prospects for the economy as being broadly favourable. In 2006 GDP is forecast to grow by 4¾ per cent and GNP by 4½ per cent. They forecast that employment will grow by 3.1%. Notwithstanding this, there are some downside risks associated with this generally benign outlook. Firstly, growth in the euro area remains sluggish and largely dependent on exports, and this leaves the region vulnerable to external shocks. Secondly the Bank identifies major uncertainty regarding the international outlook, in particular, high oil prices and sizeable global imbalances which could potentially cause a sharp depreciation of the dollar.

Domestic Risks: On the domestic front, the bank states there are "some issues regarding the composition of growth which give rise to concerns about medium-term economic performance". Increases in employment have accounted for the majority of national accounts growth, which would imply weakening productivity growth in the Irish economy. We would tend to agree with this analysis. Another concern is that economic growth is becoming somewhat unbalanced, with growth being driven by domestic demand, with net exports making a smaller contribution than in recent years. The continuing high level of output in the private residential construction sector is also of concern. The Bank sees the current level of construction output as unsustainable in the medium-term and predicts some downsizing will occur at some time.

Competitiveness: Ireland has experienced a loss of competitiveness in recent years and in this context the slowdown in manufacturing is a worry, according to the Bank. However the Bank's Real Trade Weighted Competitiveness Index, which takes account of inflation and exchange rate movements, shows however that competitiveness improved slightly in 2005. Domestic inflation has fallen to close the levels pertaining in our main trading partners and the euro has weakened against the

dollar, making our exports more competitive. However net exports are making a smaller contribution to economic growth than in recent years, with growth relatively dependent on domestic demand, which is at unsustainable levels. While the US current account imbalance is a risk outside of our control we can control some elements of competitiveness. In particular, the Bank argues that wage and price setting behaviour must recognise that the Irish economy is functioning in a low inflation environment.

Inflation: The Bank sees inflation averaging 2.5 per cent in 2005 and accelerating slightly to 2.75 per cent in 2006, partly reflecting the impact of oil prices. The Bank mentions how CPI inflation will be higher the EU HICP measure of inflation, due to the inclusion of interest rate rises in the CPI but not in the HICP. As Ireland's price level is higher than the European average, the Bank states "it is important that future pay developments take due account of productivity trends and of the low inflation environment in the single currency."

Fiscal Policy: The Bank deems that while the "broad thrust of the Budget was prudent" it did give some "expansionary stimulus to the economy". The underlying budgetary position is favourable, with the budget close to balance and the debt-to-GDP ratio stable at 28%. This would create room for manoeuvre in dealing with long term issues such as population aging and could prevent the economy being pushed into significant deficit if any of the possible shocks identified were to come about.

Table 1: Macro-Economic Forecasts for 2006

	Central Bank		**Dept. of Finance**
% change	**2005**	**2006**	**2006 Budget 06**
GDP	4.75	4.75	4.8
GNP	4.75	4.5	4.6
Employment	4.5	3.1	3.1
Unemployment	4.25	4.25	4.3
CPI	2.5	2.75	2.7

CC. Secretary General, Mr. Sullivan, Mr. McNally, Mr. Moran, Mr. Hegarty, Mr. O'Murchadha, Ms. O'Sullivan, Ms. Mackle, Ms. O'Brien, Mr. McCarthy, Press Office

*Our latest (unpublished) Budget Strategy Memo figures are 2005 GDP and GNP: 4.6% and 4.9%; 2006 GDP and GNP: 4.5% and 4.3%.

Speaking Points

- The Central Bank views the prospects for the Irish economy as broadly favourable this year. In overall terms, the Bank is forecasting GDP growth of 4¼ per cent; GNP is forecast to increase by 4½ per cent. The Central Bank's forecasts are broadly in line with my own Department's projections.

- I share the Bank's concern regarding the importance of maintaining and indeed improving the competitiveness of the economy. I welcome the call for restraint in prices and wages to maintain our competitive position.

- The Bank sees inflation averaging 2½ per cent this year and accelerating slightly to 2¾ per cent next year, partly reflecting the impact of oil prices. While inflation has moderated in recent years, I am conscious of the fact that the price level in Ireland is one of the highest - on some measures the highest - in the euro area. In these circumstances, maintaining inflation in line with that in our major trading partners is a priority.

- With regard to competitiveness, I am concerned about the decline in cost competitiveness in recent years. This is having an impact on employment in the exposed sectors of the economy - for example, employment in industry has been declining since 2001. Going forward, we must ensure that wage increases are in line with productivity improvements if we are to prevent any further deterioration in our competitive position.

- The Bank identifies the uncertainty regarding oil price developments and the potential for further exchange rate appreciation as risks to the Irish economy this year. I agree with these risks to our continued economic success.

13 November, 2007

Oifig an Aire Airgeadis

Aide Memoire for the Government

Financial Markets Developments

1. Matter-Issue for Information

The Tánaiste is submitting this Aide Memoire in accordance with his commitment to keep the Government informed of ongoing developments in the financial markets and their possible impact on Ireland. The Memorandum is based on the attached report of the Central Bank and Financial Services Authority of Ireland (CBFSAI) made to the recent meeting of the Domestic Standing Group on Financial Stability composed of the Department of Finance, the Central Bank and the Financial Regulator.

2. Background

Improvements in credit market conditions through September and October have stalled in the most recent period. International central banks had over recent months provided liquidity to the marketplace and cut interest rates (Federal Reserve) or held back on interest rates increases (ECB) to support confidence. However, the most recent disclosures by major financial institutions of their losses have created further uncertainty, e.g. the largest banks have already written down $24 billion (Citibank, USB, Merrill Lynch, etc), but Citibank's forecast of further near term write downs across the sector amounts to $40 billion.

At the root of the present difficulties are concerns about the state of the US property market (a Congressional Committee is reported as stating two million home owners are at risk of foreclosure) and a realisation that investors seeking higher yielding financial products have promoted new markets in riskier and more complex financial products, where it is now clear risk was not properly assessed or priced. Increased defaults on loans has undermined the value of many complex investment vehicles, confidence has become fragile, financial market conditions remain volatile and the expected normalisation of wholesale lending market conditions has not taken place to date.

3. Interbank market

The level of activity on the wholesale interbank lending market remains low and wholesale interest rates that banks rely on significantly to fund their activities remain high. Accessing funding through this market is difficult and the approach of year end will introduce a premium for cash as banks look to close their positions, increasing the cost of liquidity above its already high level.

4. Irish Impacts

There are two principle aspects to Irish impacts

Liquidity i.e. ability to finance day-to-day operations

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To date, financial market developments have not had any serious affects the liquidity of the Irish domestic financial system over and above the spill-over of international impacts but a number of areas remain a focus of attention.

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Domestic Irish institutions are financially sound with good quality assets and are well regulated. However, the general tightening of access to credit has required careful attention to liquidity management and work on contingency planning is being undertaken by financial institutions (e.g. seeking to restructure asset holdings to ensure these can be used as collateral for credit). A point to note is that at various times of the year, banks 'roll over' their credit positions, leading to a certain 'lumpiness' (i.e. periods when relatively significant portions of debt have to be rolled over). Irish banks face such a period early in the New Year, which may coincide with what some expect to be a 'second-round' of serious funding difficulties in international markets. This situation is being kept under careful review.

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The domestic financial institutions do not have significant direct exposure to sub-prime lending, though a number of Special Purpose Vehicles (SPVs) are registered in Ireland. While the resolution of any difficulties these encounter is a matter for their parent organisations and the supervisory authorities, reputational risks for Ireland remain.

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Market situation of major Irish retail banks

Irish banks have a good name internationally and have an asset base that that can be used as collateral to access liquidity within the Eurosystem. However, more generalised concerns about the Irish economy and the exposure of banks to the property sector has resulted in there being little investor interest in Irish banks and their share prices are up to 40% of their year high (February). The relatively small size of Irish banks in international terms and the depressed state of their share prices (notwithstanding their basic soundness and profitability) make them vulnerable to takeover. Such is the fragile state of investor confidence that the market learning of moves by one bank to restructure asset holdings (see above), led to reports of the institution having to access emergency liquidity. The institution concerned found it necessary to brief market participants to calm the situation. In this context and the current heightened sensitivity of the international financial system every report of difficulties receives magnified attention, e.g., recent reports of alleged wrongdoing by lawyers in relation to borrowing, though the amounts are small in the overall context, have been unhelpful but are of a scale that there is no potential for any prudential concerns.

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5. Broader economic impacts

On the longer term economic situation; there has been recognition that global credit difficulties will have an effect beyond the purely financial realm, though it is too early yet to determine the full extent. Lenders have already become more selective in extending credit and increasingly international commentators are factoring in that the increased cost and reduced availability of finance will spill-over into lower economic growth internationally in 2008.

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6. The Central Bank's Financial Stability Report CONFIDENTIAL

The Central Bank annually publishes a Financial Stability Report, providing an independent, comprehensive and authoritative assessment of the state of financial stability in Ireland; its 2007 report will be published on 14 November. In the present circumstances, it is to be expected that this will receive significant public and media attention.

While the report is independently prepared by the Central Bank, and its content is highly confidential until published, it is understood that the overall assessment of the Report is that financial stability risks have on balance increased since publication of last year's report.

On the **positive side**, the Report will welcome improvements with respect to some domestic risks.

- First, the upward momentum in residential property prices has abated, thus reducing the vulnerability posed by the previous substantial increase in house prices. House prices are now about 3.5 per cent lower on a year-to-date basis but the Bank states that this should be assessed against the gains in house prices in recent years. It concludes that the underlying fundamentals of the residential market continue to appear strong and the central scenario is, therefore, for a soft, rather than a hard, landing.
- Second, it reports that the rate of credit growth has eased and the rate of accumulation of private-sector indebtedness has moderated accordingly. Although the current rate remains high by international comparison and increases the vulnerability of the private sector to income and interest-rate shocks, there are also important mitigating factors such as the sector's overall net worth and the positive outlook for the economy which, when assessed alongside the slowdown in borrowing, reduce this vulnerability somewhat.

On the **negative side**, the Bank reports that issues have arisen with respect to the domestic economy arising from the longer-term deterioration in competitiveness, the moderation in the contribution of residential construction-sector activity to overall growth, and the possible effects of international financial-market turbulence. In this respect, the Bank notes that the domestic banks report no significant direct exposures to US subprime mortgages and very limited exposures through investments and credit lines extended to other financial companies or special purpose vehicles. It states that the domestic banks' shock absorption capacity has not been much reduced by these events.

We understand the central expectation of the CBFSAI, based on an assessment of the risks facing both the household and non-financial corporate sectors, the health of the banking sector and the results of recent in-house stress testing is that, notwithstanding the international financial market turbulence, the Irish banking system continues to be well placed to withstand adverse economic and sectoral developments in the short to medium term.

7. Contingency Planning

The Domestic Standing Group on Financial stability is continuing its work in line with EU requirements to strengthen financial stability planning arrangements in Ireland. This comprises part of the Government's Emergency Planning

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Arrangements generally. The DSG is also examining the lessons for Ireland from developments in Northern Rock in the UK including in relation to the powers available to the CBFSAI and the Minister for Finance to respond to any such situation arising in Ireland, as well as the issues for Ireland arising from the EU review of Deposit Guarantee arrangements.

8. Conclusion

It is important to emphasis that the Irish banking system is strong, liquid and well capitalised. However, should current market conditions continue Irish banks could have difficulties in accessing funding and may even be subject to a hostile takeover bid. It is important to continue to monitor the situation and the Financial Regulator has increased the frequency of its liquidity reporting requirement. In addition the Financial Regulator will meet with the Treasury Departments of the major banks in Ireland to discuss possible pressure points for funding as well as contingency plans should the interbank market remain tight.

Review of Area-Based Tax Incentive Renewal Schemes

Final Report

November 2005

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4.6.4 Scheme Impacts

A significant proportion of the Scheme output would have occurred without the tax incentives. This dead-weight element is estimated at a minimum of 46 per cent, and reduces substantially the benefits of the Scheme.

Some 40 per cent of activity under the Scheme was concentrated in the major urban areas of Longford and Carrick-on-Shannon. A common feature of both towns is that the Scheme did not operate within a dedicated area planning structure, with designation of specific areas or sites where market failure was evident. This reduced the urban regeneration benefits of the Scheme, as developments sometimes occurred on unsuitable or less than optimum sites.

Outside of these major urban areas, property-based market failure would not have been a factor to a significant degree. As it is estimated that approximately 60 per cent of housing development occurred outside these areas, benefits derived from addressing property–based market failures were absent from much of the Scheme.

The direct contribution of the Scheme to increasing economic demand was small, as commercial and industrial developments under the Scheme were few in number.

While, the Scheme has created demand for additional employment in the building industry, the economic benefits have not been significant due to the low levels of unemployment in the Scheme counties.

Significant housing output occurred under the Scheme. However, a substantial proportion of this output was taken up by existing residents. That is, that the additional housing encouraged additional household formation through young people setting up independent homes. Thus, a significant but unquantifiable element of housing output under the Scheme was not available to support population growth. While the aim of the Scheme viz. that of reversing population decline has been achieved, a significant proportion of the Scheme output did not contribute to that aim.

While many residential developments were modest, almost one in seven had a floor area in excess of 200 square metres, indicating that some house owners used the tax incentives to build or purchase very large dwellings.

Taking account of dead weight, at €59,300 per housing unit, the cost to the Exchequer is very substantial. By any measure, this is a very high price for the Exchequer to pay for incentivising housing development in the Scheme area. The implication is that the Scheme has proved to be an extremely expensive means of encouraging population growth. In present value terms, tax costs account for 29 per cent of build costs incurred by those developing new housing.

The tax costs of the Scheme are not offset to a significant degree by either direct income tax and PRSI payments by the construction industry or developer contributions. Taken together, these amount to less than 5 per cent of build costs.

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Table 5.24: Efficiency Indicators

Item	Value
Tax cost per housing unit (€)	47,483
Present value of tax costs per housing unit (€)	40,917
Ratio of undiscounted tax cost to build costs	35.2
Tax cost per sq. metre of commercial space (€)	604
Present value of a sq. metre of commercial space (€)	498
Ratio of discounted tax cost to commercial build costs	40.5

5.6 Conclusions

The Urban Renewal Scheme has resulted in a high level of investment in the designated urban areas. Up to end 2004, some 426 developments have been completed at a cost of €1,281m. There was a good mix of expenditure as between residential and industrial/commercial. There was also a balance between refurbishment and new build developments, although the latter naturally dominated in terms of Scheme expenditure.

The NPV of all tax forgone associated with Scheme up to July 2006 is estimated at €1,423m, of which residential projects account for €636m or 45 per cent and commercial projects account for €787m or 55 per cent. With regard to developments completed by end 2004, the tax cost is estimated to be €436m.

The Integrated Area Approach has worked well and the Scheme has had very positive impacts on reducing dereliction, which was one of its key objectives. The Scheme has been reasonably successful in delivering urban design benefits.

However, it has been only moderately successful in supporting the conservation of architectural heritage buildings.

With regard to economic benefits, the Scheme has contributed significantly to housing supply within the IAP areas. Over 4,500 residential units have been developed under the Scheme in the period to end 2004. The evidence is that the additional housing output has been taken up and there is little evidence of over supply or vacant dwellings.

The bulk of expenditure was on new-build, which accounted for € 78.7m or 64.2.per cent of total expenditure. Expenditure on refurbishment was relatively high at €43.5m (35.5 per cent).

To date, the Town Renewal Scheme has been less than successfully implemented, with only 372 out of total of 1,209 developments completed. In only 4.1 per cent of towns are more than 75 per cent of designated developments complete.

A sizeable minority of local authorities are dissatisfied with progress in implementing the Scheme.

For areas where progress has been poor, the major reasons are lack of interest on the part of developers or site owners. The emphasis on refurbishment within the Scheme proved unattractive to developers

Lack of local authority services and poor marketing of the Scheme were also cited as reasons for lack of progress.

The present value of all tax forgone associated with Scheme up to July 2006 is estimated at €149m, of which residential projects account for €71m or 48 per cent and commercial projects account for €77m or 52 per cent. With regard to developments completed by end 2004, the tax cost is estimated to be €51m.

There is some evidence that the Town Renewal Scheme was not as well managed as the Urban Scheme. Local authority resources were often spread too thinly across a number of towns. Either the allocation of greater managerial resources or a limit on the number of towns included in the Scheme would have produced better outcomes.

The impact of the Scheme has thus been relatively patchy. Where the Scheme was successfully implemented the impacts would have been on a par with those of the Urban schemes. This was not the case for a significant minority of towns.

Where successfully implemented, the Scheme, given its justifiable emphasis on refurbishment, had a strong impact on dereliction and conservation. Urban design issues featured less strongly than for the Urban Scheme. Because of the relatively low level of new build, economic impacts have not been to the fore. Community and social impacts were not really a feature of the Scheme, and there would not have been any real prospect of raising levies to fund initiatives in this area.

It must be recognised that there was substantial cross over between in terms of scale between areas designated under the Urban and Town Schemes. Larger towns in the Town scheme that had a relatively high level of designation for new build tended to derive similar economic benefits as did their counterparts in the Urban Scheme.

With regard to dead weight, it would appear that this was lower than for the Urban, as the higher risks in towns with lower populations made the tax incentives more crucial in the decision to develop a site.

7. Review of the Living over the Shop Scheme

7.1 Introduction

Under the 1986 Urban Renewal Scheme, certain areas in the five cities – Cork, Dublin, Galway, Limerick and Waterford, were designated for tax incentives aimed at tackling the issues of dereliction and decay, which were affecting inner city areas. In order to build on the progress made under this scheme in inner city areas, the Living over the Shop Scheme was introduced in 2001, in the five city boroughs of Cork, Dublin, Galway, Limerick and Waterford.

This Section of the report first sets out a description of the Scheme in terms of its objectives and eligibility conditions and tax benefits that apply. It then provides an overview of expenditure and tax forgone under the Scheme in Sections 7.3 and 7.4. Section 7.5 describes the outputs of the Scheme, while Section 7.6 assesses the Scheme impacts. Conclusions and recommendations are presented in Section 7.7.

7.2 Description of the Scheme

7.2.1 Objectives

The objectives of this scheme were to:

- Provide additional residential units in areas suitable and attractive for such development;
- Achieve greater economic use of such premises with a view to relieving the pressure on housing supply, particularly for rented residential accommodation;
- Promote sustainable development patterns and assist in fostering a living urban environment in certain designated streets; and
- Promote more sustainable use of existing building stock and infrastructure and relieve pressure for green field development.

Under the Living over the Shop Scheme, tax incentives were available for the construction and refurbishment of residential accommodation and associated commercial development of premises in the designated streets. As with the other Schemes, the closing date for the scheme is 31st July 2006 having been extended from the original date of 31st December 2004.

This section of the report begins with a description of the incentives available under the Living Over the Shop scheme. A breakdown of the expenditure, which has been incurred under the scheme, is then presented. The cost of the scheme to the Exchequer in terms of tax foregone in presented and overall outputs of the scheme are evaluated. An analysis of the scheme's costs and benefits is then conducted.

7.2.2 Designated Areas

Under the LOTS scheme, certain streets in the five city boroughs – Cork, Dublin, Galway, Limerick and Waterford - were designated. The decision, as to which streets

8. Future of the Schemes

8.1 Introduction

This section of the report considers the future of the schemes. This must be set against the backdrop of the overall tax costs to the Exchequer and the first part of the Section provides such an overview. As the capacity of Government to use such schemes depends on their compliance with the European Union's State Aid guidelines, this is followed by a summary of the current situation in that regard. Following this, the case for extension of the expiry date of the current schemes is evaluated. A comparison of the role of tax based incentives compared to other urban regeneration measures is then set out. The final two sub-sections consider appropriate reforms of the schemes and their future targeting.

8.2 Overall Exchequer Cost

Table 8.1 summarises the overall costs to the Exchequer arising from tax forgone. In respect of developments completed up to end 2004, the total Exchequer tax costs of the Schemes is estimated to be €639m. This is anticipated to treble by the end July 2006 expiry date to €1,933m. Almost 74 per cent of the total anticipated cost will arise in respect of the Urban Scheme.

Table 8.1: Total Present Value of Exchequer Costs of the Area-Based Tax Incentive Renewal Schemes

Scheme	Residential (€m)	Commercial (€m)	Total (€m)
Completed Developments			
Rural Renewal Scheme	119	21	139
Urban Renewal Scheme	166	270	436
Town Renewal Scheme	24	27	51
Living over the Shop Scheme	11	2	13
Total	320	320	639
All Developments			
Rural Renewal Scheme	277	48	326
Urban Renewal Scheme	636	787	1,423
Town Renewal Scheme	71	77	148
Living over the Shop Scheme	30	6	36
Total	1,014	918	1,933

Source: Consultants' Estimate
Note: Present values at 5 per cent; apparent errors due to rounding

9. Conclusions and Recommendations

9.1 Conclusions

Cost to the Exchequer

It is estimated that the area-based tax incentive Schemes will cost the Exchequer €639 m in tax forgone in present value terms in respect of developments undertaken to end of 2004.

By the end of July 2006, when the Schemes are due to expire, it is predicted that the costs to the Exchequer will have risen to €1,933m. Almost 74 per cent of these anticipated costs will arise in respect of the Urban Renewal Scheme.

The major impact on the Exchequer is yet to come, as even those developments completed by end 2004 will give rise to claims for tax relief for a considerable future period.

These tax costs are high relative to the outputs achieved. For example, the present value of tax costs represent up to 43 per cent of the building cost associated with developments undertaken as part of the Schemes.

The Rural Renewal Scheme

Th Rural Renewal Scheme has delivered a modest increase in housing output and has improved the quality of the housing stock in the participating areas. Overall, it has had relatively little impact on industrial and commercial development and thus directly on economic activity. However, it has helped vitalise the towns of Longford and Leitrim, through both residential and commercial developments.

With regard to the housing output under the Scheme, it is evident that there is substantial dead-weight and a significant proportion of the output would have occurred in any event. A key objective of the Scheme was to support a reversal of the population decline in the participating areas. There is evidence that much of the housing output has been taken up by existing residents, further increasing the dead weight associated with the Scheme. As a result, the Scheme has not represented value for money. This has been exacerbated by the tendency, on the part of a significant minority of participants to build relatively large houses.

It is now evident that the very substantial increase in housing output has now resulted in excess supply and that house prices are softening and rents have declined.

A positive feature of the Scheme has been the large number of participants, and thus a reasonably widespread distribution of the tax benefits. However, the Scheme, in common with the other area based incentive, has fundamentally adverse equity impacts.

The Urban Renewal Scheme

The Urban Renewal Scheme has been successfully implemented, and it is anticipated that by mid July 2006 a very high proportion of developments earmarked for the designated sites will have been completed. The structures put in place, including the Integrated Area Plans, have been vital in matching development to local needs and priorities. Areas where resources were applied to managing and marketing the Scheme were particularly successful.

The Scheme has had very positive impacts on dereliction and has been reasonably successful in improving urban design. With regard to economic impacts, the Scheme has enhanced housing outputs in the target areas. This housing has been taken up and there is no evidence of excess supply. Moreover, the Scheme had a strong emphasis on commercial development and has delivered significant benefits in this area.

The Scheme has been less successful in delivering social and community benefits, as significant funding for initiatives in this area was not raised. Because of the heavy involvement of residential investors in the Scheme and the increased supply of rental properties, concerns have arisen that there have been negative impacts on social integration. This has arisen because rental properties have often attracted a transient population, with excessive dependency on occupation by social welfare recipients.

While dead-weight continues to be an aspect of all such schemes, there is evidence that the Urban Scheme kick started developments in a number of areas, and was crucial in focusing developments on inner city locations, that developers might normally have eschewed.

While the Scheme has proved extremely valuable, its very success, together with the strength of the economy and the increase in private capital, has reduced the need for it going forward. Dead weight is now relatively high at the level of the individual project.

The tax benefits of the Scheme have accrued to relatively few higher income individuals. There has also been significant inflation of property prices as a result of the tax incentives and this has benefited a small number of landowners and developers. Thus, the Scheme has had strong negative income distributional effects, although this is to some extent inevitable when only a small number of sites are tax designated.

The Town Renewal Scheme

The Town Renewal Scheme has been less successfully implemented than the Urban Renewal scheme. A large number of developments at designated sites remain to be commenced. In a significant proportion of towns only a minority of developments have been completed by end of 2004. That said, some towns have benefited enormously from the Scheme.

Where progress has been poor, this is largely a result of lack of interest on the part of developers and site owners. To some extent this lack of interest reflected a level of risk of investment in relatively small towns, which the tax incentives were

insufficient to offset. It was also the result of the fact that in many towns the designations provided largely for refurbishment of existing commercial property and this proved less attractive to developers than new build.

There is some evidence that the Town Renewal Scheme was not as well managed as the Urban Scheme. Local authority resources were often spread too thinly across a number of towns. Either the allocation of greater managerial resources or a limit on the number of towns included in the Scheme would have produced better outcomes.

The impact of the Scheme has thus been relatively patchy. Where the Scheme was successfully implemented the impacts would have been on a par with those of the Urban schemes. This was not the case for a significant minority of towns.

Where successfully implemented, given its emphasis on refurbishment, the Scheme had a strong impact on dereliction. Urban design issues featured less strongly than for the Urban Scheme, as did conservation. Because of the relatively low level of new build, economic impacts have not been to the fore. Community and social impacts were not really a feature of the Scheme, and there would not have been any real prospect of raising levies to fund initiatives in this area.

It must be recognised that there was substantial cross over in terms of scale between areas designated under the Urban and Town Schemes. Larger towns in the Town scheme that had a relatively high level of designation for new build tended to derive similar economic benefits as did their counterparts in the Urban Scheme.

With regard to dead weight, it would appear that this was lower for the Urban, as the higher risks in towns with lower populations made the tax incentives more crucial in the decision to develop a site.

Living over the Shop Scheme

The Living over the Shop Scheme, as with its predecessors, suffered from low levels of take up. This is a problem that is unlikely to be overcome, as the disruption to retail activities and the loss of storage space act as a deterrent to shopkeepers. Additionally, over the shop residences may not be very attractive to prospective tenants. Because of low take-up, the impacts of the Scheme on the urban environment has been limited. However, the Scheme has been more successful in some urban areas than others. The key factor appears to have been the application of resources to managing and marketing the Scheme.

9.2 Recommendations

It is recommended, subject to compliance with EU State Aids policies, that the expiry date for the current Schemes be extended to end 2007. This would solely be to facilitate the completion of developments that have been granted planning permission under the scheme, but where work has yet to commence.

Thereafter, the Rural Renewal Scheme should not be continued. It is not regarded as cost-effective approach to the problems of rural decline, and is not a model that should be employed elsewhere in the country.

As the Living over the Shop Scheme has a narrow focus on fostering a living urban environment, it should be retained, despite the difficulties with take-up. It is recommended that the tax incentives be made available contingent on a commitment of resources by local authorities to managing the process.

With regard to the Urban and Town Renewal Schemes, the scale of economic activity and the availability of capital have reduced the need for such Schemes. That said, it is recommended that Government retain tax incentivisation as a tool of policy, should economic conditions require further action to regenerate urban areas.

If Government chooses to reintroduce area based tax incentivisation in the post 2007 period, then it is recommended that changes to the structure of the schemes be implemented to reduce the cost to the Exchequer and their inequitable effects.

These changes include:

- Targeting the schemes in areas or towns for which there is evidence of development activity, but where problem sites, such as old dock lands and industrial sites, are being neglected;
- Giving priority to urban areas identified as Gateways and Hubs in the National Spatial Strategy and to towns and cities that host RAPID areas;
- Ensuring that adequate resources are applied to the management of the Schemes;
- Incorporating structures to share experience and promote good practice
- Introducing measures to control abuse of the Schemes;
- Ensuring that designated sites have a prospect of being serviced;
- Establishing the Scheme for a sufficient duration to allow developers to respond;
- Increasing the level of owner-occupation in the housing output mix;
- In order to incentivise the latter, granting 100 per cent relief to owner- occupiers over ten years and restricting the investor relief to 50 per cent; and
- Improving the equity and cost effectiveness of the Schemes by allowing the relief in relation to a proportion of expenditure only.

Indecon Review of Property-based Tax Incentive Schemes

Report for the

Department of Finance

Prepared by

Indecon

17th October 2005

Review of Capital Allowances for Investment in Multi-storey Car Parks

Available evidence on the tax incentive for multi-storey car parks indicates that there has been a high level of uptake on the scheme. The incentive has been successful in increasing the supply of multi-storey car-parks but we do not see an economic case for government intervention in this sector. Capital spend on projects which have proceeded is estimated to be €61m at a gross Exchequer cost of €23m. The Indirect Exchequer Tax Revenues and the Net Tax Foregone estimates are adjusted for opportunity cost and deadweight. Future spend is estimated to be €13m.

Multi-Storey Car Parks: Summary of Indecon Estimates

Estimate	€ million
Capital Expenditure on Projects that have Proceeded	61
Gross Tax Costs of Allowances	- 23
Indirect Exchequer Tax Revenues	6
Economic Benefit	4
Net Tax Foregone	- 17
Capital Expenditure on likely Future Projects	13

Review of Relief for the Refurbishment of Certain Rented Residential Properties

Indecon also reviewed the property-based tax incentive on certain types of rented residential accommodation. There is very little awareness regarding the availability of these incentives and we believe usage has been very limited.

High Income Earners

Our analysis indicates that nearly all of the property tax incentives reviewed have been used primarily by high income earners. Structural features of the incentives including the restriction to rental income have had the unintended impact of facilitating this outcome. There is no doubt that the incentives have been a key mechanism for high income earners to reduce their tax liabilities. An assessment of the extent to which the individual tax allowances have been claimed by high earners is examined in the individual chapters dealing with each of the incentives.

Recommendations

Our general recommendations, applicable across all incentive schemes, are contained in the table overleaf.

2.6.4 Impact on Financial Returns to Promoters

Table 2.6 presents the views of the financial institutions, auctioneers and accountancy/tax professionals on the impact of the property-based tax incentives on the financial returns to promoters. Among financial institutions and accountancy/tax professionals, all respondents considered the incentives to have led to increased returns to promoters. Over 85% of auctioneers share this view.

Table 2.6: Views of Financial Institutions on the Impact of the Property-based Tax Incentive Scheme – Proportion of Respondents believing that the Scheme has Increased Financial Return to Promoters

Respondent Group	% of Survey Respondents	
	Yes, result of incentive	No, not a result of incentive
Financial Institutions	100.0%	0.0%
Auctioneers	86.7%	13.3%
Accountancy/Tax Professionals	100.0%	0.0%

Source: Indecon Confidential Surveys of Financial Institutions in Ireland.

Figure 2.8 illustrates the views of those surveyed by Indecon on the effect of the schemes on financial returns to promoters.

Table 14.1 General Recommendations on Property-based Tax Incentive Schemes

1.	All tax incentives schemes should require full disclosures of key information to the Exchequer by investors/promoters via a certification scheme or other mechanism to enable the full cost and impact of the schemes to be monitored.
2.	The decision to introduce any new tax incentives should be informed by a formal assessment of the likely costs and benefits.
3.	Where there is justification for government incentives the option of direct public expenditure as an alternative to tax incentives should be considered.
4.	Any tax incentive schemes which are introduced should have a defined lifespan of a maximum of 3 years and extensions should only be considered after evaluation of the results of a formal cost-benefit appraisal.
5.	Developers/investors in any tax incentive scheme should be responsible for securing independent certification that the conditions of the schemes have been met.
6.	Restrictions on capital allowances which focus exclusively on shelters on rental income rather than on personal income should be refocused.
7.	Consideration should be given to introducing a cap on total annual allowances which can be claimed by any individual.
8.	Differential allowances in any tax incentive scheme should be introduced depending on whether these allowances are being claimed at corporate or personal tax rates.

General Recommendation 1

All tax incentives schemes should require full disclosures of key information to the Exchequer by investors/promoters via a certification scheme or other mechanism to enable the full cost and impact of the schemes to be monitored.

A major problem from a public policy perspective which applies to many of the property schemes under review is an absence of information on the level of investment, the nature of investors and the costs of the schemes. With rigorous and innovative approaches Indecon has been able to overcome these significant information gaps for this study. Without this information it is not possible for policymakers to know the costs of the schemes or whether their continuation is valid or otherwise. This applies to all tax incentive schemes and it is in our view essential that policymakers have full and up to date information on an ongoing basis regarding such schemes.

14.3 Specific Recommendations for each Tax Incentive Scheme

Indecon has also made recommendations specific to each incentive scheme. Our specific recommendations are contained in Table 14.2. In many cases while the schemes have had a benefit our analysis suggests they have served their purpose and there is absolutely no case for future government incentives. Continuing to approve new projects would contribute to oversupply and represent a clear waste of scarce public resources.

In a number of cases on-going government support for the activity is needed (for example in case of third level buildings) but the tax incentives are an extremely high cost and wasteful mechanism to achieve the objectives. In a limited number of cases (private hospitals, nursing homes and childcare facilities) increased private sector investment is needed to address the economic and social needs in these sectors and would reduce demands on the public sector and have significant economic estimates.

For the incentives which we believe should not continue there is an important issue for the timing of projects which have already secured approval. We see little or no merit in requiring all of these projects to be completed in a very short timeframe. Such an approach would damage the construction sector and increase inflationary pressures. Permitting a much longer timeframe with an associated adjustment in allowable capital expenditure would reduce Exchequer costs and have other economic efficiency benefits.

Table 14.2 Specific Recommendations for each Property-based Tax Incentive Scheme

1.	There should be no further extension of capital allowances for hotels and holiday camps for projects which have not lodged a full and valid planning application before 31 December 2004.
2.	There should be no further extension of capital allowances for registered holiday cottages which have not lodged a full and valid planning application before 31 December 2004.
3.	The capital allowances scheme for sports injury clinics should be ended with immediate effect at the earliest feasible date.
4.	There should be no extension of the capital allowances for third level education buildings for projects which have not secured Ministerial certificate of approval by 31 December 2004.
5.	Additional public expenditure resources for third level education buildings should be provided.
6.	There should be no extension of the capital allowances for student accommodation for projects which had not lodged full planning applications by December 2004.
7.	The tax relief to lessors in respect of the expenditure incurred on the refurbishment of certain rented residential accommodation should be ended with immediate effect.
8.	There should be no further extension to the capital allowances for investment in multi-storey car parks for projects which had not incurred at least 15 per cent of costs by 30 September 2003.
9.	The capital allowance scheme for associated commercial or residential investments with park and ride facilities should be ended with immediate effect. We would support continuation of the incentive for specific investment in park and ride facilities.
10	Public expenditure to support park and ride facilities should be provided.
11.	Capital allowances for childcare facilities should continue subject to certain amendments.
12	Capital allowances for private hospitals should continue subject to certain amendments.
13.	Capital allowances for private nursing homes should continue subject to certain amendments.
14.	For projects under the hotel, holiday cottages, third level buildings, student accommodation and multi-storey car parks, which have already met the requirements for planning and/or Ministerial or other approvals a five year extension to the timescale for completion of the projects should be introduced but the level of all capital allowances claimed should be restricted to 50%.

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Independent auditor's Compliance Certificate to Irish Nationwide Building Society on the Quarterly Compliance Certificate to the Irish Financial Services Regulatory Authority for the quarter ending 30 September 2009

This report is made pursuant to Paragraph 27 of the Credit Institutions (Financial Support) Scheme 2008 ("the Scheme") in respect of Irish Nationwide Building Society and Irish Nationwide (I.O.M) Limited ("the Covered Institution") and in accordance with our engagement letter dated 13 February 2009.

We confirm and certify that we have examined the Quarterly Compliance Certificate ("the Certificate") signed by the Chairman and the Chief Executive of Irish Nationwide Building Society, dated 9 November 2009 and the Internal Report ("the Internal Report") to which it refers.

This Certificate has been prepared for the information of the Covered Institution solely to enable it to report to the Irish Financial Services Regulatory Authority ("the Regulator") on behalf of the Minister of Finance, as required by Paragraph 27 of the Scheme. It is released to the Covered Institution on the basis that our report shall not be copied, referred to or disclosed to any other party, in whole (save for the Covered Institution's or the Regulator's own internal purposes) or in part, without our prior written consent, provided however that the Minister for Finance may disclose this Report in whole or in part as he or she thinks fit. Our report should not otherwise be regarded as suitable to be used or relied on by any party wishing to acquire rights against us other than the Covered Institution for any purpose or in any context. Any party other than Covered Institution or the Regulator who obtains access to our report or a copy and chooses to rely on our report (or any part of it) will do so at its own risk. To the fullest extent permitted by law, KPMG will accept no responsibility or liability in respect of our report to any other party.

Respective responsibilities

The Chairman, Chief Executive and other members of the Board of the Covered Institution are responsible for ensuring that adequate procedures and internal controls are put in place to secure compliance with the requirements set out in the Paragraphs of the Scheme as they apply to the Institution and for confirming that the Covered Institution is in compliance with those requirements.

Our responsibility is to examine the Certificate issued by the Chairman and Chief Executive, together with the Internal Report to which it refers, and report our conclusions in respect of the statements made in the Certificate regarding compliance with those Paragraphs identified for our review We also report to you whether we consider that any information in the Certificate or Internal Report is inconsistent with information that has come to our attention in the course of undertaking work to fulfil our responsibilities under company law as the Covered Institution's statutory auditor.

The Paragraphs of the Scheme identified as within the scope of our examination have been determined in consultation with the Department of Finance and Regulator as those for which sufficiently objective criteria can be identified to assess compliance. On this basis, our review extends to all Paragraphs of the Scheme together with additional requirements as may be specified by the Minister under the Scheme but excluding Paragraph 20, relating to the charge payable by the Institution, on which we report separately. Our assessment of compliance with the assertions relating to consistency with matters of general public policy set out in Paragraphs 37, 44, 47 and 50 of the Scheme now includes those matters, in the manner set out in item 5 below.

Our conclusion is based on criteria determined by reference to the extant rules and guidance issued by the Regulator relevant to the Scheme's requirements and, where appropriate, directions from the Minister regarding specific matters.

Scope of assurance engagement

Our work was conducted having regard to the International Standard on Assurance Engagements 3000 "Assurance Engagements other than Audits or Reviews of Historical Financial Information" ('ISAE 3000') and consisted of the following procedures

1 reading the Certificate and the Internal Report and reviewing related workpapers prepared by Internal Audit and Compliance personnel;

2 meeting with the Chief Executive, Chairman of the Audit Committee and others as appropriate to discuss the findings and conclusions set out in the Internal Report;

3 considering the independence and experience of Internal Audit and Compliance personnel undertaking the work to support the Internal Report;

4 undertaking procedures designed to assess the adequacy of work undertaken by Internal Audit personnel and Compliance Officer and the reasonableness of findings and conclusions in the Internal Report, including
- making inquiries of persons responsible for undertaking the procedures set out in the Report,
- analysing supporting information
- appropriate testing procedures,
- inspecting relevant documents; and

5 assessing the reasonableness of assertions made in the Internal Report or related documents concerning consistency with matters of general public policy set out in Paragraphs 37, 44, 47 and 50 of the Scheme, and for which objective and verifiable procedures are not identifiable, by
- discussion and enquiry with relevant personnel
- assessing whether the assertions are consistent with information known in our capacity as auditor of the Institution
- obtaining representation from those charged with governance that they are not aware of any information inconsistent with those assertions;

6 assessing the consistency of statements in the Certificate and the Internal Report with information obtained in the course of undertaking work as the Covered Institution's statutory auditor.

Our procedures were planned taking into account the requirements of ISAE 3000 applicable to limited assurance engagements and as such are designed to provide assurance that is lower in scope than an audit conducted in accordance with International Standards on Auditing (UK and Ireland). Consequently, our conclusion is not expressed as an audit opinion.

Review conclusion (qualified)

Following completion of our review procedures outlined above we have detailed below our specific findings which are also highlighted in the Covered Institution's Internal Report.

- The Financial Regulator has requested the Society to strengthen its management team through the appointment of a Chief Risk Officer ("CRO") and Head of Commercial Lending ("HoCL"), to strengthen its credit resources and processes. The Society is currently in the process of recruiting a CRO and HoCL. In addition on an ongoing basis, the Society is reviewing its credit resources and processes.

- The Society and IOM do not maintain a database of all regulatory requirements and have not established a clear set of processes and protocols that would allow non-compliance of any applicable legislation, statutory duties and other regulatory requirements to be identified, responded to and rectified on a timely basis. We note that the Society's Compliance Department has been strengthened during the quarter and a number of initiatives in relation to establishing a database of regulatory requirements have been undertaken and are estimated by the Compliance Department to be completed at the later date of the quarter ending 31 December 2009 (previously 30 September 2009). In this regard we also note that during the quarter ending 30 September 2009:

  - the Society was in breach of sectoral concentration requirements relating to real estate and construction;

  - the Society was in breach of its solvency requirements imposed by the Financial Regulator;

  - the Society has not booked additional specific loan loss provisions in its management accounts which form the basis of its Regulatory Returns;

  - the Society's commercial loan book has increased and its residential loan book has decreased and that these movements are not in line with the Society's current business plan.

  In the absence of the database noted above, these matters should not be relied upon as an exhaustive list of all possible exceptions under Section 4 of the Scheme.

Except for the matters set out above, we confirm that nothing has come to our attention to indicate that the assertions by the Chairman and the Chief Executive in the Quarterly Compliance Certificate concerning the Covered Institution's compliance with the relevant Paragraphs of the Scheme as at 30 September 2009 are not, in all material respects, fairly stated or that those assertions are inconsistent with information of which we are aware in our capacity as statutory auditor of Irish Nationwide Building Society as at 30 September 2009.

Our report is provided on the basis that the Minister for Finance is satisfied with the Covered Institution's interpretations of its obligations as set out in the Covered Institution's Internal Report.

KPMG

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Chartered Accountants
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9 November 2009

III. The Crisis in Ireland

1. Macroeconomic developments and policies

This section looks at the role that macroeconomic conditions played in triggering the banking crisis in Ireland. First, however, it seems important to recall briefly the remarkable economic success story of the 1990s, including the dramatic rise in the standard-of-living of the Irish population, which preceded and accompanied the run-up to the crisis.

a. Economic developments

When Ireland joined the European Economic Community (EEC) in 1973, it was the poorest country in that grouping, and it continued to underperform the economic growth of the other members until the late 1980s. From then on, however, Ireland's economy experienced a rapid catching-up with the rest of Europe and became, next to Luxembourg, the member state with the highest per-capita income in the EU.

The turnaround in the late 1980s was triggered and underpinned by a range of successful government policies. Significant fiscal consolidation measures in the late 1980s were one important factor in creating stable economic conditions, against the background of earlier structural reforms. "Trilateral" wage agreements between unions, employers and the government ensured wage moderation, competitiveness and industrial peace which was instrumental in attracting large amounts of foreign direct investment. In this environment, Ireland benefited greatly from the launch of the EU Single Market which meant increased openness in the EU and better access to key markets. EU funds (up to 3 percent of GDP) were put to good use by financing public investment. Deregulation and low corporate taxes made the economy more flexible. The run-up to monetary union and membership in the euro area implied a shift to a permanently lower interest rate level. A long period of high growth attracted a large number of immigrants for the first time in Irish history and resulted in the highest population growth - by far - of all EU member states with positive demand and supply effects.

This highly successful phase of economic catching-up, while preserving macroeconomic stability, came to an end early in the past decade. Even though GDP-per-capita growth in Ireland continued to outperform per-capita growth in other EU member states until 2007, underlying developments were much less robust than in the 90s. The sources of growth shifted significantly and growth became demand-driven. Financial vulnerabilities increased.

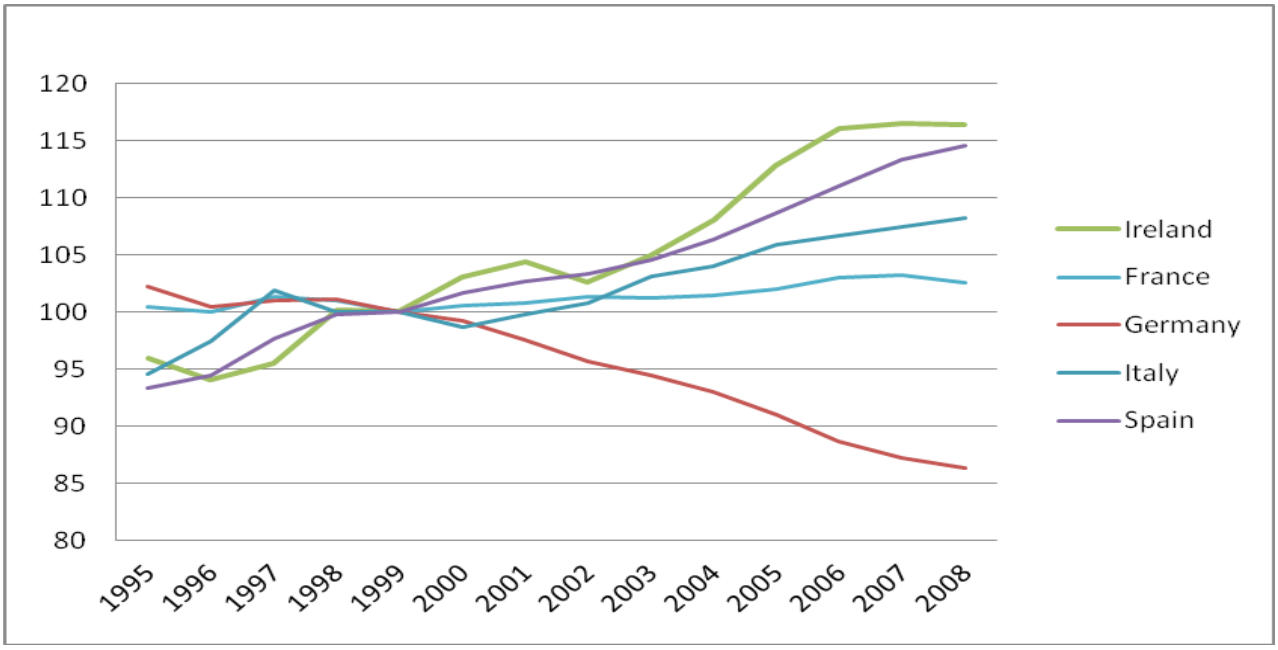
b. Wages and competitiveness

Wage settlements accelerated markedly from the late 90s, in absolute and in relative terms. The "trilateral" wage agreements continued but became less relevant as workers negotiated supplementary wage increases against the background of full employment and an overheating economy. Compensation per employee, which had grown more or less in line with the euro area

average until 1996, increased at two to three times the euro area average from 1997 to 2008. In nominal terms, annual gross wages in Ireland in 2007 were the highest in the euro area except Luxembourg. Ireland had also the highest price level in the euro area according to Eurostat statistics. Competitiveness deteriorated significantly. From 1999 to 2008, Ireland's real effective exchange rate increased more than that of any other country in the euro area.

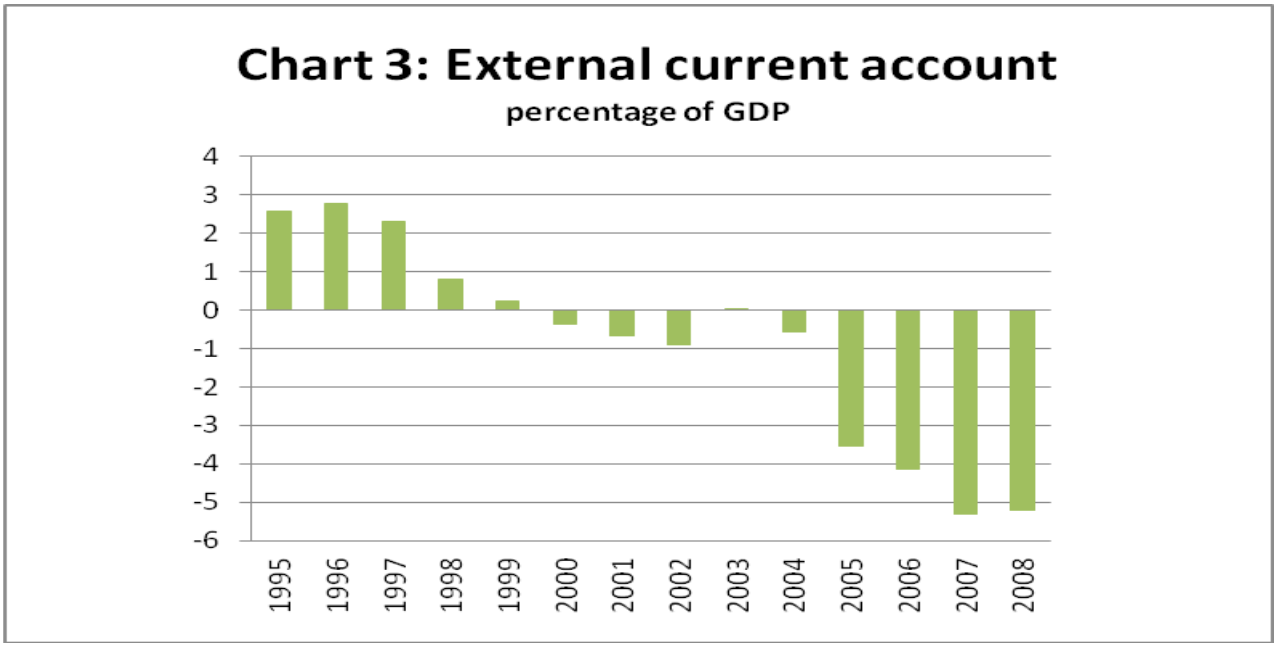
Of course, some loss of competitiveness is the natural mechanism through which growth is slowed in a euro area economy that is overheating. In Ireland, however, an imprudent expansion of bank lending, accompanied by an unwise policy on tax exemptions, resulted in this natural economic cycle becoming much more extreme than should have ever have been the case. The loss of competitiveness went much too far; and then the pro-cyclical swings in fiscal policy and the banking system, once the cycle turned, were bound to cause a sharp slowdown. This process was already underway when it was exacerbated by the savageness of the Lehman Bros shock.

Chart 2: Relative unit labour costs*
Index, 1999 = 100



Source: OECD
* Unit labour costs compared to Euro Area, total economy, double export weights.

Growth rates of public expenditures also accelerated to the highest pace among OECD countries (see below). The share of the construction sector in the economy became excessive; residential investment as a percentage of national output reached nearly 13 per cent in 2006, double its long-term average**,** and the share of employment in construction as percent of total employment also doubled from the 1990s to 2007. Analysis by the OECD indicates that Ireland was the most overheated of all advanced economies. Consequently, Ireland lost market shares in international trade (even compared to other advanced economies), the current account surpluses of the balance of payments shrank and turned negative from 2000 onward.



Source: OECD and European Commission

Why did all this happen after a decade and a half of very successful economic developments? What went wrong in Ireland?

To a certain extent, it may be human nature and hubris that lead to excesses after a long period of success. It is understandable that wages go up more when full employment is reached, for example. However, this increases the need for "good" policies which try to compensate and set incentives in such a way that vulnerabilities in the economy do not get out of control. In a monetary union, the challenge for policies becomes even greater as monetary conditions cannot be influenced directly and the (nominal) exchange is no longer a policy instrument.

This section looks at macroeconomic aspects of the situation while Section III.2. analyses what went wrong in the financial sector.

effects of EMU membership on the macroeconomic environment or even fueled the fire, in particular tax policies (see below).

At the same time, being a member of a large monetary union helped Ireland to survive better the global financial crisis. Without EMU, European currency markets would have been in turmoil in 2008-09. Funding problems for the banking sector would have become much bigger. Firms and households would have borrowed more in foreign currency, and would have been exposed to balance sheet risks. Coordination problems for national central banks would have been significant. None of the interlocutors in Ireland and abroad, with whom the authors of this report talked, questioned that EMU membership for Ireland has been, on balance, highly beneficial.

d. The fiscal stance

For a long time, Ireland's overall fiscal policy was considered to be exemplary because the country achieved fiscal surpluses every year from the mid-1990s to 2006, including the creation of a Pension Reserve Fund to make budget surpluses politically more acceptable.

However, the nominal budget figures mask an underlying deterioration in the fiscal situation after 1999. The cyclically-adjusted fiscal surplus was rather small during much of the last decade according to the data available at the time. As already mentioned, statistical tools to capture the full impact of asset bubbles on tax revenue are not well developed, otherwise it would have become clearer much earlier that the structural, underlying fiscal balance was much less favourable than assumed at the time. The IMF estimates now that in 2007, when the headline budget was approximately in balance, the underlying, structural deficit (taking into account the large positive output gap and the effects of the asset price bubble) had deteriorated to 8 ¾ percent of potential GDP and amounted to 4 to 6 percent in the run-up to the crisis. The conclusion is that overall fiscal policies were pro-cyclical during most years up to, and including particularly, 2007 thus adding markedly to the overheating of the economy.

This was the result of both public expenditure and revenue developments. The Irish public expenditure-to-GDP ratio increased during the years preceding the crisis although it remained low compared to the majority of EU countries. Expenditure increases were particularly marked in 2006 and 2007. Current expenditures, which had not kept pace with nominal GDP growth in the 1990s, grew faster than nominal GDP every year from 2001 to the crisis. In addition, from 2001 to 2007, ex-post growth in current expenditure was always higher than budgeted every year except one.

concerns might have been voiced internally.

Why did the IMF team get things so badly wrong? There are several explanations. First, the analysis was grounded largely on acceptance of the CBI view favouring the soft landing outcome for house prices. While some stress tests involved larger price falls, the possible rise in non-performing loans, NPLs, was, it appears, capped at 5% of all mortgage loans. Second, the neglect of commercial property lending was a crucial omission, Third, while the increased dependency on wholesale external funding by the banks was noted, no one considered what might be the catastrophic effect of a worldwide drying up of liquidity as actually occurred in 2008. Finally, the IMF team appeared to have had no inkling of the indecisiveness and lack of firm engagement underlying the detailed interaction between the Financial Regulator and key individual institutions, problems that were uncovered only much later by the Honohan inquiry.

These were serious shortcomings to which can be added the general approach at the time that favoured so-called principles-based, what is sometimes called light touch, financial regulation. The IMF, being a creature of its member countries, was undoubtedly heavily influenced by this prevailing philosophy. That said, in my view, it would have been incumbent on the FSAP report, as a minimum, to have posted a health warning and cited more explicitly the limitations that underlay the positive conclusions it presented. The Irish experience suggests that the absence of such warnings can seriously undermine the credibility of the IMF's work.

The third area is the budget. The last major area covered by the consultation reports was the budget. Until 2008, Ireland had been running small overall budget surpluses. However, the IMF staff generally urged that these surpluses be increased somewhat, both to counteract what was thought to be overheating, often described as using contra-cyclical policies, and to build up a reserve against future unknowns. By and large this recommendation fell on deaf ears.

A far more serious shortcoming in my view was the conclusion by the IMF up to and including 2007 that the underlying, that is, cyclically adjusted, fiscal balance, CAB, was in approximate balance throughout 2007. This CAB measure attempts to strip out so called temporary factors, such as higher than average growth or transitory revenue flows, that mask the true underlying fiscal picture. In Ireland's case, the IMF, together with the Department of Finance, went along with a common EU methodology used to calculate the CAB.

The problem was that this methodology assumed that the high output levels reached by Ireland in the first half of the decade of the 2000s, which in turn reflected the massive reliance on the construction sector, were permanent structural features. The same assumption applied to the artificial boost in revenues associated with the property boom. Using more technical phraseology, it was assumed that actual output was close to potential output, but the reality was the other way around. Irish output throughout the latter years of the boom was far above sustainable potential. After all, as was pointed out by very few at the time, there was a limit to how many homes people can actually live in. By 2009, the assumptions underlying the earlier IMF calculation of the CAB were clearly untenable. In a quite dramatic reversal, the 2009 IMF report re-estimated the CAB for earlier years using a quite different methodology. For example, the CAB for 2007 turned out to be a deficit of 8.7% of GDP compared with an originally estimated surplus of 0.7%, a change of more than nine percentage points in GDP for the same year. Seldom has the picture of a country's fiscal health deteriorated so sharply and so quickly. The question can be asked if, starting from 2009, a far more appropriate methodology was used, why this was not done in earlier years or at least presented as a variant of the standard approach that had been uncritically accepted.

The last area concerns the overall macroeconomic interlinkages. The various IMF reports did point out to some extent the vulnerabilities associated with particular sectors, that is, property, financial and fiscal, but they explore the dynamics of a possible downward self-reinforcing spiral such as eventually ended up happening. At best, some first round effects were considered. While precise quantification of a worst case scenario would have been very difficult, some key elements could have been addressed more explicitly. It is possible that the IMF reports did not go down this route because of the somewhat speculative nature of what was involved. It would likely also have been seen as highly alarmist, and provoked strong negative market and, one assumes, political and media reaction. Nevertheless, that complication could have been dealt with by raising the issues confidentially with the Irish authorities as opposed to including a discussion in the published staff report. However, there is no evidence available indicating that such discussions occurred. There could have been pressures both within the IMF and *vis-à-vis* the Irish authorities to dismiss the possibility of such very negative outcomes. The consensus, reflecting perhaps strong elements of groupthink, was to stay with the soft landing hypothesis and to hope that perhaps, in the end, our luck would hold out.

I will turn briefly to the second period, 2008 to 2010, when, of course, things were quite different. The 2007 report was the last rosy IMF report on Ireland. By the time of the 2009 consultation two years later, the picture had changed dramatically. The property market was in free fall, the budget deficit had exploded, unemployment was soaring and the full extent of the banking disaster was starting to emerge. However, no consultation took place in 2008. Normally, the consultation would have taken place as scheduled, unless the authorities indicated a desire to postpone it. The reasons underlying this hiatus are not in the public domain. The postponement meant that during this critical two-year period, from mid-2007 to mid-2009, there was no formal dialogue between the IMF and the Irish authorities. This must be considered a significant flaw. If IMF surveillance is to be meaningful, there should be at least the opportunity for timely inputs from the IMF at a time when, amidst global financial disarray, many key policy options were being considered on the Irish side.

In particular, there are no indications, at least on the public record, suggesting that the IMF staff provided input on the end of September 2008 bank guarantee, either before this decision was taken or afterwards. The 2009 consultation report described the guarantee but did not offer any views as to its appropriateness or otherwise. It did, however, contain a useful table summarising the key features of guarantees provided by various other countries during the past 30 years. This table is summarised as part of chapter 10 on page 214 of the book Dr. Murphy and I wrote. The chapter deals extensively with the guarantee decision. Perhaps contrary to what is sometimes said, it appears from this table that the coverage of the Irish guarantee was not that radically different from that contained in several other earlier guarantees.

Overall, it seems that around this critical time, the IMF did not provide sufficient timely professional technical advice to the Irish authorities. Whether this was primarily a supply side issue, perhaps because the IMF was busy elsewhere, or reflected demand side factors, because perhaps the authorities preferred not to hold the consultation in 2008, remains an important question to which I do not have the answer.

I thank the Chairman and committee members for their attention. I am, of course, very happy to answer any questions they may have on the foregoing or on any other related aspects covered in our book or elsewhere. I received a list of possible questions that committee members may raise and I am certainly happy to do my best to try to answer them as far as I can.

Chairman: Thank you, Dr. Donovan. Before I bring in the lead questioners, he might deal

THEME: R4

Appropriateness and effective utilisation of the expert advice

LINE OF INQUIRY: R4c

Analysis and consideration of the response to contrarian views (internal and external)

Minister,
from John McCarthy

ESRI Spring 2006 Quarterly Economic Commentary

The ESRI Spring 2006 Quarterly Economic Commentary will be published tomorrow. The ESRI are forecasting GDP growth of 4.8 per cent this year, a slight acceleration from the 4.7 per cent outturn last year. GNP this year is forecast to rise by 5.1 per cent, compared to the 5.4 per cent outturn last year. These overall growth rates have been revised upwards slightly from the previous Commentary. The ESRI are projecting employment to increase by 67,000 (3.4 per cent), resulting in an unemployment rate of 4.4 per cent this year. CPI inflation is forecast to average 2.8 per cent. The overall macroeconomic projections are broadly similar to our own (see table 1 below).

Table 1: Macro-Economic Forecasts for 2006 (growth rates unless otherwise stated)

	ESRI	Dept. of Finance
GDP	4.8	4.8
GNP	5.1	4.6
Employment	3.4	3.1
Unemployment (rate)	4.4	4.3
CPI	2.8	2.7

Notwithstanding the relatively favourable outlook for the economy, the ESRI identify a number of areas of concern. In particular, concern is expressed regarding the acceleration in house price inflation since last Autumn, which the ESRI view as increasing the possibility of a house price bubble. On the basis of the OECD analysis (which argued that prices were overvalued by 15 per cent last summer), the ESRI suggest that the acceleration in house price inflation in the interim period raises the level of overvaluation and hence increases the probability of a sharp adjustment. Notwithstanding these concerns, the ESRI still view a 'soft landing' as the most likely outcome for the housing market.

In addition, the ESRI identify the loss in competitiveness as one of the factors behind the sharp slowdown in export growth last year (exports rose by just 1.8 per cent last year despite a strong world economy). The ESRI argue that policy can address this deterioration in competitiveness in a number of ways. Firstly, it is argued that fiscal policy should not add to demand at a time when the economy is operating at close to full capacity. They caution against an excessively stimulatory fiscal policy which would lead to overheating and a further loss in competitiveness. In addition, the ESRI acknowledge that a greater level of competition in the economy can contribute to lowering inflationary pressures. Therefore, greater competition in sectors such as public houses, the legal profession, pharmacies and the bus market is recommended.

CC. Secretary General, Mr. McNally, Mr. Moran, Mr. Hegarty, Press Office

Speaking Points

- I welcome the publication of the Spring Quarterly Economic Commentary from the ESRI.

- The ESRI view the short-term prospects for the Irish economy as positive, with GDP projected to rise by 4.8 per cent this year (GNP by 5.1 per cent).

- I share the ESRI's assessment regarding the outlook for the economy. On Budget day, I forecast GDP growth of 4.8 per cent this year (GNP growth of 4.6 per cent). At the same time, I identified several risks – both domestic and external – to this relatively benign outlook.

- The ESRI envisage a further strong performance in the labour market this year, with employment growth of 3.4 per cent projected (the equivalent of 67,000 net new jobs). Our unemployment rate is forecast to remain amongst the lowest in the EU.

- I note the ESRI's concern regarding the recent acceleration in the rate of house price inflation.

- On balance, it still appears that a soft landing remains the most likely outcome for the housing market. The large increase in housing supply in recent years can reasonably be expected to restore balance between housing demand and supply and have a moderating impact on house price inflation. Nevertheless, there are risks and we must be cognisant of these.

- I agree with the ESRI views on the need to reduce inflationary pressures in the economy in order to improve competitiveness.

Tánaiste,
from John McCarthy

ESRI Summer 2007 Quarterly Economic Commentary

The ESRI Summer 2007 Quarterly Economic Commentary (QEC) will be published tomorrow. The ESRI are forecasting GDP growth of 4.9 per cent (4.8 per cent in GNP terms) this year. These figures do not take into account quarterly national accounts data which will be published by the CSO tomorrow morning. The rate of growth is projected to moderate to 3.7 per cent in both GDP and GNP terms next year. The ESRI's view of prospects for this year and next is broadly in line with our own current internal view.

Macro-Economic Forecasts (per cent growth rates unless otherwise stated)

	ESRI (Summer QEC)		**Dept of Finance** (Budget day)	
	2007	2008	2007	2008
GDP	4.9	3.7	5.3	4.6
GNP	4.8	3.7	5.3	4.6
Employment	2.8	1.2	3.5	2.1
Unemployment (rate)	4.7	5.0	4.4	4.5
CPI	4.9	3.0	4.1	2.4
GGB (per cent of GDP)	1.1	1.2	1.2	0.9

While the ESRI see the slowdown as being moderate, the possibility of a sharper slowdown is not ruled out. In particular, the risk that the current high rate of inflation begins to feed into wage demands is identified as a cause for concern, particularly in an environment in which productivity growth has been modest. While acknowledging that the labour market in Ireland is reasonably flexible, the ESRI also argue that policy responses to tackle wage inflation are limited in the short term. However, it is suggested that policy can exert an influence on wages through limiting benchmarking increases under the next round. In addition, the Government is urged to adopt a cautious approach to calls for a renegotiation of the national wage agreement.

An article contained in the QEC (by UCD Professor Morgan Kelly) will argue that **real house prices in Ireland could decline substantially**. It should be noted that this paper is nothing new – a version of the paper received considerable media attention in recent months. The analysis considers house price developments in OECD countries since 1970, and finds a strong relationship between the size of the initial increase in prices and the subsequent fall. If this same relationship was to hold for Ireland, then real house prices would decline by 40 – 60 per cent over a period of 8 – 9 years. It is also argued that policy will not be able to address any decline in house prices; in particular, it is argued that stamp duty cuts will not change buyers' self-fulfilling incentive to wait and see if prices fall further.

CC. Secretary General, Mr. O'Brien, Mr. McNally, Mr. McGrath, Mr. Gallagher, Press Office, Mr. Steadman

Speaking Points (if required)

Growth prospects

- I note the ESRI's view of economic trends this year, with GDP growth of 4.9 per cent (GNP of 4.8 per cent) being projected. At Budget time, my own Department's forecasts were for GDP and GNP growth of 5.3 per cent. Either way, growth of this magnitude is good and we must be careful not to talk down the economy.

- At this stage, it is fair to say that the prospects for next year are less benign, mainly reflecting an easing in domestic demand. However, growth is likely to remain strong by international standards.

- Our economic fortunes in the coming years will increasingly depend on achieving an improved export performance. This is why we need to improve our cost competitiveness.

Housing market (in response to the Morgan Kelly paper)

- We must be careful that we do not over-react to the current easing from the very high levels of activity.

- House prices have fallen back slightly in recent months, although prices still remain above their levels this time last year.

- I share the view of most commentators that house price increases in recent years have been underpinned by many factors including a strong economy, increases in employment and earnings, reductions in taxation and lower interest rates resulting from participation in monetary union.

Tánaiste,
from John McCarthy

ESRI Autumn 2007 Quarterly Economic Commentary

The ESRI Autumn 2007 Quarterly Economic Commentary (QEC) will be published tomorrow. The ESRI are forecasting GDP growth of 4.7 per cent this year, easing to 2.7 per cent next year. GNP growth of 4.4 per cent is projected for this year, moderating to 2.9 per cent next year. These figures do not take account of second quarter national accounts data published by the CSO this morning, which show that GDP expanded by 6.7 per cent year-on-year in the first half of this year (GNP by 5.7 per cent).

Macro-Economic Forecasts (per cent growth rates unless otherwise stated)

	ESRI (Summer QEC)	
	2007	**2008**
GDP	4.7	2.7
GNP	4.4	2.9
Employment	2.5	0.6
Unemployment (rate)	4.8	5.6
CPI	4.9	3.4
GGB (per cent of GDP)	0.7	0.0

In terms of the fiscal and economic projections, a number of issues arise:

- the ESRI are now projecting an Exchequer deficit of €1.4 billion this year; immediately post-Budget last year they were forecasting a surplus of €1.0 billion for this year (citing stronger taxes for 2007 as the reason), and yet this €2.4 billion swing in their projection is largely unexplained;
- notwithstanding the moderation in consumption, investment and exports growth (all of which have an import content), the ESRI have assumed a fairly high rate of import growth. This would not seem to be internally consistent and the impact is to lower the rate of overall GDP growth next year.

In terms of fiscal policy, the ESRI are recommending slower growth in public current spending next year. Notwithstanding this, they see a mildly stimulatory budget as being affordable in the context of prudent fiscal management. The Commentary also suggests that concerns regarding the inflationary impact of the NDP are receding given the slowing of activity in construction. We would see this as somewhat disingenuous given that these concerns mainly originated from the Institute, and that it was ourselves who argued that such concerns were misplaced given our view at the time that lower housing output would free up resources for completion of the NDP without generating inflationary pressures.

The ESRI see the current adjustment in the property market as being part of a process of returning the Irish economy to a more sustainable growth path, and they do not see a role for Government in 'propping up' prices or activity. In terms of house prices, the ESRI are less explicit than in the previous commentary, but nonetheless suggest an over-valuation of around 10 per cent by end-2008 and warn that financial market turbulence could result in a sharper decline in house prices.

CC. Secretary General, Mr. O'Brien, Mr. McNally, Mr. McGrath, Mr. Gallagher, Press Office, Mr. Steadman

Speaking Points (if required)

- I note the publication of the Quarterly Economic Commentary from the ESRI today. They are forecasting GDP growth of 4.7 per cent this year (4.4 per cent for GNP).

- The Institute's forecasts for next year would appear too pessimistic in my view at this stage. Nevertheless, their forecasts still imply that economic growth in Ireland will be in excess of that in the euro area as a whole.

- While the scale of moderation next year is open to debate, it is fair to say that we are entering a more uncertain economic environment. However, if we continue to implement prudent, sensible fiscal policies – while giving spending priority to those areas which enhance our productive potential – then I am confident that the short-term blip will be temporary.

- Lower output and employment in the construction sector highlights the need to find alternative sources of growth to drive the economy forward. For a small, trading nation such as Ireland, long term sustainable increases in living standards can only be attained through supplying goods and services to the global economy. Therefore, future income gains will increasingly depend on improving competitiveness.

- I also note that the ESRI believe that the slowing of activity in construction means that their initial concerns about the inflationary impact of the NDP are receding. I and my Department have been saying this ever since we launched the NDP earlier this year.

- My Department will publish revised forecasts in the *Pre-Budget Outlook* in October.

Minister,
from John McCarthy

European Commission Spring 2007 Economic Forecasts

The Commission will release their Spring 2007 economic forecasts for the EU, the euro area, and individual European countries on Monday. **We have not seen the forecasts except for the Irish figures which have been provided on a confidential basis**.[1] The Commission view the global economic prospects as generally favourable. In particular, the EU economy is projected to perform well this year, with domestic demand being the main driving force behind growth. However, growth is projected to moderate in the US, mainly reflecting the ongoing adjustment in the US housing market.

Irish Economy
GDP in Ireland is projected to rise by 5.0 per cent this year, with domestic demand (mainly consumption and investment) being the main driver of growth. This is a slight downward revision from the Commission's previous forecasts (published last November). Employment is forecast to increase by 3.4 per cent, resulting in an unemployment rate of 4.6 per cent. HICP inflation is forecast to average 2.6 per cent. This outlook is broadly similar to our own forecasts for this year.

Growth is projected to moderate to 4.0 per cent next year, mainly on foot of lower new housing output as well as the ending of the impetus to personal consumption from the ending of the SSIA scheme. The downward revision to the growth forecast for next year is in line with downward revisions from other commentators in recent weeks.

In terms of the public finances, the Commission refer to the 2007 Budget as being expansionary. However, this is in line with their assessment of the Stability Programme Update and so is not a 'new' development.

The Commission identify a number of risks to the outlook in Ireland, including:

- the exposure of the economy to the construction sector;
- the increase in personal indebtedness;
- the exposure of the Irish economy to economic developments in the US.

Table 1: EU Commission Forecasts for Ireland (growth rates unless otherwise stated)

	EU Commission		Department of Finance	
	2007	**2008**	**2007**	**2008**
GDP	5.0	4.0	5.3	4.6
Employment	3.4	2.1	3.5	2.1
Unemployment (rate)	4.6	4.7	4.4	4.5
HICP inflation	2.6	2.2	2.6	2.0
GGB (% GDP) *	1.5	1.0	1.1	0.9

* The 2007 GGB figure refers to our April Maastricht figure. All other DoF data are Budget day forecasts.

CC. Secretary General, Mr. O'Brien, Mr. McNally, Mr. McGrath, Mr. Gallagher, Press Office

[1] In the recent past, the Commission forecasts have been leaked in advance of publication. As a result, the Commission have decided not to distribute their forecasts to the Member States until the documents have been published. Nevertheless, there has been a discussion in general terms between forecasters in the Member States and in the Commission regarding the outlook for the major regions.

Speaking Points

- The Commission view the prospects for the global economy as broadly favourable. In particular, growth in both the EU and the euro area is likely to remain relatively robust this year.

- The Commission are forecasting another year of robust growth for the Irish economy this year, with GDP projected to rise by 5 per cent. Domestic demand is identified as being the primary driver of growth.

- This favourable outlook is broadly similar to my own view. At Budget time, my Department forecast growth of 5.3 per cent for this year in both GDP and GNP terms.

- Today's analysis from the Commission illustrates that such a rate of growth in Ireland, if realised, would again be amongst the highest in the euro area.

- The Commission identify a number of risks facing the economy, including the exposure to the construction sector and rising household indebtedness. On the external front, our exposure to the US economy is highlighted.

- I note the Commission's concerns regarding the exposure of the economy to the construction sector. However, as housing output eases, as is generally expected, this will free up resources for completion of the recently launched *National Development Plan*.

August 2006
IMF Country Report No. 06/293

Ireland: 2006 Article IV Consultation—Staff Report; Staff Supplement; and Public Information Notice on the Executive Board Discussion

Under Article IV of the IMF's Articles of Agreement, the IMF holds bilateral discussions with members, usually every year. In the context of the 2006 Article IV consultation with Ireland, the following documents have been released and are included in this package:

- the staff report for the 2006 Article IV consultation, prepared by a staff team of the IMF, following discussions that ended on May 17, 2006, with the officials of Ireland on economic developments and policies. Based on information available at the time of these discussions, the staff report was completed on June 27, 2006. The views expressed in the staff report are those of the staff team and do not necessarily reflect the views of the Executive Board of the IMF.

- a staff supplement of July 18, 2006, updating information on recent developments.

- a Public Information Notice (PIN) summarizing the views of the Executive Board as expressed during its July 26, 2006 discussion of the staff report that concluded the Article IV consultation.

The document listed below has been or will be separately released.

Financial System Stability Assessment Update

The policy of publication of staff reports and other documents allows for the deletion of market-sensitive information.

To assist the IMF in evaluating the publication policy, reader comments are invited and may be sent by e-mail to publicationpolicy@imf.org.

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EXTERNAL RELATIONS DEPARTMENT

Public Information Notice (PIN) No. 06/88
FOR IMMEDIATE RELEASE
August 7, 2006

International Monetary Fund
700 19th Street, NW
Washington, D. C. 20431 USA

IMF Executive Board Concludes 2006 Article IV Consultation with Ireland

On July 26, 2006, the Executive Board of the International Monetary Fund (IMF) concluded the Article IV consultation with Ireland.[1]

Background

Ireland's economic performance remains strong. In recent years, real GNP growth was one of the highest among industrial countries; the unemployment rate was among the lowest; and HICP inflation declined to close to the euro area average. Employment growth was rapid, reflecting strong immigration and rising labor force participation. This remarkable performance reflected both good policies and fortunate circumstances. Prudent government spending led to declining government debt; low taxes on labor and business income encouraged labor supply and investment; and flexible labor and product markets helped growth. At the same time, favorable demographics boosted the working-age population, and participation in EMU lowered interest rates.

[1] Under Article IV of the IMF's Articles of Agreement, the IMF holds bilateral discussions with members, usually every year. A staff team visits the country, collects economic and financial information, and discusses with officials the country's economic developments and policies. On return to headquarters, the staff prepares a report, which forms the basis for discussion by the Executive Board. At the conclusion of the discussion, the Managing Director, as Chairman of the Board, summarizes the views of Executive Directors, and this summary is transmitted to the country's authorities.

However, economic activity has become reliant on building investment and competitiveness has eroded. The share of the construction sector in economic activity has increased and is now one of the highest in Europe. Bank credit to property-related sectors has grown rapidly and now accounts for more than half of total bank lending. Household debt as a share of household disposable income rose to about 130 percent in 2005, among the highest in Europe. Reflecting the expansion of the labor-intensive construction and services sectors, labor productivity growth has declined. The combination of the slowdown in productivity growth, faster wage growth in Ireland compared to its trading partners, and the appreciation of the euro, has led to an appreciation of the ULC-based real effective exchange rate. Partly as a result, the contribution of net exports to growth has fallen steadily since 2001. After being in balance for several years, the external current account registered a deficit of about 2½ percent of GDP in 2005.

Executive Board Assessment

The Executive Directors commended Ireland's continued impressive economic performance, which has been supported by sound policies, including prudent fiscal policy, low taxes on labor and business income, and labor market flexibility. Economic growth is strong, unemployment is low and labor participation rising, and government debt has been reduced dramatically over the past two decades. Nevertheless, Directors observed that growth has become increasingly unbalanced in recent years, with heavy reliance on building investment, sharp increases in house prices, and rapid credit growth, especially to property-related sectors. At the same time, competitiveness has eroded, reflecting the combination of faster wage growth in Ireland compared to its trading partners, declining productivity growth, and the appreciation of the euro against the U.S. dollar. Directors observed that Ireland's small, highly open economy is also vulnerable to external shocks.

Directors expected economic growth in 2006–07 to remain strong, driven by domestic demand and accompanied by a widening current account deficit and continued rapid credit growth. While the contraction of the construction sector to a more sustainable size over the medium term is likely to be smooth, Directors noted that an abrupt correction cannot be ruled out.

Directors welcomed the Financial System Stability Assessment Update, which finds that Ireland's financial sector soundness indicators are generally strong and that the major lenders have adequate buffers to cover a range of shocks. The recent increase in the risk-weighting on high loan-to-value residential mortgages is an important signal of the need for banks to differentiate between higher- and lower-risk lending within an asset class. Directors suggested that the Financial Regulator continue to monitor banks' risk management practices, including for commercial property lending. Going forward, they called for continued updating of the stress-testing framework, and further strengthening of the regulatory and supervisory framework, especially for insurance.

While recognizing that Ireland's fiscal position is sound, most Directors considered that a modest fiscal tightening would be desirable in 2007, given the strength of domestic demand, potential risks of a hard landing, and the need to prepare for population aging. Slowing the growth of current spending to slightly below nominal GDP growth would also help prevent inefficiencies that could otherwise emerge given the rapid increases in spending in recent years. A number of Directors, however, saw less merit in fiscal tightening at the current juncture, pointing to the need for further increases in spending to achieve social goals, as well as to the recent tightening of euro area monetary policy. Directors agreed that improvements in public services remain a key priority, and, in this context, encouraged the authorities to focus on value for money, including by monitoring government outputs and extending multi-year envelopes to current spending. They welcomed the authorities' plans to further deepen the public debate on fiscal priorities.

Directors considered that continued wage moderation and labor market flexibility are essential to support competitiveness. The implementation of the new social partnership agreement should continue to allow flexibility in wage increases at the firm level and minimize the increase in the restrictiveness of employment protection legislation.

Business Planning Review - 3 March 2006
Budget and Economic Division

ISSUES NOTE

The work of Budget falls into two distinct areas – Budget and Economy.

The Economy - reporting to David Hegarty

Unit	Staff
Economic Forecasting and Analysis	Sharon Daly, Patrick Mullane
Prices and Competitiveness	John McCarthy, Michael Haugh
Labour Market and International Economy	Orla O'Brien, Scline Scott, Michelle Dalton
Construction Sector Analysis	Marie Mackle
Longer-term Analysis, Lisbon and Modelling	Loretta O'Sullivan, John Howlin, Denise O'Connell

The Budget - reporting to Barra O'Murchadha

Unit	Staff
Fiscal Policy and Budget Coordination	Brian Finn, Aoife O'Sullivan, John Uhlemann
Tax Forecasting and Analysis	Donal Murtagh, Alan Mahon
EU Fiscal Reporting and Statistical Analysis	Ciaran Judge, Margaret O'Donnell, Eddie Tierney
Budgetary Surveillance & SGP	Joe Kirwan, Laura Casey
Budgetary Surveillance & Social Partnership	Anne Donegan, Colm O'Connor, Colm Forde

Economic Analysis and Forecasting & Prices and Competitiveness

(Sharon Daly, John McCarthy, Patrick Mullane and Michael Haugh)

First round of forecasting for the BSM will start shortly. The issues that have to be addressed include private residential housing output, SSIA, commodity prices, interest and exchange rates and uncertainties in the international environment.

Impact of SSIA maturity remains an imponderable; we have assumed a low propensity to spend the proceeds

Growth has been largely, indeed almost exclusively, driven by domestic demand over last couple of years. Forecasts assume a recovery in export performance but we cannot be sure that this will materialise. We need to get a better handle on factors driving the manufacturing (and export) sectors

The economy is very exposed to the fortunes of the construction sector. While medium-term underlying demand for housing is probably now higher that the previously oft-quoted 50,000 units figure, the biggest risk is the possibility that some external shock negatively interacts with and affects the sector.

Preparation of new SPU update in late September or early October will pose challenges as it should carry more relevance to policy making than its predecessor the ERO.

Construction and Sectoral Analysis

(Marie Mackle)

We are very reliant on construction for both employment and economic growth. As a result it is the biggest domestic risk to economic development especially where some external shock negatively interacts with and affects the construction sector.

Ongoing need to monitor very carefully trends and developments in the construction sector and within individual sub-sectors

The development and analysis of non-residential construction remains important. Data is more limited in this area. Non-residential construction accounts for about half of construction output so it is worth devoting time to.

We need to develop a better understanding of the shift from manufacturing to services, the driving forces and possible policy implications

International and Labour Market

(Orla O'Brien, Scline Scott, Michelle Dalton)

Social Partnership talks are leading to a number of demands in terms of analysing pertinent issues such as immigration, developments in wages etc.

With the arrival of new staff, analysis/forecasting of earnings has moved to this section from the forecasting section

In response to criticisms from OECD as to our lack of participation in the EDRC, we are planning to participate in some 11 EDRC reviews over the 2006/2007 period

Given current emphasis on the all-island economy, we intend to monitor developments in the Northern Ireland economy so that we can react to requests for input to ministerial speeches etc.

IMF Article 4 mission scheduled for May

Longer term Analysis, Lisbon and Modelling

(Loretta O'Sullivan, John Howlin, Denise O'Connell)

This section has a wide-ranging portfolio, some of which is essentially new work.

On ageing, age-related expenditure projections were published in SPU which substantially updated, for policy changes and demographics, the estimates contained in the unpublished long-term issue group report.

The section participated in the EPC AWG process which led to the publication of EU wide projections recently. Further work is envisaged under the AWG process and we need to think about whether we wish to expand the partial SPU exercise

Section co-ordinates Lisbon process; an implementation report has to be submitted to the Commission (by D/Taoiseach) in the autumn

We want to develop an in-house macroeconomic modelling capacity so that we can do budget etc. simulations rather than relying on ESRI

BUDGET/EU SECTIONS
Most of the work areas on this side are linked and there is a need for a high degree of integration. The Budget/SPU/Maastricht/Tax Forecasting areas which are spread across 4 sections are all closely inter-linked.

BUDGET REFORM
(Brian Finn, Anne Donegan, Aoife O'Sullivan, Colm O'Connor)

The Minister announced a number of changes to the budgetary process in December. Preparations are being made to accommodate within the normal cycle:

- A spring meeting with the Finance and Public Service Committee to discuss the economic and fiscal background to the current and following two Budgets, and,
- An autumn (late September/early October)publication of an update of the three year economic and fiscal forecasts in the SPU, in place of the existing Economic Review and Outlook.

It is now unlikely that the first meeting with the FPSC will take place before 2007.

E-BUDGET PROJECT
(Brian Finn, Ciaran Judge, Donal Murtagh, Aoife O'Sullivan, Eddie Tierney, Alan Mahon)

Work has commenced with CMOD to develop an e-budget system which uses technology to link the core outputs involved in Budget preparation across sections and thereby minimise the potential for inconsistencies or errors.

The first elements of the project have been completed (i.e. a narrative description of process, procedures and outputs).

The overall objective is to develop an integrated relational database system (similar to e-estimates) that will facilitate the full range of analytical, reporting and publishing requirements of the Budget, tax forecasting, Maastricht and SPU sections.

TAX FORECASTING
(Donal Murtagh, Alan Mahon)

Through a combination of own research, cooperation with the Revenue Commissioners and through the Direct Tax Base Working Group work is ongoing to improve methodology and produce more robust tax revenue forecasts.

Specific priorities for 2006 are

- identify factors driving high yields in Stamp duty and CGT – this includes participation with Revenue in the analytical outputs from the computerisation of Stamp Duty returns ,and

- Statistical sampling of Revenue's data base to improve Income Tax forecasting with the participation of the ESRI in an advisory capacity.

E.S.R.I. EXPENDITURE REVIEW
(Barra O'Murchadha, Joe Kirwan)

The group's report will be submitted to the March meeting of the Assistant Secretary Group.

COUNTRY SURVEILLANCE
(Joe Kirwan, Anne Donegan, Colm O'Connor, Laura Casey)

Ongoing development on the knowledge necessary to the critical analysis of convergence/stability programmes of all 25 Member States

The section also provides detailed analysis and briefing on the Excess Deficit Procedure which, at present, applied to 5 Euro area and 7 other MS.

In order to develop our knowledge base on strategic economies it has been decided that AP's will participate in a number of relevant OECD EDRC Review meetings in Paris each year.

RISK MANAGEMENT & BUDGET PRODUCTION
(Brian Finn, Aoife O'Sullivan, John Uhlemann)

A review of procedure has been undertaken and steps are being put in place to reduce the possibility of errors in the 2006 Budget documentation recurring in future.

An Roinn Airgeadais
Department of Finance

F009/029/101
PART C07

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2 July 2003

Ms. Deirbhle Murphy
Chief Parliamentary Counsel
Office of the Parliamentary Counsel
Government Buildings
Upper Merrion Street
Dublin 2

Re: Central Bank and Financial Services Authority of Ireland (CBFSAI) Act 2003.

Dear Ms. Murphy,

As you are aware, the majority of the provisions of the above Act were commenced on 1 May 2003.

The provisions of the Act impose, *inter alia*, the following requirements:

- That the Regulatory Authority prepare an annual estimate of income and expenditure not later than 3 months before the beginning of each financial year (section 33N of the Central Bank Act 1942, as inserted by section 26 of the CBFSAI Act 2003) (Pages 39 and 40 refer);

- That the Regulatory Authority prepare a strategic plan at least 3 months before the beginning of each financial year (section 33P of the Central Bank Act 1942, as inserted by section 26 of the CBFSAI Act 2003) (Page 41 refers);

- That the Consumer Director prepare a draft strategic plan at least 3 months before the beginning of each financial year (section 33V of the Central Bank Act 1942, as inserted by section 26 of the CBFSAI Act 2003) (Page 47 refers);

- That the Registrar of Credit Unions prepare a draft strategic plan at least 3 months before the beginning of each financial year (section 33AE of the Central Bank Act 1942, as inserted by section 26 of the CBFSAI Act 2003) (Pages 52 and 53 refer).

FOI 604/43

However, as the Regulatory Authority (IFSRA) was only formally established on 1 May 2003, it will not be possible for the Authority to meet the deadlines imposed under the Act in relation to the above mentioned provisions. Accordingly, it is intended to amend the deadlines imposed under the Act for the first year of operation of IFSRA.

Schedule 3 to the CBFSAI Act 2003 deals with Savings and Transitional Provisions. Paragraph 31 of Schedule 3 (Page 227 refers) gives the Minister for Finance the power to make regulations to deal with savings and transitional issues. It is proposed, therefore, that the Minister make regulations under this paragraph which will amend the timescale under which the estimate and plans outlined above must be prepared for IFSRA's first full year of operation.

As you will see, the date proposed in the Regulations is December 2003; however, as the Regulatory Authority is not yet in a position to confirm a date, it is still subject to change. I will contact you as soon as a definitive date is decided upon.

Therefore, I would ask you to prepare the necessary regulations for signature which will give effect to these revised timescales. I have attached draft regulations which you may find useful. If you need to discuss the matter further, I can be contacted at **6045576**, although I will be absent from the office until Monday 21 July 2003. However, in my absence, you can contact Grainne Goggin at **6318120** or Paul Shannon at **6045570**.

Yours sincerely,

Jimmy Doyle
Principal
Banking, Finance and International Division.

S.I. No. [ ] of 2003

REGULATIONS

entitled

CENTRAL BANK AND FINANCIAL SERVICES AUTHORITY OF IRELAND ACT 2003 (TRANSITIONAL) (No. 2) REGULATIONS 2003

(Prn.) Price: €

S.I. No. of 2003

CENTRAL BANK AND FINANCIAL SERVICES AUTHORITY OF IRELAND ACT 2003 (TRANSITIONAL) (No. 2) REGULATIONS 2003

I, CHARLIE McCREEVY, Minister for Finance, in exercise of the powers conferred on me by paragraph 31 of Schedule 3 to the Central Bank and Financial Services Authority of Ireland Act 2003 (No. 12 of 2003), hereby make the following regulations:

1. These Regulations may be cited as the Central Bank and Financial Services Authority of Ireland Act 2003 (Transitional) (No. 2) Regulations 2003.

2. In these Regulations "Bank" means Central Bank and Financial Services Authority of Ireland.

3. Notwithstanding sections 33N, 33P, 33V and 33AE (inserted by section 26 of the Central Bank and Financial Services Authority of Ireland Act 2003 (No. 12 of 2003)) of the Central Bank Act 1942 (No. 22 of 1942) the obligation imposed -

(a) on the Regulatory Authority under subsection (1) of the said section 33N, to prepare its annual estimate of income and expenditure not later

than 3 months before the beginning of each financial year, shall not apply in respect of the first such statement which shall be discharged as soon as practicable but not later than 31st December 2003, and

(b) on the Regulatory Authority under subsection (1) of the said section 33P, to prepare a strategic plan at least 3 months before the beginning of each financial year, shall not apply in respect of the first such strategic plan which shall be discharged as soon as practicable but not later than 31st December 2003, and

(c) on the Consumer Director under subsection (1) of the said section 33V, to prepare a draft strategic plan at least 3 months before the beginning of each financial year, shall not apply in respect of the first such draft strategic plan which shall be discharged as soon as practicable but not later than 31st December 2003, and

(d) on the Registrar of Credit Unions under subsection (1) of the said section 33AN, to prepare a draft strategic plan at least 3 months before the beginning of each financial year, shall not apply in respect of the first such draft strategic plan which shall be discharged as soon as practicable but not later than 31st December 2003.

GIVEN under my Official Seal, this

day of , 2003.

CHARLIE McCREEVY,

Minister for Finance.

OECD Economic Surveys

Ireland

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Executive summary

Ireland has continued its exemplary economic performance, attaining some of the highest growth rates in the OECD. After a remarkable decade, per capita income has caught up with and overtaken the EU average. Further progress will require strong productivity growth and continued increases in labour supply. These challenges are familiar to most OECD economies. But it also faces some issues that are less common: it is going through a transition phase in upgrading its social services; infrastructure levels need to catch up with the boom in activity and population that has occurred over this period; and it has to manage some sizeable macroeconomic risks.

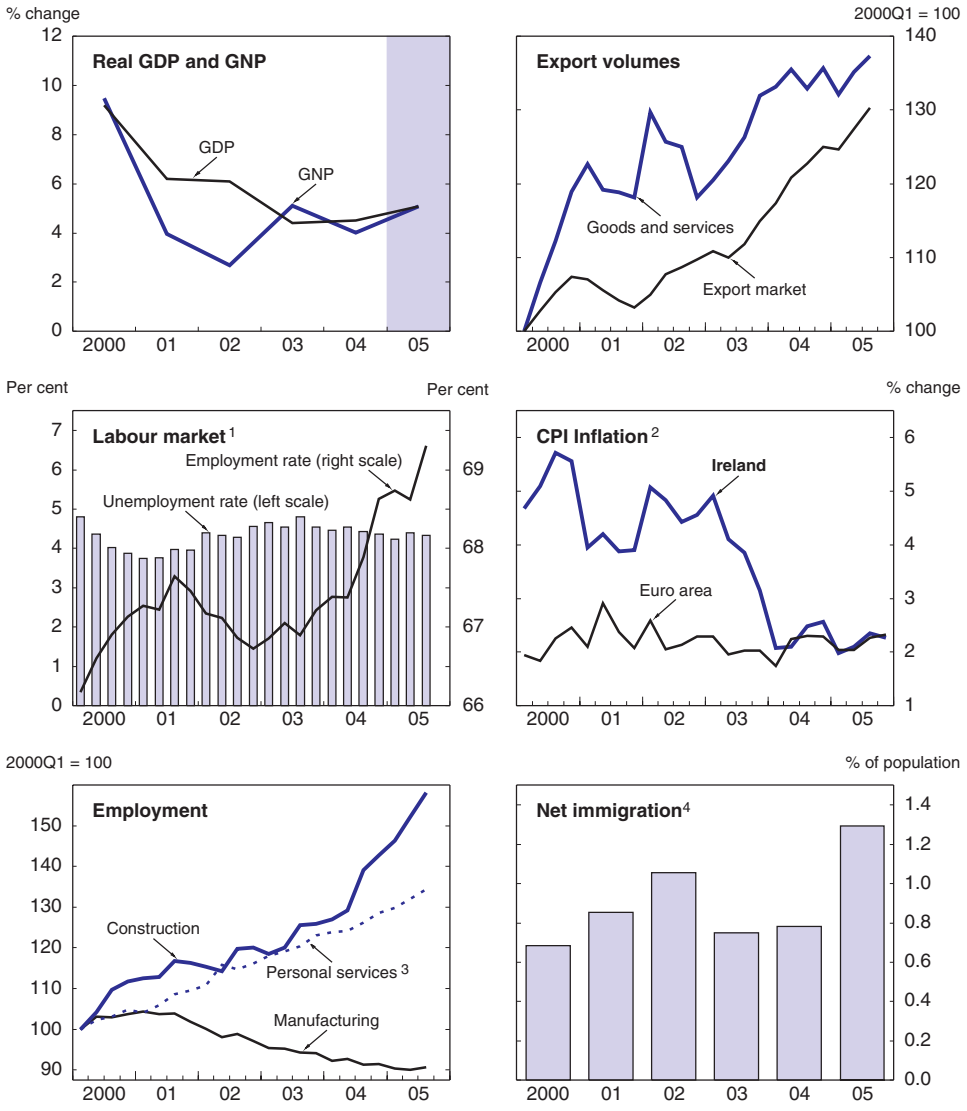
Maintaining high rates of productivity growth. *As Irish activity comes to rely less on foreign firms and more on home-grown services, productivity gains will become harder to achieve. The main areas where policy could make a difference in sustaining productivity growth are:*

- *Boost competition. There are too many sectors where producers are shielded from competition, raising prices and stifling growth. Reforms are needed in the electricity and telecom sectors, and unnecessary restraints in services such as law, pharmacies and the pub trade should be removed. In the retail sector, the government's decision to abolish the Groceries Order is welcome.*
- *Improve education. Funding is still an issue in universities. One option is to re-introduce tuition fees, but backed by an income-contingent loan scheme. In secondary schools, the key challenge is to target resources on students who are struggling.*
- *Encourage innovation. The science framework needs to improve before public spending is increased further. The many funding agencies could be amalgamated or better co-ordinated; public support could shift towards market-driven measures; and resources should not be spread too thinly.*
- *Upgrade infrastructure. Rigorous cost-benefit analysis of infrastructure projects, including those in the ten-year transport plan, should play a greater role in decision-making than has been the case in the past. Moreover, an increasing number of projects should be financed by users.*

Boosting labour supply. *An important option for boosting labour supply is to raise female participation. Expanding day-care for infants and out-of-school care for children will help. From the point of view of labour market participation, childcare supports such as the new Early Childcare Supplement should be linked to employment status or made conditional on actually using formal childcare. A mutual-obligations approach for sole parents would help reduce child poverty by assisting parents to get a foothold in the labour market. As regards older people, work incentives in the public-pension and welfare systems could be improved. Migrants will also continue to play an important role in alleviating labour supply bottlenecks. The attractiveness of Ireland for immigrants will be influenced by the overall price level (including house prices) and the quality of public services.*

Macroeconomic risks are high. *As one of the OECD's more open economies, Ireland is particularly exposed to external risks. But it also faces domestic risks. House prices may have overshot fundamentals to some extent, although this does not imply that they will fall significantly; and house building will eventually ease. A soft landing is the most likely scenario but a sharper fall cannot be ruled out. Hence, the government needs to leave plenty of breathing space by balancing the budget or running a surplus, curtailing tax breaks and pushing ahead with public management reforms to get better value for money from public expenditure.*

Figure 1.1. **The 2000s so far**



1. Unemployment in per cent of labour force, employment in per cent of working-age population.
2. Harmonised consumer price index, per cent growth over the same quarter of previous year.
3. Public administration and defense, education, health and other services.
4. Estimates from the Central Statistics Office.

Source: OECD (2005), Economic Outlook 78 database and Central Statistics Office.

Productivity growth has been a key driver of rising living standards

Looking back over the decade since 1995, growth in real gross domestic product (GDP) per capita has averaged almost 6% per annum, with growth in GNP per capita averaging 5%. Roughly three-quarters of this is explained by labour productivity growth, with the remaining quarter being due to an increase in labour supply, especially among women. Growth in GDP per hour has averaged 4.3% per annum, while GNP per hour grew by 3.5% per annum.[1] This was by far the strongest productivity performance of any OECD economy over that period. Productivity growth has been highest in the manufacturing sector (especially in high-tech manufacturing), but it has been fairly strong in other industries as

well (Table 1.1). Labour productivity growth appears to have slowed since 2000, which partly reflects the cyclical slowdown but is also due to the shift towards more labour-intensive services and construction. Comparing the *level* of productivity in manufacturing with the EU15 average, Ireland measures up well in all sub-sectors (Figure 1.2).

Table 1.1. **Productivity growth by sector**

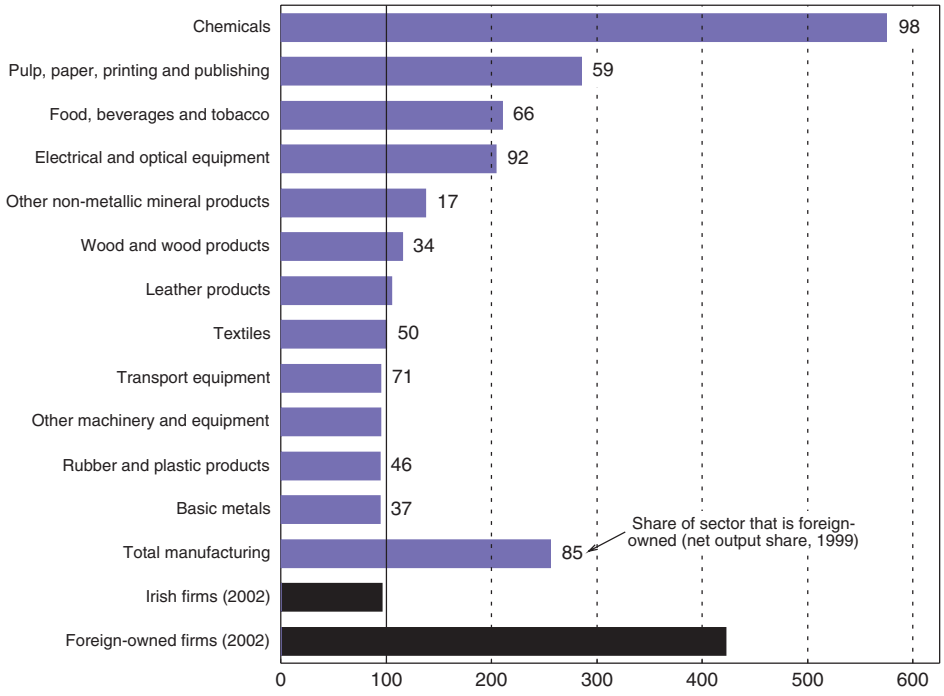
Gross value added per employee, annual average percentage change

	Market services	Industry	Construction	Agriculture	Whole economy
1991-2003	1.9	8.4	–0.7	3.2	3.4
1991-1995	0.4	6.4	1.9	2.6	2.8
1995-2003	3.1	9.5	–2.1	3.7	3.8

Source: OECD calculations based on Cassidy, M. (2004), "Productivity in Ireland: Trends and Issues", *Quarterly Bulletin*, Central Bank and Financial Services Authority of Ireland, Spring, Dublin and Tansey, P. (2005), *Productivity: Ireland's Economic Imperative*, report presented to a conference organised by Forfás, Dublin, October.

Figure 1.2. **Productivity levels in manufacturing relative to EU15**

Gross value added per worker in 2000, EU15 = 100



Source: Cassidy, M. and D. O'Brien (2005), "Export Performance and Competitiveness of the Irish Economy", *Quarterly Bulletin*, No. 3, Central Bank and Financial Services Authority of Ireland, Spring, Dublin.

An interesting feature of Ireland's boom is that the contribution from investment in physical capital has not been particularly large, especially when compared with other countries that have undergone "growth miracles" (Figure 1.3). Consequently, a large proportion of income growth is accounted for by multifactor productivity growth, *i.e.* the efficiency with which capital and labour are used. Multifactor productivity also captures the contribution from inputs that are not included in the growth accounting exercise, such as human capital, land and intellectual property owned by foreign multinationals.

normally buy a house, the average number of people per dwelling has fallen but is still high by OECD standards and there has been significant immigration. Even so, most indicators – including econometric models – suggest that house prices may have overshot their equilibrium level to some extent.

While house prices may be overvalued, this does not imply that they will fall. The housing market is not symmetric. Prices, construction activity and turnover all surge during a housing boom. After the peak, however, people prefer to take their house off the market rather than sell at a loss. The most likely scenario therefore is that prices will stabilise (or perhaps fall *slightly*), house building activity will fall back, turnover will decline sharply and Ireland will have a flat housing market for several years. By the end of that period, incomes should have grown by enough so that fundamentals catch up with actual prices, and the next cycle can begin.

Although this "soft landing" scenario is the most likely one, there are alternatives on the upside and the downside that could have large macroeconomic implications. On the upside, the market may not level off endogenously and prices may continue to rise. In this scenario, events could develop into a significant over-valuation with serious macroeconomic imbalances. Although short-term interest rates are back on the way up, the increase is likely to be fairly mild. It is therefore difficult to see what would prompt a slowdown in housing demand in the short term. While the enormous increase in supply over the past three years should take some pressure off prices, international experience shows that this process is rarely smooth and orderly – see Ahearne *et al.*, 2005). Obviously, the more that houses become over-valued, the greater the chances of a subsequent slump. The experiences of Japan, Sweden and Finland show that the aftermath of an asset price bubble can be serious and long-lasting. Now that monetary policy is set by the European Central Bank, the Irish government has few levers that could be used to avoid this scenario unfolding. But it can alter housing taxation and, as shown in Chapter 7, Ireland's tax system is more favourable to housing than that of most other OECD countries.

The second possibility is that house prices fall by a significant amount over the next few years either because the economy gets hit by a negative shock or because houses are more over-priced than commonly thought. It is difficult to assess how big an impact this would have on consumption because the economy has changed so much recently and a lack of information on household finances means that little is known about the marginal propensity to consume out of wealth. International evidence suggests that the consumption impacts are higher in countries such as Ireland and the United Kingdom which have high home ownership rates, variable rate mortgages and high loan-to-value ratios (Catte *et al.*, 2004). Estimates of the short-run marginal propensity to consume out of housing wealth range from virtually zero in France, Italy and Germany to 0.08 in the United Kingdom where variable interest rates and mortgage equity withdrawal generate a considerable amount of over-shooting, though mortgage equity withdrawal is not common in Ireland.

Residential construction is also a risk

Even if prices level out, a decline in house building may have large macroeconomic consequences. The rate of house building has averaged 79 000 units per annum for the past two years. This is well above the medium-term sustainable rate of around 50 000 to 60 000 units (Table 1.5), reflecting demand due to very strong immigration and the desire for second homes (including holiday houses and investment properties). With housing

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Chapter 7

The housing boom

The Irish housing market is very buoyant. The housing boom is driven by strong economic growth, dynamic demographics and low interest rates. However, large tax advantages and relatively lenient credit policies by banks have also played their part, and prices may have become overvalued. To the extent that high house prices reflect favourable tax treatment, they may lead to economic inefficiencies by drawing excessive resources into residential construction. While a soft landing appears the most likely prospect, a disorderly correction of house prices would pose risks for macroeconomic and possibly financial stability. In this context, one policy lever available to the government would be a phased removal of the tax advantages associated with housing. In addition, banks should remain cautious in their lending and provisioning policies.

House prices across the industrialised world have surged since the mid-1990s – with the notable exceptions of Germany and Japan which are both still grappling with the aftermath of real estate busts in the early 1990s. In many countries, housing demand is underpinned by an easy monetary stance (Otrok and Terrones, 2005), while over a longer period tight zoning regulations have exacerbated the upward movement in property prices in and around growth centres (Glaeser *et al.*, 2005). Yet Ireland stands out by its extraordinarily strong increase in house prices over the past decade. It is important to understand what has been driving this increase in order to judge the likelihood, timing and size of any fall. A sharp decline in house prices would be a concern for homeowners and could have serious consequences for macroeconomic and financial stability. Meanwhile, the booming market combined with the tax treatment of housing may be impacting on the economy's productive potential by diverting a large amount of resources into residential construction. It may also be acting as a brake on labour supply by making it more expensive for people to immigrate and settle in the country.

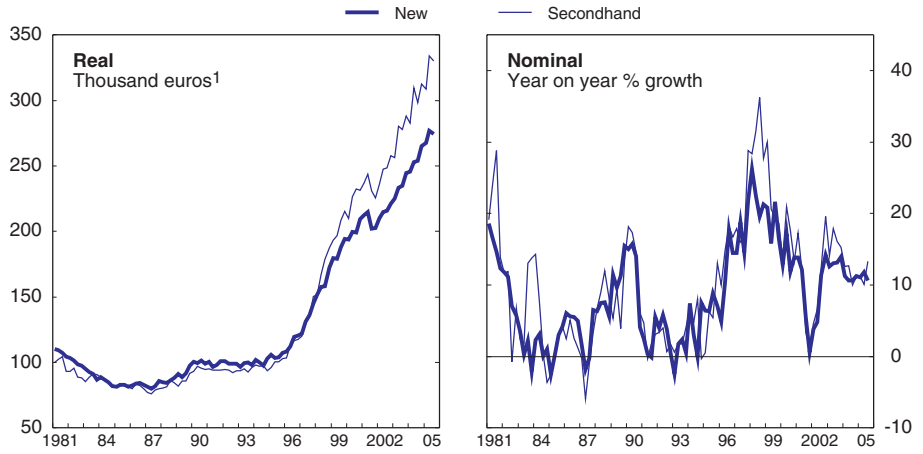
This chapter argues that *most* of the increase in Irish house prices is justified by the economic and demographic driving forces. It should be remembered that in 1993 the average Irish house cost a mere € 75 000, which was extraordinarily low for a European country. Since then, remarkable growth in incomes, low interest rates, strong population growth, especially among the younger house-forming age groups, a surge in immigration and changing living patterns have all contributed to the boom. However, prices have probably over-shot to some extent, and taxation may have contributed to fuelling the speculative boom. Looking ahead, the most likely scenario is that prices stabilise and the housing market stays flat for some years. But there is some risk that house prices will fall, and the market is certainly exposed should the economy be hit by a negative shock. This chapter looks at the past and the future of the housing market and discusses the role that policy can play going forward.

Forces driving the housing market

Ireland's house prices have risen dramatically since the mid-1990s. From 1995 to 2005 the price of second-hand houses more than tripled in real terms (Figure 7.1, left panel). House price inflation eased temporarily in 2001 but it has reignited since. Compared with other countries, the Irish housing boom has been extraordinarily vigorous: both in real and nominal terms the increase in house prices since the mid-1990s has been the highest in the OECD, with the United Kingdom and Spain ranking second and third respectively.

More favourable demand factors in comparison with developments elsewhere have surely played a role in shaping the buoyant price developments in Ireland. Growth in real disposable income since the mid-1990s has been stronger than in any other industrial country and real interest rates were among the lowest (Figure 7.2). The decline in inflation has also contributed by front-loading mortgage repayments. Furthermore, demographic trends were particularly favourable to housing demand in the 1990s, including strong

Figure 7.1. **House price growth remains high**



1. Nominal prices deflated using the harmonised consumer price index (base 2005).

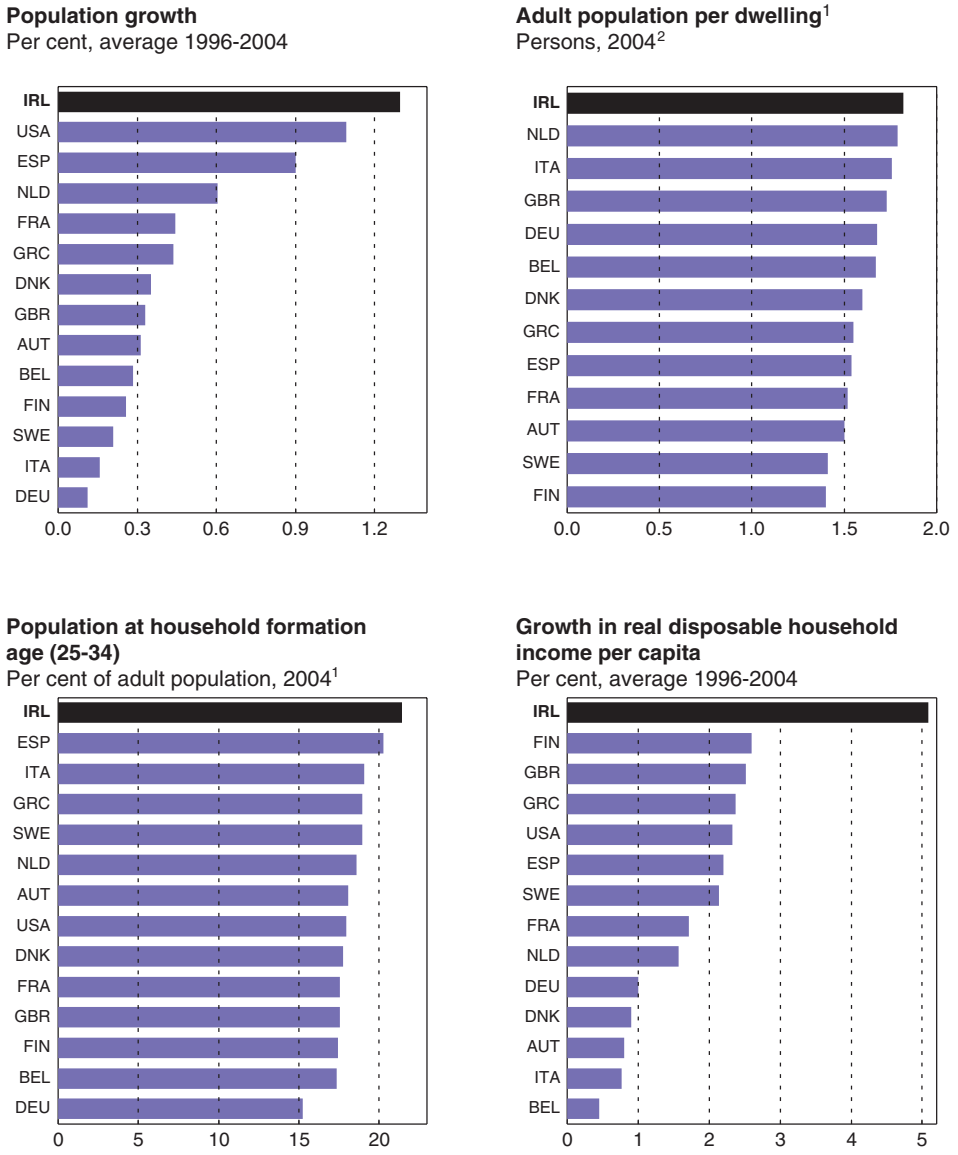
Source: Department of the Environment, Heritage and Local Government, *Quarterly Housing Statistics* and OECD, Main Economic Indicators database, February 2006.

population growth, a sharp fall in household size from a high level, a rapid acceleration in the growth of population in the household formation cohort and sizeable net immigration. Other demographic developments include the increase in the number of double income households and higher divorce rates. Another factor is the number of baby boomers investing in the buy-to-let market because of increasing worries about inadequate pension provisions for retirement.

In addition, the tax treatment of housing in Ireland has been more favourable for home ownership than in most other EU countries (van den Noord, 2005). This is reflected in a low user cost of capital. The user cost for homeowners is analogous to the cost of rental accommodation for tenants. It includes the after-tax mortgage interest rate net of capital gains, the opportunity cost associated with equity financing (usually the after-tax deposit rate), property tax (if any) and depreciation. There have been extended periods when the user cost has been negative, in particular in the late-1970s and from the mid-1990s onwards, implying a strong incentive to invest in housing.[1] The main driving factor keeping the user cost negative has been the untaxed capital gains (on owner-occupied homes), whereas the importance of income tax deductions has diminished with the gradual decline in marginal income tax rates and a series of other tax reforms (Box 7.1). Since taxation of capital gains has an important negative influence on the user cost, its absence could have acted as a catalyst for the upward spiral in house prices.

Access to mortgage finance is also less restrictive in Ireland than elsewhere, especially compared with continental Europe (Table 7.1). Financial market liberalisation during the 1980s and 1990s has supported demand by allowing a rapid expansion in credit. The full effects of liberalisation were beginning to be felt in the mid-1990s, just at the time when housing demand was growing fast. Loan-to-value ratios have risen from an average level of 60% in the 1980s to around 80% at present. The trend towards securitisation of bank loans is another factor. In general, securitisation makes interest rates on new borrowing more responsive to financial market developments. It also enhances competition, which lowers the costs of taking out a mortgage and makes it easier for households to access their

Figure 7.2. **Forces shaping house prices**



1. Adult population covers persons from age 20 onwards.
2. 2003 for Austria, Finland, France, Greece and Italy.

Source: OECD (2005), Labour Force Statistics and Economic Outlook 78 databases; European Mortgage Federation (2005), *Hypostat 2004*.

capital through housing equity withdrawals (Catte *et al.*, 2004). The adoption of the euro has been another important influence in helping to increase the elasticity of supply of mortgages. The exchange rate risk disappeared, removing one of the obstacles to the freer flow of funds within the euro area. This means that the domestically-based Irish banks have a hugely expanded pool of funds available. The removal of the exchange rate risk premium, by lowering interest rates, has also acted to stimulate demand for mortgages. Finally, most mortgages in Ireland are variable rate loans, so the reduction in short-term interest rates (until recently) has further boosted demand.

Box 7.1. **Tax breaks for housing and policy flip-flops**

Ireland has some of the most generous tax provisions for owner-occupied housing, largely because it is the only OECD country that allows households a tax deduction for mortgage interest payments at the same time as *not* taxing property values, capital gains or imputed rent (Barham, 2004 and van den Noord, 2005).* The following provisions are the most important ones:

- Ireland introduced a residential property tax in April 1983. The rate was 1½ per cent for properties above a certain value and where the owner's income exceeded a certain rate. The 1994 Budget adjusted these price and income thresholds, but those measures were scrapped in the following budget, with a return to the previous system. The property tax was abolished altogether two years later. A private residence of up to one acre is exempt from capital gains tax, which is large enough to cover virtually all houses.
- Mortgage interest can be deducted against income tax. Prior to 1974 there was no limit as the full cost of mortgage interest could be deducted at the marginal tax rate. A ceiling was introduced in 1974 and increased on two occasions, in 1993 and 2003. Both these increases followed prolonged periods in which interest repayments normally exceeded the ceiling. Mortgage interest relief was phased in at the standard rate of tax (as opposed to the marginal rate) in 1994. This saw a reduction in the benefit accruing to homeowners with the deductibility rate falling from 48% in 1993 to 26% in 1997. Meanwhile, the imputed rental income is not taxed, unlike rental income to a third party.
- A package of tax measures was introduced in 1998 in an attempt to deflate what appeared to be a housing bubble. Stamp duty on new houses that were not owner-occupied was increased, while stamp duty on second-hand houses was reduced; capital gains tax on disposals of qualified residential land was reduced; and tax breaks for rental income were removed. These were successful in stopping house price inflation – possibly too successful, as they were reversed in the 2002 Budget. Meanwhile, another package of measures was introduced in 2000 in order to discourage investors from buying rental property. This included a 9% stamp duty on the purchase of property for rent. That also worked but had the predictable side effect of driving up rents, so it was abolished just a year later. Stamp duty was changed again in the 2005 Budget, this time lowering the tax for first-time buyers.

* Finland, Portugal and Spain are the only other countries which, like Ireland, give a tax deduction for mortgage interest payments but do not tax imputed rent or capital gains on the principal owner-occupied dwelling. However, all three have municipal taxes on property values ranging from 0.4% to 1%. The size of the tax bias in Ireland has been reduced over time as the ceiling on mortgage interest deductibility has not kept pace with the increase in house prices. Updating the estimates by van den Noord (2005) shows an overall tax wedge of –0.57% for the first seven years and –0.36% thereafter, giving Ireland the fifth-largest tax bias in the EU15.

The rise in housing demand triggered a strong response in supply, which again is unprecedented by international standards (Figure 7.3). House construction and residential permits per capita are among the highest in the OECD. Around a third of the housing stock is younger than ten years old. Half of the stock is detached houses, with apartments accounting for just 6%. The enormous increase in housing supply was accompanied by significant increases in real construction costs and land prices. The significant cost increases did not deter the supply of housing, which was aided by more relaxed zoning rules. Yet, despite the massive increase in the housing stock, it will almost certainly increase further in the medium term (even ignoring the effect of population growth) given

Table 7.1. **Mortgage and housing market indicators**

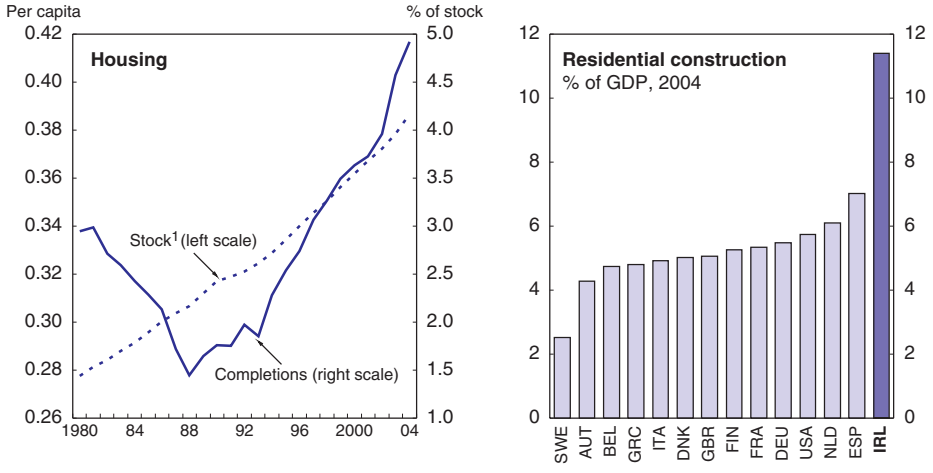
	Residential mortgage debt (% of disposable income, 2003)[1]	Typical loan-to-value ratios of new loans (%)	Typical loan term (years)	Variable interest rates (% of all loans, 2002)[2]	Securitisation of mortgages	Home ownership rate (%, 2002)[2]
Ireland	**106**	**70-100**	**20**	**85**	**Limited**	**77**
Australia	120	90-100	25	73	Yes	70
Austria	. .	. .	20-30	. .	. .	56
Canada	77	70-80	25	25	Yes	66
Denmark	188	80	30	15	Yes	51
Finland	71	75-80	15-18	97	Limited	58
France	40	80	15	20	Limited	55
Germany	83	70-80	25-30	72	Limited	42
Italy	20	50	15	56	No	80
Japan	58	80	25-30	. .	No	60
Netherlands	208	87	30	15	Yes	53
New Zealand	129	. .	. .	. .	. .	65
Norway	24	70	15-20	. .	No	77
Portugal	33	. .	15	. .	. .	64
Spain	67	. .	15	75	Yes	85
Sweden	98	80-90	<30	38	Limited	61
United Kingdom	105	75	25	72	Yes	69
United States	78	80	30	33	Yes	68

1. 2002 for Norway and Portugal, 2005 estimate for Ireland.
2. Or latest year available.

Source: OECD (2005), *OECD Economic Outlook*, No. 78, Paris; OECD (2004), *OECD Economic Outlook*, No. 75, Paris; Tsatsaronis, K. and H. Zhu (2004), "What Drives Housing Price Dynamics: Cross Country Evidence", *BIS Quarterly Review*, Bank for International Settlements, Basel, March; Ahearne, A.G. *et al.* (2005), "House Prices and Monetary Policy: A Cross-Country Study", *International Finance Discussion Papers*, No. 841, Board of Governors of the Federal Reserve System, September; Central Bank and Financial Services Authority of Ireland.

that in Ireland there are significantly more adults per dwelling than in other OECD countries. If preferences in Ireland were similar to those in other EU countries, this would, *ceteris paribus*, lead to falling numbers of (adult) persons per dwelling. This gap has undoubtedly been a factor in the buoyant demand for housing and a driving force behind

Figure 7.3. **Residential construction is booming**



1. OECD estimate of stock of permanent dwellings, end of year.

Source: Department of the Environment, Heritage and Local Government (2005), *Annual Housing Statistics, Bulletin 2004*, The Stationery Office, Dublin and OECD (2005), Economic Outlook 78 database.

the escalation of house prices, and is likely to act for several more years. Indeed, the high cost of accommodation in Ireland may be discouraging people from forming an independent household (Fitz Gerald, 2005).

Are house prices overvalued?

The question of whether the fundamentals can fully explain the Irish housing boom can be addressed by different methods. One approach is to use an econometric model and see if house prices deviate from their long-term equilibrium level. Another is to treat housing as an asset that reflects the discounted present value of its future earnings. However, these indicators need to be complemented by other evidence such as price-to-rent ratios, measures of affordability and benchmarking against other countries. A range of evidence is discussed below.

Econometric evidence

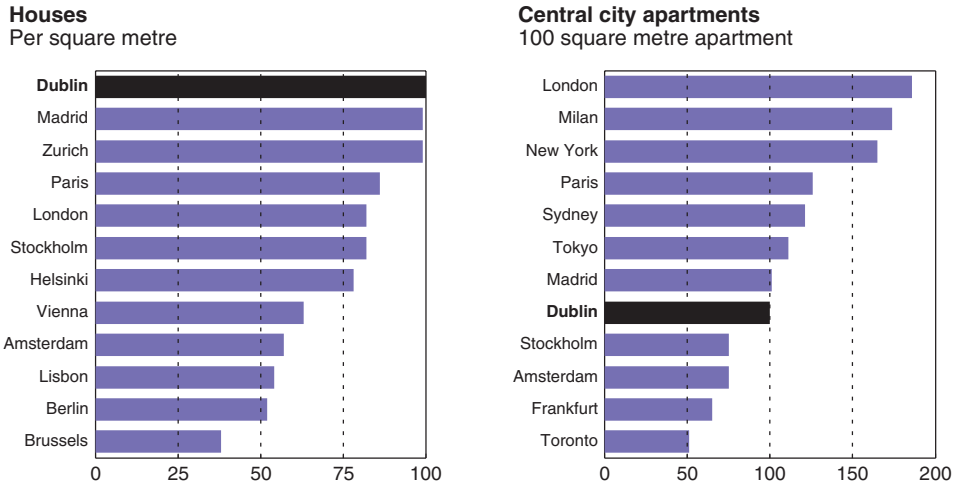
Econometric models can be used to estimate the "fundamental" price, as determined by demand factors, such as real disposable income and real interest rates, and supply factors. A price level in excess of the fundamental price could be a sign that prices are inconsistent with demand and supply conditions and instead may be driven by irrational expectations of future capital gains. In such a house price bubble, home buyers consider that a house that would normally be too expensive for them (or much more expensive than renting) is worth buying because they will be compensated by significant further price increases (Meen, 2000 and Case and Shiller, 2003).

The available econometric evidence does suggest that prices have overshot their fundamental value. It is worth noting, however, that around 80 to 90% of the increase in house prices since 1995 is justified by the fundamentals – rising incomes, lower interest rates, demographic factors, etc. The remainder appears to be speculative froth. The model described in the annex to this chapter estimates that average house prices have been diverging from their fundamental level in recent years and were perhaps 10-20% overvalued in the middle of 2005 (although all econometric models obviously are subject to considerable uncertainty, due to modelling error, omitted variable bias and so forth). This estimate is broadly consistent with a similar analysis conducted by the IMF (2004). Some models presented in the central bank's *Financial Stability Report 2005* show an estimated over-valuation ranging from essentially zero to more than 70%, highlighting that it is necessary to look at more than one indicator (and to make judgements about which indicators may be more reliable than others).

International comparisons

It is difficult to compare prices across countries because the size, quality, location and amenities of houses can differ substantially. Comparisons are a little easier if they are restricted to the major cities, but this does not solve the problem entirely. Bearing this in mind, the available evidence suggests that average prices in Dublin are higher than in comparable cities. In a comparison of average sale prices in 2004 across a dozen European cities, the price per square metre was higher in Dublin that everywhere else (Figure 7.4, left panel). Some further evidence comes from cost-of-living comparisons conducted by various private-sector consultancies. These usually focus on prices or rents of inner-city apartments typically bought or rented by business executives. Here Dublin does not stand out so dramatically (Figure 7.4, right panel).[2] This may be because rents are not especially

Figure 7.4. **Average house prices**
Dublin = 100, 2004



Source: OECD calculations based on data from ERA Immobilier (left panel) and The Economist Intelligence Unit (right panel).

high in Ireland but it may also reflect urban sprawl. Anecdotally at least, there is not a great deal of diversity in the housing stock. The centres of the main cities have not been taken over by apartment complexes and there is relatively little high-density in-fill housing. If preferences change and Irish people become more comfortable living in downtown apartments or in higher-density housing with no garden, then the distribution of prices may become more uneven: house prices in the central city may rise significantly relative to prices in the suburbs and city fringes. There is some evidence this may be happening already (Policy Exchange, 2005).

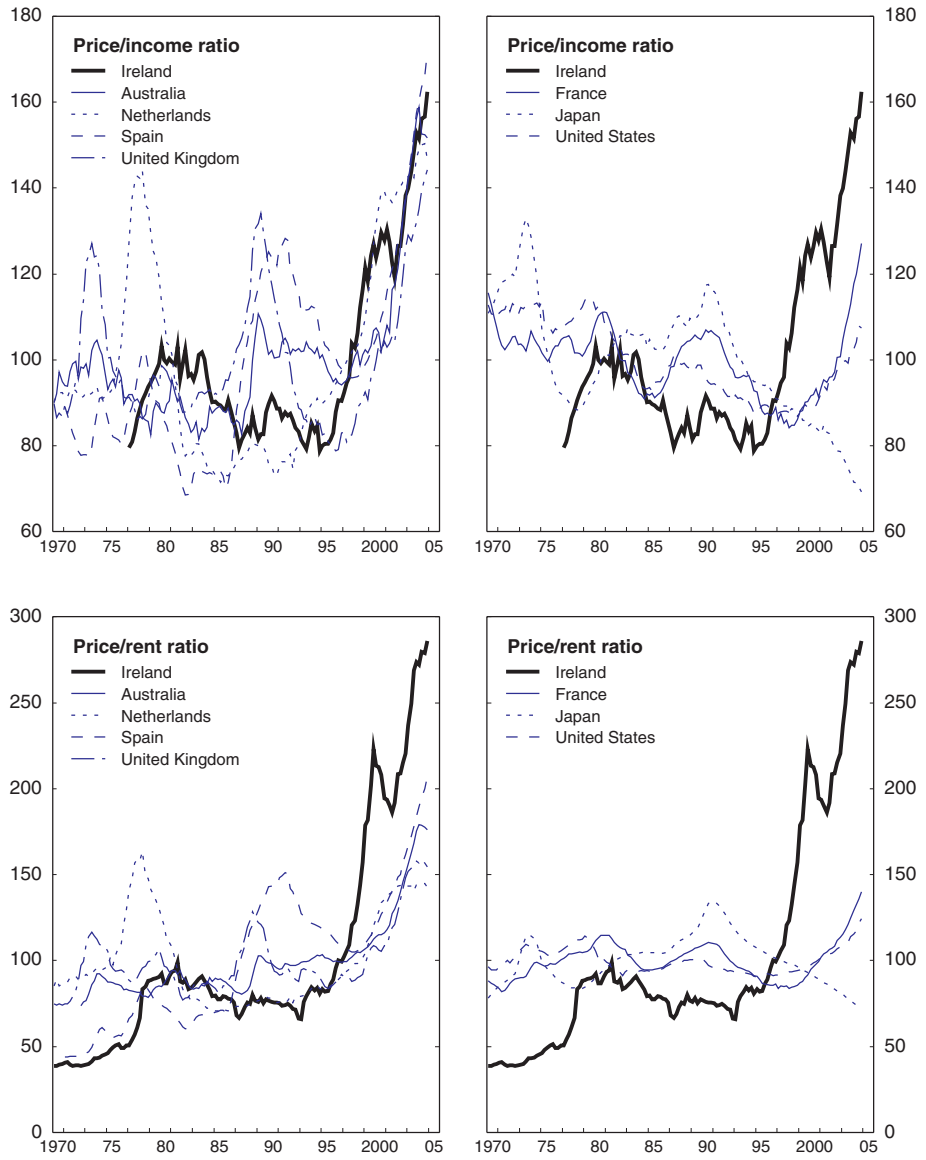
Owning versus renting and the "great ratios"

In a majority of countries, the ratios of prices to rents and prices to disposable income do not have strong trends when considered over long periods of time. The ratios may rise sharply during housing booms, but they usually fall back again through a combination of falling real house prices (*i.e.* a lower numerator) and rising rents or incomes (the denominator rising to catch up). In Ireland's case, the increase in these two ratios far outstrips the cycles that have been seen in other countries before the most recent global housing boom (Figure 7.5), although the increase in the price-to-income ratio is in line with some other countries that have also enjoyed booming house prices in the last five years.

The forward-looking present value approach

In theory, permanently lower interest rates should lead to permanently higher price-to-rent and price-to-income ratios. Therefore, *some* increase in these ratios, as identified in the previous paragraph, is justified by the decline in Irish real interest rates. Whether the run-up is *fully* justified can be assessed using the forward-looking present value approach. It determines the fundamental house price as the present discounted value of expected future rental income from the property and has the advantage over econometric models that it relates the fundamental price to expectations of the future rather than comparing it to past developments. Real incomes have now converged to the euro area average but

Figure 7.5. **House prices are generally high relative to rents and income**
Sample average = 100



Source: OECD (2005), *OECD Economic Outlook*, No. 78.

house prices have substantially overshot the European average. This would imply that people expect growth in Irish incomes to remain above the euro area average for some time to come, and this is probably a fair assumption. If the annual rental income on private housing remains at € 13 000 and assuming a discount rate of 2%, the present value model would give a fundamental house price that is close to current levels. That is, this model concludes that current prices can be justified so long as interest rates remain at their current low level. However, assuming a more reasonable discount rate that reflects long-term expectations of interest rates of around 4%, the present value model yields a 20% overvaluation.

Affordability

The concept of housing "affordability" is popular in public discussions and with the real estate industry, perhaps because of its simplicity. While it is not particularly useful for assessing house price over-valuation, it is a useful measure of cash flow pressures. In 2005, the average mortgage repayment burden for a first time buyer was estimated to be 30% of disposable income (Central Bank, 2005), which is higher than in 1994/95, but is actually slightly lower than it was in 1991, when interest rates were much higher. Thus, the repayment burden is not out of line with past levels – provided, of course, that interest rates remain low.

Other evidence

The effects of increased housing wealth and equity withdrawal on household saving have never been strong in Ireland. The savings rate has been fluctuating around 9% throughout the housing boom. However, this does not imply that no housing equity is released, but rather that it may be recycled back into the housing market. This shows up especially in the buy-to-let market and in the rapid growth in the number of secondary or otherwise mostly vacant homes. This suggests that demand is driven, at least in part, by expectations of capital gains, which may confirm the impression of over valuation emerging from some of the quantitative indicators.

The buy-to-let market is small but has been growing fast.[3] New buy-to-let mortgages constituted 20% of all mortgage transactions in 2004 while 30% of second-hand dwellings sold during the first half of 2004 were previously held as investment properties. The buy-to-let market is dominated by small, mostly inexperienced investors, whose primary objective is to provide for retirement. With property investors taking such an active part in the market, the question is to what extent they have driven up house prices. Attracted by the substantial capital gains and small carrying costs, many investors have entered the buy-to-let market, possibly displacing first time buyers and contributing significantly to housing demand and house prices. The main concern – and another indication of overshooting prices – is the growing divergence between property prices and rental income. Indeed, rents actually fell from 2002 to early 2005. The position of those in the buy-to-let segment of the market will continue to be sustainable only if interest rates stay low. However, if mortgage rates were to rise many of these investment positions would be loss making.

Demand for second homes appears to be another important factor in the housing market. Although housing supply has risen tremendously in recent years, a surprisingly large proportion of it appears to be satisfying demand for second-home properties (in 2005, around 15% of homeowners aged 35-54 owned a second home). As in the case of the buy-to-let market, some properties may have been acquired with the expectation that house prices would continue to grow at a fast pace for the indefinite future. More generally, an important element of the boom over the last decade has been the growth in the number of dwellings that are vacant, for whatever reasons, for most of the year. Fitz Gerald *et al.* (2003) calculated that the number of vacant dwellings in Ireland had increased by 80 000 from 2000 to 2003, which is equivalent to half the houses constructed over that period. On the basis of modelling work in that paper it was estimated that this additional demand would have added between 15 and 20% to house prices over the same period, which roughly corresponds to the estimated overvaluation reported in Annex 7.A1.

Key policy issues

Risks to financial stability

An over-valued housing market may have implications for financial stability, but that depends on many factors. The first point to note is that an overvaluation does not imply that prices will drop, at least if the degree of overvaluation is moderate. The housing market is unlike other asset markets in that house price dynamics are not symmetric. Prices rise quickly during booms, but in a market slump most people prefer to take their house off the market rather than sell at a loss. Hence, a *small* fall in prices followed by several years of a flat market is more likely than a sharp drop in house values. Put another way, the price level may remain fairly high as the market waits for the underlying fundamentals to catch up. Another factor working in favour of this benign scenario is that, in the past, house price slumps have usually been triggered by a hike in interest rates, and while interest rates in the euro area are back on an upward path, the increase is likely to be relatively mild – a hike in rates has usually been the trigger for price slumps in the past. But even if they are not overvalued, concerns about stability still arise. If the fundamental drivers were themselves subject to severe negative shocks – such as a slowdown in the expected growth rate of disposable income – then house prices could still fall substantially. This would be particularly difficult for households that are highly leveraged in the buy-to-let and secondary home markets. The sensitivity of these markets to changes in financial conditions may be illustrated by the hit to confidence and the subsequent halt in real house price growth in 2001-02 when the budget announced an increase in the stamp duty and the introduction of an anti-speculative property tax (Box 7.1). The potential magnitude of the problem is difficult to gauge. Average debt levels are high and are growing rapidly (Table 7.1), but there is little up-to-date information on how this is distributed across households. The current level of rents is not adequate to cover debt service costs for new or very recent investors (i.*e.* those with a loan-to-value ratio of at least 80%), so their financial position will be squeezed if prices do not rise as fast as they had hoped. Even if house prices level off, there is a potential macroeconomic and financial stability issue that could arise from decline in residential construction. As noted in Chapter 1, the rate of house building will need to fall to some extent to return to its sustainable long-run level. International experience shows that this process is seldom smooth: when the investment rate turns down, it usually falls sharply (Box 7.2).

Stress testing by the central bank suggests that the banking system has adequate capacity to absorb a modest fall in residential construction and house prices. However, it is more exposed to a negative shock that reduces residential and commercial property prices simultaneously as more than half of the banking sector's loan book relates to property. Hence, it would be worthwhile for banks to err on the side of caution. Loan provisions are currently in line with international norms, despite Ireland's financial risks possibly being higher than in other countries.[4]

Longer-term economic efficiency

Aside from the question of whether house prices are currently overvalued, there are also issues of longer-term welfare related to the housing market. The share of the average household budget that is spent on housing is very high by international standards – it is the second highest in the European Union after the United Kingdom.[5] This suggests there may

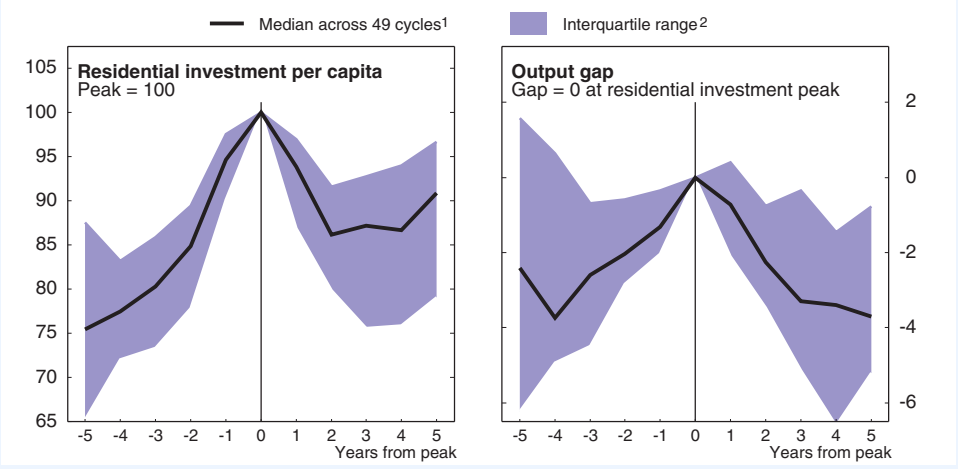
Box 7.2. **Has residential construction ever had a soft landing?**

Residential investment is characterised by a pronounced boom-bust cycle. This box looks at how often a construction boom has been followed not by a slump but by a soft landing.

Between 1960 and 2004, 49 residential construction booms have occurred in 23 countries for which data is available. A boom is defined (rather generously) as a rise in the level of real per capita residential investment of at least 15% over a five-year period. In order to avoid identifying false peaks and data blips, a peak is defined as the highest point in a window of the preceding four years and the subsequent three years. By construction, the latest peak that can be identified is 2002; the analysis therefore omits the housing booms that are currently underway. In the cycles that have been identified, the average increase in real per capita residential investment from trough to peak is around 40%. The largest occurred in Korea from 1973 to 1978 (where investment rose by 160%). The trough-to-peak increase has exceeded 50% in 16 cases.

The downturn that follows is usually rapid. On average in the first year after the peak, 40% of the increase during the trough-to-peak upswing is reversed, with another 40% lost in the second year (Figure 7.6). Investment stabilises at that level for two years, before beginning to recover about five years after the peak.

Figure 7.6. **Has there ever been a soft landing?**



1. In each cycle, real per capita residential investment is scaled so that the peak equals 100.
2. The shaded area shows the middle two quartiles (*i.e.* half the countries fall in this range).

Source: OECD (2005), Economic Outlook 78 database.

How common are soft landings? If a soft landing is defined as a relatively small reduction in the investment rate, they are not especially common. There have been only four cases where the decline in per capita residential investment has been smaller than one-third of the increase that occurred during the boom years (these are the Netherlands after 1978, Belgium after 1990, the United Kingdom after 1998 and Finland after 2000). Soft landings are more common if they are defined as *gradual* declines, *i.e.* where it takes at least three years to hit the trough. There have been around 20 examples of these. But all of these were comparatively deep declines. If a soft landing is defined as something that is *both mild and gradual*, there has not been a single case out of the 49 boom-bust cycles.

Box 7.2. **Has residential construction ever had a soft landing?** *(cont.)*

It is also revealing to look at the behaviour of monetary policy before and after the construction peaks. Of the 34 booms for which there is also data on short-term interest rates, monetary policy tightened before the investment peak in only a little over half of all cases. Thus, there appear to be factors other than a tightening of monetary policy that have been responsible for many of the downturns.

be over-investment in housing and a corresponding under-investment in more productive assets.

The scarcity of accommodation in Ireland is partly a matter of misallocation of resources. To the extent that the increased stock of dwellings is absorbed as secondary or vacant dwellings, there are fewer dwellings available to meet the rise in the number of households driven by the changing age structure of the population. This has also put pressure on the resources of the building industry. Moreover, as noted by Fitz Gerald (2005) the high demand for secondary homes makes it more expensive for individuals to live and run businesses in the regions. The provision of the necessary infrastructure for new dwellings, such as sewerage and water connections, is very expensive, especially in urban areas. Where such dwellings are held vacant for investment purposes,[6] there is not an occupier to generate tax revenues to help defray the costs. Moreover, the government's social housing policy may be putting undue pressure on property prices (Box 7.3).

Furthermore, the level of house prices could reduce the growth potential of the economy by discouraging potential migrants, shifting the balance of labour market growth from employment to wages, with a consequent deterioration in competitiveness. Rises in house prices lead to unambiguous welfare gains for current home owners while immigrants, first time buyers and those with lower labour market skills miss out.

Tax policy issues

Some landowners are reaping large capital gains as a result of the major investment in infrastructure by the state and the rezoning of land for development. It would be appropriate for part of this windfall to be siphoned off by taxation to partly fund the infrastructure investment that creates the gain in the first place. The higher development levies that have been implemented go some way in this direction but they do not affect existing home owners. In contrast, the state is intervening in a number of different ways to encourage demand for housing, thereby pushing up the price. The tax relief on mortgage payments and the under-pricing of infrastructure encourage higher demand and higher prices, especially for land. Restrictive zoning, while popular with existing suburban residents, fuels an artificial shortage and encourages urban sprawl. Hence there is a strong argument for a property tax. But this has so far proved unacceptable to the public. As a softer alternative, some have advocated a property tax on vacant or second dwellings only (Fitz Gerald, 2005). This would help defray infrastructure costs, reduce demand and therefore reduce price pressures, thereby enhancing the productive potential of the wider economy. A very important side effect is that it would reduce the share of this potentially most volatile element in the housing stock.

Box 7.3. **Housing support may not be provided in the most cost-effective way**

The government has substantially increased expenditure on housing support for people on low incomes. In 2004, public social expenditure on housing was more than 1½ per cent of national income – around four times the OECD average. It is unclear whether this money is well spent. There are around 15 different schemes but the government appears to have a strong preference for encouraging home ownership rather than providing rent assistance (Fahey, 2004). In 2004, only 16% of total expenditure went towards rent subsidies (housing benefits); approximately two-thirds went to capital expenditure, especially the construction and maintenance of local authority housing. Local authorities rent out 107 000 units at an average rent of just € 32 per week, so it is no surprise that there is a long waiting list for such housing. Expenditure on social and affordable housing schemes in 2004 amounted to € 1.88 billion and benefited 12 145 households. This subsidy is therefore equivalent to € 155 000 per household. Instead of building new houses for these families, that sum could cover all their rent for 10 to 15 years depending on the type and location of the rental accommodation. In its latest attempt to encourage home ownership, the government announced in 2005 that a further 10 000 houses would be built under its Affordable Housing scheme. People who would otherwise have to spend more than 35% of their net disposable income on a mortgage can apply to buy one of 10 000 new houses at up to a third off market value. The scheme is income tested, and is available to households earning up to around 130% of the average wage. This is in addition to the tenant purchase scheme under which social housing tenants can buy their properties at a considerable discount.

Policy needs to shift to a more tenure-neutral stance. The private rental sector, which currently is small by European standards, could expand if the government shifted more resources towards rent assistance instead of constructing houses and selling them or renting them and controlling the system through queues. Constructing houses and selling them at a low price seems especially ineffective as government assistance only takes into account a household's current, but not permanent income. It has aspects of a lottery, and its irreversibility makes it impossible to adapt to changes in situation or to households' often transitory needs. It is also a high-cost measure, so that less is available for lower cost, but more effective measures. Subsidising low-rent housing, while not suffering from irreversibility to the same extent, still often does not cater to the poorest households as it can be difficult to dislodge renters whose incomes have risen above the threshold for being placed in a low-rent flat. In addition, the owners of social housing parks usually have little incentive to maintain the property. Providing assistance by a housing benefit or housing vouchers would be entirely tenure neutral if households were free to use their means-tested benefits to cover rent or a mortgage. Means-tested housing benefits necessarily increase marginal effective tax rates on low-income earners but Ireland has relatively low marginal rates (at least on first earners) and therefore has more scope than most countries to deliver its housing policy through the income support system and let households make their own choices about whether to own or rent from the private or social sectors.

Box 7.4. **Summary of recommendations**

- Phase out the strong bias towards housing that is embedded in the tax system. For example, mortgage interest should not be tax deductible unless a tax on imputed rental incomes or a broader capital gains tax is introduced.
- Introduce a property tax in order to fund local infrastructure and services, and as a way of redistributing some of the windfall gains that accrue to people living close to new roads and public transport links.
- Encourage banks to be sufficiently prudent in their lending and loan-loss provisioning practices.
- Social housing policy should become more tenure-neutral by scaling back house building and providing more by way of income support and/or housing vouchers.

Notes

1. For Ireland, the user cost is computed by Barham (2004) following the method of Poterba (1984).
2. The figures in the right-hand panel come from the Economist Intelligence Unit and are based on a 100 m^2 apartment close to the city centre. They are highly correlated with the Union Bank of Switzerland's cost of living comparison in different cities (correlation coefficient of 0.78).
3. In 2004, around 8% of the housing stock was for private rental.
4. Loan loss provisions fell from 1.4% of loans in 2000 to 0.7% in the second quarter of 2005 (Central Bank, 2005). This level is in line with other European countries (Hoeller *et al.*, 2004).
5. The simple way to see this is to compare the level of house prices in Ireland relative to other countries. More rigorous statistical comparisons of the cost of living across countries compiled by Eurostat generate the same conclusion (see Eurostat data table COLC_NAT under subject Prices, Intra-EU correction coefficients).
6. There was a strange tax loophole until 2002 which meant that it could be worthwhile for a landlord who owned multiple properties to buy an additional property and keep it vacant.

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Minister,
from John McCarthy
28 July 2005

Central Bank Quarterly Bulletin

The Central Bank Quarterly Bulletin is being published today.[1] The Bank is forecasting GDP growth of 5½ per cent this year and in 2006. GNP growth is forecast at 5¼ per cent in both years. These forecasts are slightly higher than our own forecasts published on Budget day (5.1 and 5.2 per cent this year and next respectively for GDP). It should be noted that the Bank's forecasts were compiled prior to the publication of today's national income and expenditure accounts by the CSO, which may lead to a downward revision of these forecasts in due course.

The Bank is forecasting that employment will increase by 53,000 (2.8 per cent) this year, resulting in an average unemployment rate of 4¼ per cent this year. A further increase in employment of 40,000 (2.1 per cent) is being forecast for next year.

In terms of inflation, the Bank is forecasting a pick-up in the annual rate of increase in the consumer price index during the second half of the year. This acceleration in the rate of inflation mainly reflects the current high level of oil prices and the assumption of a pick-up in services sector inflation on foot of strong domestic demand and the current low rate of unemployment. In overall terms, therefore, inflation is forecast to average 2½ per cent for the year as a whole, picking up slightly to 2¾ per cent next year. On an EU harmonised basis, inflation is forecast to average 2¼ per cent this year. While this is close to (although still slightly above) the likely euro area figures, the Bank points out that the price **level** in Ireland is the highest in the euro area and the second highest in the EU (only Denmark has higher consumer prices than Ireland).

Notwithstanding this broadly favourable outlook, the Bank identifies a number of **risks** to the short- and medium-term outlook to the economy. These include:

- the current high level of oil prices and their volatility;
- a significant euro appreciation cannot be ruled as part of a possible correction of the US current account deficit;
- the level of private sector credit and its growth rate remain high;
- the unsustainably high level of output in the construction sector which must revert to more "normal" levels at some stage in the future.

CC. Secretary General, Mr. McNally, Mr. Moran, Mr. Hegarty, Ms. Daly

[1] The publication of Bank's quarterly bulletin comes shortly after the publication of its annual report. As a result, and as is usually the case for the summer bulletin, the bulletin contains no commentary (which is the policy oriented section of the bulletin) and there is no press conference. As a result, there may be lower media attention attached to this bulletin than is normally the case.

THEME: R5

Clarity and effectiveness of the Government and Oireachtas oversight and role

LINE OF INQUIRY: R5a

Effectiveness of the Oireachtas in scrutinising public policy on the banking sector and the economy

. **Deputy Michael McGrath** asked the **Minister for Finance** if, building on the euro area summit statement of 29 June 2012, he will outline his specific objective in the negotiations that will now follow, with particular reference to breaking the link between bank debt and the sovereign; his views on the way the €64 billion of taxpayers' money which has been injected into the banks can be revisited with the burden being lifted from the State; and if he will make a statement on the matter. **[32959/12]**

Deputy Michael Noonan: The Government welcomes last Friday's euro area summit statement. As the Deputy is aware, it has been working extremely hard to secure a deal on the Irish bank debt. The recent euro area summit statement represents a major shift in European policy in terms of breaking the vicious circle between the banks and the sovereign. It is particularly pleasing to note that last Friday's summit agreement reflects the proposals set out in the Taoiseach's letter to the other Heads of Government that was sent following the approval of the fiscal stability treaty. The Government's objective remains the same, which is to break the link between the banks and the sovereign, thereby making the debt more sustainable and to maximise the benefit to the Irish taxpayer.

The summit agreement provides an opportunity for the issue of the bank debt to be addressed at an EU level. It has been agreed that when an effective single supervisory mechanism is established, involving the ECB, for banks in the euro area, the European Stability Mechanism, ESM, could have the possibility to recapitalise banks directly. While the policy position is very positive, it is not possible at this stage of the process to attempt to quantify the benefits that will accrue to the economy. The details of how to separate banking from sovereign debt must now be discussed in detail, including the capital already injected into the Irish banking system.

While the details, structures and arrangements have yet to be finalised, the policy statement provides a basis for a euro area solution to what essentially is a euro area problem. This will be one of the Government's key priorities between now and the end of year with the initial formal steps, at a European level, taking place at the euro group meeting on 9 July.

[695]**Deputy Michael McGrath:** At the outset, I apologise to the House and to the Minister for not being present at the beginning of Question Time. I was attending the Joint Committee on Finance, Public Expenditure and Reform meeting with representatives of Ulster Bank and was not aware the time set for Question Time had changed.

I thank the Minister for his response to this priority question and wish the Minister well in the detailed negotiations that will commence on Monday on foot of last week's summit statement. I believe the statement and what hopefully will flow from it to be highly significant for Ireland and this could be extremely helpful in respect of the public finances and Ireland's debt sustainability. Moreover, it has the potential to make easier the fiscal adjustment. The cost of servicing the national debt has grown significantly in recent years and will continue to increase as the stockpile of debt continues to grow. However, if it is possible to secure a better deal in respect of bank debt, it could have highly positive implications. I note the Minister has ruled out the possibility of a deal making any difference to the forthcoming budget next December. However, if the negotiations conclude reasonably quickly and if Ireland secures an overall deal, we may end up with a significantly reduced interest bill in 2013, which would make the budget arithmetic easier. In that context, why is the Minister ruling out the possibility of there being any benefit in respect of the next budget? As the negotiations on this deal are only beginning now, a conclusion could well be reached before the end of the year that could work its way into the budget arithmetic.

5 o'clock

Deputy Michael Noonan: If there is any benefit, the Deputy can be assured the Government will take it into account. However, Deputies Michael McGrath and Pearse Doherty are better aware than most Deputies that the Government is dealing with two problems. First, it is dealing with the problem of the debt and second, it is dealing with the problem of the budget. The budget problem is the Government is not collecting enough in taxation to cover what it spends in the provision of services. While that is one problem, there also is the size of the debt, which according to present figures will peak next year at 117% of GDP. It is true the two issues have an influence on each other, that there is a crossover effect and that one reinforces the other. If one is paying a lot of interest on one's debt, it makes one's budget position more difficult. However, even if there was no interest to be paid, the Government still is approximately €14 billion on the wrong side of a balanced budget and this problem must be dealt with as a distinct fiscal problem.

If there are benefits in reduced interest rates, then well and good. However, the timeline is quite long and the European supervisor of banking seems to be the key appointment. That triggers the other elements of the procedure.

Deputy Michael McGrath: I urge the Minister to be highly ambitious on behalf of the Government in the negotiations, given the scale of the capital injection into the Irish banks. If the principle agreed last week to separate bank debt from the sovereign is to be implemented in full, then we have a very strong case for the €64 billion issue to be revisited. The Minister's negotiating position will be supported by Fianna Fáil. We wish him well. This is critical for Ireland. It could certainly be of great benefit to the public finances, the national debt and the economic recovery we want to see. We want the Minister to be highly ambitious and put the entire €64 billion on the table as a starting point.

Deputy Michael Noonan: The key element of the communiqué is the sustainability of the Irish programme. That is obviously a clear reference to getting the debt down to a stage where we go back into the markets, and then we are entirely sustainable if we can fund in the markets at low interest rates. If Deputy McGrath puts his accountancy experience to use and thinks of [696]it in terms of a balance sheet, then he will know that it is not really possible to work on one side of the balance sheet. If debt is moved off one side of the balance sheet, what is moved off the other side? We can see how complex it is to get matching collateral that we can shift as well. When the Government put money into the banks, they took the shareholding of the banks as well.

Deputy Michael McGrath: They can have the banks.

Deputy Michael Noonan: Yes, but we get into values then. Is it nominal value or market value? There will be quite a tricky piece of design work and then a very difficult negotiation phase.

60. Deputy Finian McGrath asked the **Minister for Finance** the amount of money Ireland has received in bailout funds under the EU and IMF financial assistance programme to date; and the amount of money in each year that went to repay senior bondholders and unsecured bondholders. **[33738/12]**

Minister for Finance (Deputy Michael Noonan): The Joint EU/IMF Programme of Financial Support for Ireland provides for a total financial package of €85 billion. Some €67½ billion comes from the European funding facilities – the European Financial Stability Mechanism (EFSM) and the European Financial Stability Facility (EFSF) – bilateral loans from the UK, Sweden and Denmark and the International Monetary Fund's (IMF) Extended Fund Facility (EFF). The remaining €17½ billion comes from the State's own resources, namely the National Pensions Reserve Fund and other domestic cash sources. At the 5th of July 2012, Ireland's net borrowings under the EU/IMF Programme amounted to €51.73 billion.
The following table gives an updated breakdown of the loans drawn-down by Ireland under the EU/IMF programme. The table incorporates the recent draw-downs from the IMF, the Swedish bilateral loan and the EFSM.
Loans drawn by Ireland under the EU/IMF Programme – as of 5th July 2012

Funding Mechanism	Currency	Currency Principal	Net Eur drawdown
		Billion	Billion
European Financial Stability Facility	EUR	12.74	12.15
European Financial Stabilisation Mechanism	EUR	20.70	20.64
International Monetary Fund	XDR	15.03	17.24
UK Bilateral Loan	GBP	1.21	1.45
Denmark Bilateral Loan	EUR	0.10	0.10
Sweden Bilateral Loan	EUR	0.15	0.15
			.73

Notes
The net euro drawdown figures are net of deductions including the prepaid margin on the first EFSF disbursement and discounts applied for below par issuance and also reflect the effect of foreign exchange transactions.
These figures are for net drawdowns and include the effect of maturing and rolling over of short term EFSF financing.
XDR is the currency code used to denote the IMF's Special Drawing Rights (SDRs), an international reserve asset which is composed of a basket of currencies consisting of the euro, Japanese yen, pound sterling, and U.S. dollar.
[502]To date bank recapitalization costs completed under the programme have amounted to a net €17.7 billion including the recent provision for the acquisition of Irish Life from Irish Life and Permanent, broadly equivalent to the amount provided from our own resources.
None of the EU-IMF programme funds has been used to directly fund the repayment of senior bondholders. The funds used in the recapitalisation of the banks have assisted these banks in maintaining adequate liquidity to fund their obligations, which includes the repayment of senior bonds as they mature.

The information on the engagement with stakeholders was not available to the Oireachtas. For instance, all negotiations with the social partners were conducted in secret and there was no role for the Oireachtas. In addition, there is extensive lobbying of Ministers and senior civil servants and that is not open to scrutiny.

I accept that the rationale behind the decisions taken by Government are explained in parliamentary debate, but that debate will not deal with the submissions received from interested group.

19. What is your view of the quality of the advice provided by the Department of Finance to the Government and in particular the analysis on which that advice was based?

All the PAC, when it questioned the Department, could do was to ask whether the Department of Finance had the appropriate skill-set and knowledge to give advice. The PAC could not question the Accounting Officer of the Department of Finance on a policy decision and on whether the Department was fully supportive of the decision taken or that full consideration of alternatives had been undertaken. That discussion is beyond the remit of the PAC as is clear from Standing Order 163(7) which states:

> (7) The Committee shall refrain from—
>
> (*a*) enquiring into in public session, or publishing, confidential information regarding the activities and plans of a Government Department or office, or of a body which is subject to audit, examination or inspection by the Comptroller and Auditor General, if so requested either by a member of the Government, or the body concerned; and
>
> (*b*) enquiring into the merits of a policy or policies of the Government or a member of the Government or the merits of the objectives of such policies.

20. Please describe the level of analysis of budgetary policy carried out by the Committee. Was the increased reliance on pro-cyclical or once-off taxes as a percentage of the total income identified as a risk?

PAC is not allowed carry out analysis of budgetary policy having regard to Standing Order 163 (7). The PAC is a post audit committee, which examines the expenditure and to that end and based on value for money reports of the C&AG, the PAC would examine whether the money was well spent and did it achieve what was proposed. However analysis of budgetary policy which takes place in advance of the appropriation of funds was a matter for the Dáil and the Joint Committee on Finance.

As the Minister stated, we do not expect the same numbers of houses to be built in the future, but somewhere in the region of 60,000 will be built with confidence and will be sold, which will help to continue the type of economic growth this country has come to value. It will continue to be a good country to live in, for children to be reared in and for first-time buyers to buy houses in without having to pay any stamp duty.

Deputy Richard Bruton: Very impressive.

An Ceann Comhairle: Deputy Creed, to be followed by Deputy Noonan. I remind Deputies that we must conclude by 5.45 p.m.

Deputy Michael Creed: Like previous speakers, I congratulate the Ceann Comhairle on his appointment and the Tánaiste on his elevation to that post.

I listened to this debate in my office for some time and found fundamentally depressing the assumption that those on the Government benches have a monopoly on wisdom on these matters. Nothing demonstrated that more clearly than Deputy Ardagh's contribution. It really is a dialogue of the deaf here, although there is merit in some of the content of all the contributions.

I accept the Minister's points that we must safeguard the Exchequer and that there is a demand for funding for a variety of public services. [706] However, we must put the want-to-be home owner centre stage in this debate. Home ownership has been a long cherished ambition in society and it is now a dream for many people who, ten, 15 or 20 years ago, would never have been clients of local authorities for housing, be it social or affordable. That is the issue that must be centre stage in this debate. While there may be a cost to the Exchequer of yielding on some of the points raised, there is also a cost to society of not addressing this issue, which the Exchequer will end up bearing indirectly. There will be a greater demand for the Department of the Environment, Heritage and Local Government to build more social and affordable housing because people are put at such a financial disadvantage that they cannot afford to buy houses themselves. It is a dialogue of the deaf. It is fundamentally depressing.

All the Minister needs to do is to yield on some of the issues raised, which have merit. If there were a willingness to engage in serious debate, it would not be beyond the capacity of this House to come up with a solution that would address the problems of many want-to-be home owners for whom this Government is killing the dream.

Deputy Willie O'Dea: The solution is to abolish stamp duty.

Deputy Michael Noonan: Like others, I congratulate the Ceann Comhairle and wish him a very successful and fulfilling period of office.

I welcome the Bill as a modest measure. Certainly it will be of benefit annually to 2,000 or 3,000 people——

Deputy Willie O'Dea: Four thousand people.

Deputy Michael Noonan: ——or 4,000 people, if that is the estimate. However, it is a very small and modest proposal in the context of the housing industry and the difficulties faced by many families.

It restores certainty to the market, which will be reflected in some positive trends over the summer months. However, it does nothing fundamental. There is a serious issue facing

the Minister as he prepares his next budget. Whatever about the merits of the commission on taxation, he needs to make a serious economic statement in the early autumn giving his view on where the building industry is going. The demand for mortgages in the first half of the year has dropped by 21%. It peaked at over 30% last year. The 21% drop in the demand for mortgages has nothing to do with the former Tánaiste's statements on stamp duty but has to do with rising interest rates. Housing starts for the first part of the year run as follows. In January, year on year, housing starts were down by 17%, in February they were down
39%, in March they were down 23%, in April they were up 4% and in May they were down [707]43%. The 12 month trend shows a drop from approximately 90,000 housing units last year to 60,000 units this year. That is an astronomical drop. However, the demand for social housing is not the same as financial demand. The number of housing starts can drop significantly and, with it, take down the number of affordable and social houses that are statutorily required to be put in place by builders and developers. At the same time, there is an increasing social demand for houses for those who simply cannot afford them. Many builders have priced themselves out of the starter market. With eight interest rate increases of 0.25% each over the past 18 months, and a forecast of three more to follow, affordability is now a major issue.

The contention by many economists that the supply of houses has now met demand is not accurate. The drop in the supply of houses to 60,000 will be close to the financial demand for houses. It will be close to the number of people who can afford to purchase but beyond that there is a huge social demand for houses which will not be met. The number of affordable and social houses being put in place by builders and developers is dropping in proportion to the total number of housing starts this year. The Minister knows that the building and construction sector makes a huge, yet disproportionate, contribution to the wealth of the country and the Minister's revenue flow. I think it is now €3.5 billion or €4 billion, but this measure will not reduce that very much. The number of housing starts will significantly reduce the flow of VAT, income tax and PRSI into the Minister's coffers as soon as the autumn. I wonder what the estimate by the Departments of Finance and the Environment, Heritage and Local Government is of how many people will not commence work this summer in the building industry after the builders' summer holidays. I would be interested to know how many will not go back.

There is also some mismatch in the infrastructural programme. My information is that the National Roads Authority has not given out new contracts yet this year for structural work. The Minister should beef up the national plan by investing heavily in the roll-out of infrastructural work to take up the obvious redundancies that will occur in the house building sector. The Minister knows the issues as well and probably better than any of us, but it is time he produced a reasoned paper on trends early in the autumn. In that way, when we come to debate the budget we will base our arguments on solid facts rather than anecdotal evidence or speculation.

An Ceann Comhairle: Is Deputy Burton pressing her amendment?

Deputy Joan Burton: Yes.

[708]Amendment put and declared lost.

An Ceann Comhairle: Amendments Nos. 3, 8 and 26 to 28, inclusive, are related. Amendments Nos. 27 and 28 are technical alternatives to amendment No. 26. All five amendments may be discussed together, but I am afraid Deputy Bruton has only one minute left.

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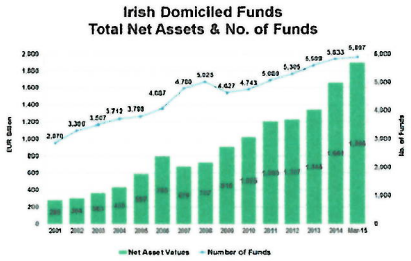
Irish Domiciled Funds March 2015



Source: Central Bank of Ireland

Year	Net Assets (€ Million)	Annual Growth	No. Of Funds Including Sub Funds
2002	304,383	37%	3,300
2003	363,007	19%	3,507
2004	434,782	20%	3,712
2005	587,302	35%	3,798
2006	730,171	24%	4,087
2007	808,367	11%	4,780
2008	647,955	-20%	5,025
2009	748,629	16%	4,627
2010	963,326	29%	4,743
2011	1,055,459	10%	5,069
2012	1,227,425	16%	5,306
2013	1,344,340	10%	5,599
2014	1,661,210	24%	5,833
Mar - 2015	1,895,664	14% YTD	5,897

Source: Central Bank of Ireland

Downloads

Total Domiciled Funds Raw Data - March 2015xlsDownload (http://files.irishfunds.ie/1433602437-irish-domiciled-funds-raw-data-march-2015.xls)

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THEME: R5

Clarity and effectiveness of the Government and Oireachtas oversight and role

LINE OF INQUIRY: R5b

Appropriateness of the advice from the Department of Finance to Government and the use thereof by Government

Tánaiste,
from John McCarthy

Central Bank Autumn Bulletin

The Central Bank autumn bulletin will be published today. The Bank is projecting a growth rate of 4¾ per cent for this year in both GDP and GNP terms. GDP growth is forecast to moderate to 3½ per cent next year (GNP of 3¼ per cent). The forecasts for both years have been revised downwards slightly from the previous Bulletin.

A slower rate of personal consumption growth and lower levels of new housing output are the main reasons for the more modest growth rate next year. In terms of the latter, the Bank is projecting completions of 75,000 this year declining to 65,000 next year. The Bank expects this to result in a limited increase in unemployment, as well as more modest inflationary developments. While there are some differences in terms of the actual numbers, this overall picture of current and prospective developments is in line with our own view as currently set out in the *Pre-Budget Outlook*.

Table 1: Macro-Economic Forecasts (growth rates unless otherwise stated)

	Central Bank (autumn 2007)		**Dept. of Finance** (unpublished PBO)	
	2007	**2008**	**2007**	**2008**
GDP	4¾	3½	4¾	3¼
GNP	4¾	3¼	4¼	3
Employment	2.9	1.5	3.5	1¼
Unemployment (rate)	4¾	5¼	4.6	5½
CPI	4.9	3	4.9	2½

In terms of policy issues, the Bank highlights the need to improve our export performance through improving productivity and competitiveness and maintaining macro-economic stability. Several mechanisms through which these objectives could be achieved are identified: reducing the infrastructural deficit, increasing competition in sheltered sectors, improving the quality and efficiency of public services, investing in education and creating an environment conducive to increasing the levels of R&D. In terms of budgetary policy, the Bank suggests aiming for a general government surplus next year; in the event of adverse economic developments emerging, the balance could then be allowed to deteriorate somewhat. Finally, the Bank notes that the modest decline in house prices and lower output of new housing has resulted in a moderation in the rate of mortgage credit growth. This is seen as a welcome development, given the existing high level of indebtedness.

CC. Secretary General, Mr. O'Brien, Mr. McNally, Mr. McGrath, Mr. Gallagher, Mr. Hough, Press Office

Speaking Points (if required)

- I note the publication of the Central Bank's Quarterly Bulletin today.

- The Bank is forecasting a moderation in GDP growth from 4¾ per cent this year to 3½ per cent next year (GNP from 4¾ per cent to 3¼ per cent). While revised downwards a little, growth of this magnitude is still high by international standards.

- As is well known, the main factor weighing on the short-term prospects for the economy is new housing output, the level of which is now in transition towards more sustainable levels.

- We must put these developments into context. Other components of construction – such as home improvement and commercial activity – remain strong.

- Moreover, infrastructural spending under the NDP will support activity levels over the medium term. Our view that we would achieve greater value for money from such spending was the right one and we are now seeing the benefits of our ambitious plans regarding the roll out of the NDP.

- I view the Bank's analysis as a balanced assessment of the outlook for the economy. I share the Bank's view regarding the need to re-balance activity towards the traded sector and share the concerns in relation to the need to improve competitiveness.

- I will publish revised forecasts in the Pre-Budget Outlook later this month.

Tánaiste,
from John McCarthy

Central Bank Winter Bulletin

The Central Bank winter bulletin will be published tomorrow. The Bank is projecting a GDP growth rate of 3.0 per cent for this year, with GNP slightly lower at 2.6 per cent. These forecasts have been revised downwards (½ per cent for GDP and ¾ per cent for GNP) compared to the Bank's previous bulletin and are now broadly similar to our Budget day forecast. While detailed forecasts beyond this year are not produced, the Bank does expect a pick-up in the growth rate to around 4 per cent in 2009, as the restraining impact of the housing sector adjustment wanes. Again the assumption of a pick-up is consistent with our own published view, although the scale of the acceleration is stronger under the Bank's outlook (in Budget 2008, we projected a GDP growth rate of 3.5 per cent for next year).

The main factor underpinning the moderation in growth this year is – unsurprisingly – the prospect of lower new housing output; the Bank is projecting completions of 55,000 units. Lower employment growth will result in a rise in unemployment and also affect household incomes, which in turn will depress consumption growth. On the positive side, a further reasonably upbeat export performance is expected, mainly reflecting strong services exports. This overall picture on consumption, housing and the external sector is very similar to our own.

Table 1: Macro-Economic Forecasts (growth rates unless otherwise stated)

	Central Bank (winter 2008)		**Dept. of Finance** (Budget day)	
	2007	**2008**	**2007**	**2008**
GDP	5.3	3.0	4.8	3.0
GNP	5.1	2.6	4.2	2.8
Employment	3.3	0.8	3.5	1.1
Unemployment (rate)	4.5	5.6	4.6	5.6
CPI	4.9	3.5	4.9	3.0

In terms of policy issues, the Bank highlights the importance of promoting a strong export performance in order to drive growth, and in this regard the high price level (including energy costs) and infrastructural constraints are identified as areas which may be restraining inward investment / exports. The Bank suggests greater levels of competition in the non-traded sectors of the economy as a means to reduce inflationary pressures.

In relation to fiscal policy, the Bank is fairly complementary regarding the Budgetary measures. The moderation in the growth of current spending and the emphasis on efficiency in the provision of public services is welcomed. The stance of the Budget is seen as mildly expansionary but not excessively so.

Finally, the Bank notes that the modest decline in house prices and lower output of new housing has resulted in a moderation in the rate of mortgage credit growth. This is seen as a welcome development, given the existing high level of indebtedness.

CC. Secretary General, Mr. O'Brien, Mr. McNally, Mr. McGrath, Mr. Gallagher, Mr. Hough, Press Office

Speaking Points (if required)

- The Central Bank is forecasting GDP growth of 3.0 per cent this year, with GNP growth of 2.6 per cent. While the Bank has revised downwards its forecasts since the last Bulletin, I would point out that growth of this magnitude is still high by international standards.

- These growth forecasts are similar to those of my own Department, published on Budget day. We expect GDP growth of 3 per cent this year, and GNP growth of 2.8 per cent.

- I share the Bank's views regarding the importance of improving our export performance by improving our competitiveness.

- As is well known, the main domestic factor weighing on the short-term prospects for the economy is new housing output, the level of which is now in transition towards more sustainable levels.

- It is also fair to say that the global economic environment appears to have deteriorated in recent weeks. This was a risk identified at Budget time.

- The policies are in place to support the economy. These include:

Implementing prudent fiscal policy

- Budget 2008 represents a significant stimulus to the economy, providing for an increase in current spending of over 8 per cent while revenues are projected to grow by around 3½ per cent.

Full role out of the NDP

- The Government will continue to prioritise the full implementation of the National Development Plan.

- In terms of capital spending, I have provided for an increase of around 12 per cent this year. Infrastructural investment under the Plan will help to eliminate bottlenecks and foster an improvement in our competitiveness.
- Considerable resources are also being directed towards improving the educational and skills attainment of our workforce.
- These measures – investing in human and physical capital – will help to boost the productive capacity of our economy, improve competitiveness and help us to compete in an increasingly globalised economy.

Retaining flexibility

- A flexible economic environment gives us greater capacity to respond to external shocks such as adverse developments in key trading partners such as the US.
- We will, of course, continue to maintain this flexibility.

Enhancing competitiveness

- The Government is committed to improving our competitiveness in order that Ireland can continue to compete on the international stage.
- In addition to enhancing flexibility, investing in education and infrastructure (outlined above), a number of measures are in place to improve competitiveness.
- For instance, the consensus approach to pay determination ensures that wage developments are cognisant of wider trends in the economy.

Supporting the housing market

- In relation to the new housing market, the measures announced in the recent Budget (reforms to stamp duty regime, raising the ceiling on mortgage interest relief) will help to restore confidence to this market. An orderly adjustment to more sustainable levels of output in this sector is in all of our interests.

Tánaiste,
from John McCarthy
4th April 2008

Central Bank Spring Bulletin

The Central Bank spring bulletin will be published this morning. The Bank has reduced its forecasts for economic growth this year by just over ½ percentage points compared with the previous bulletin, reflecting a lower assumption for new housing output this year (50,000 units) and the deterioration in the external environment. GDP is now projected to expand by 2.4 per cent this year; the equivalent figure for GNP is 1.9 per cent. A pick-up in GDP growth to 3.6 per cent next year (GNP to 3.2 per cent) is expected. The Bank is projecting employment growth of just 0.5 per cent this year, so that unemployment is expected to rise to 5.9 per cent. CPI inflation is forecast to average 3.2 per cent this year. HICP inflation is expected to be in line with the euro area average this year and next.

With the exception of the housing market (where the Bank has access to later data), there are only minor differences between the Bank's latest forecasts and the Budget day numbers. However, the impact of assuming lower new housing output has a significant impact on the overall GDP growth rate which is now 0.6 percentage points below our own.

Table 1: Macro-Economic Forecasts (growth rates unless otherwise stated)

	Central Bank (spring 2008)		**Dept. of Finance** (Budget day)	
	2008	**2009**	**2008**	**2009**
GDP	2.4	3.6	3.0	3.5
GNP	1.9	3.2	2.8	3.3
Employment	0.5	1.6	1.1	1.3
Unemployment (rate)	5.9	6.0	5.6	5.6
CPI	3.2	1.6 *	3.0	2.2

* note that the CPI for next year is affected by the Bank's assumption of a decline in interest rates.

In terms of the **housing market**, the Bank sees the decline in the level of new housing output as being a move towards a more sustainable position and points out that current house price levels better reflect economic fundamentals than was the case a year or two ago. In addition, the moderation in the growth of credit is welcomed.

In relation to **fiscal policy**, the Bank makes a number of observations. Firstly, the Bank argues for adherence to budgetary targets, given the increased economic uncertainty. In particular, the Bank highlights the fact that a higher than projected deficit this year would leave the economy with less room for manoeuvre next year. In addition, the Bank suggests

that public sector pay developments should be cognisant of the more difficult budgetary position and that the efficiency of public spending should be enhanced. Finally, lower revenue growth than in the past and the need to prioritise capital spending underline the importance of containing the growth of current spending in coming years.

In order to rebalance growth towards external demand, the need to improve competitiveness and enhance productivity (including in the public sector) is stressed. In particular, the Bank argues for a realistic approach to pay developments that takes account of the more challenging economic environment. Importantly, the Bank argues that higher global commodity prices are beyond our control, and so wage increases should not attempt to compensate for these. Greater competition in the non-traded sectors of the economy and continued investment in human and physical capital to support productivity are also recommended.

CC. Secretary General, Mr. O'Brien, Mr. McNally, Mr. Connolly, Mr. Cardiff, McGrath, Mr. Gallagher, Press Office

Speaking Points (if required)

- The Central Bank is forecasting GDP growth of 2.4 per cent this year, with GNP growth of 1.9 per cent. A pick-up in the growth rate is expected next year.

- The Budget day forecasts are for GDP growth of 3.0 per cent this year and GNP growth of 2.8 per cent. The main difference between these forecasts and those of the Bank relates to different assumptions regarding the level of new house building this year.

- Whatever the level of completions, it is clear that the market is in transition towards more sustainable levels.

- We are clearly in a somewhat more difficult economic environment. However, one of the great strengths of our economy is its ability to adapt and to respond to changing conditions. The limited fall-out from the global ICT shock in the early part of this decade is testament to this resilience.

- Exchequer figures relating to the first quarter of the year were published this week. In looking at the performance of taxes, of particular note is the good performance of income tax, which is up 5 per cent compared to the same period last year. This demonstrates the real health of the Irish economy and shows that the most important part of economic activity – employment – remains strong. It is a positive indicator of the resilience of the Irish economy.

- Overall tax receipts were €600 million, or 5.1 per cent behind target in the first three months of 2008. Over half of this shortfall is due to the poor performance of Capital Gains Tax which reflects the more adverse conditions in equity and property markets.

- The Government is playing its part in minimising the impact of the global slowdown. For example, we are…

…implementing prudent fiscal policy

- Budget 2008 represents a significant stimulus to the economy, providing for an increase in current spending of over 8 per cent while revenues are projected to grow by around 3½ per cent.

…rolling role out of the NDP

- The Government will continue to prioritise the full implementation of the National Development Plan.
- In terms of capital spending, I have provided for an increase of around 12 per cent this year. Infrastructural investment under the Plan will help to eliminate bottlenecks and foster an improvement in our competitiveness.
- Considerable resources are also being directed towards improving the educational and skills attainment of our workforce.
- These measures – investing in human and physical capital – will help to boost the productive capacity of our economy, improve competitiveness and help us to compete in an increasingly globalised economy.

…retaining flexibility

- A flexible economic environment gives us greater capacity to respond to external shocks such as adverse developments in key trading partners such as the US.
- We will, of course, continue to maintain this flexibility.

…enhancing competitiveness

- The Government is committed to promoting export-led growth through improving our competitiveness.

- In addition to enhancing flexibility, investing in education and infrastructure (outlined above), a number of measures are in place to improve competitiveness.
- For instance, the consensus approach to pay determination ensures that wage developments are cognisant of wider trends in the economy.

…supporting the housing market

- In relation to the new housing market, the measures announced in the recent Budget (reforms to stamp duty regime, raising the ceiling on mortgage interest relief) will help to restore confidence to this market. An orderly adjustment to more sustainable levels of output in this sector is in all of our interests.

Minister,
from John McCarthy
10th July 2008

Central Bank 2007 Annual Report

Summary: the Central Bank is forecasting that growth in both GDP and GNP terms will be "significantly less than 1 per cent" this year, with some modest improvement in prospect for next year with growth forecast to be about 2 per cent. Unemployment is forecast to average 6 per cent this year, mainly on foot of the construction slowdown, and Ireland like others is facing significant inflationary pressures. In terms of the public finances, the Bank concurs with our assessment. The Bank reiterates the assessment that Irish Bank's are well capitalised with good quality assets and that the banking sector's shock absorption capacity remains strong.

The Central Bank will publish their annual report for 2007 later this morning. The Bank will publish their detailed economic forecasts in around two weeks time in its quarterly bulletin. However, the economic overview contained in today's report contains some preliminary forecasts which are likely to receive some media attention.

Economic Overview

The Bank is projecting growth in both GDP and GNP terms of "significantly less than 1 per cent this year." These forecasts are based on the assumption of 45,000 new housing units being completed this year, and result in an increase in the unemployment rate to an annual average of 6 per cent. On a CPI basis, inflation is forecast to average 4½ per cent this year. Given the recent interest rate increase, this is in line with our own forecasts. The harmonised measure of inflation – the HICP – is forecast to average 3½ per cent.

The Bank is expecting a modest recovery in the growth rate next year to about 2 per cent, mainly on the assumption that the rate of new house completions declines at a slower rate (and therefore imparts a lower drag on growth). This is similar to our own assumptions, where we have built in completions of 43,000 units this year (a 45 per cent decline) easing to 33,000 units next year (a 23 per cent decline).

On the assumption of a stabilisation in the housing market and a recovery in the global economy, the Bank sees the economy returning to its potential rate of growth (which it estimates as being around 4 per cent per annum) by 2010. However, the Bank argues that this is not guaranteed without action in those areas under our control. Appropriate actions identified include adopting a prudent approach to fiscal policy (the Bank argues that the targets under the Stability and Growth Pact represent such a prudent approach), improving the efficiency and effectiveness of public spending, and implementing policies that promote productivity and competitiveness (greater competition in sheltered sectors, encourage innovation / R&D, enhance skills level). Finally, the Bank stresses that we cannot compensate ourselves for external commodity price increases.

Assessment

This overall view of economic trends – namely weak growth this year, only a modest pick-up next year and a return to trend by 2010 – is very much in line with our own thinking.

Other Economic Forecasts

Various other economic commentators have been revising downwards their forecasts for growth this year, on foot of the weak first quarter data. Yesterday, *National Irish Bank* published a forecast of 1 per cent for GDP growth this year, while *Ulster Bank* published a forecast of a -0.7 per cent decline in output this year.

Finally, it is also our understanding that one of the stockbroker firms will publish a very weak forecast for GDP growth later today. While no details are currently available, the indications are that the figure will be considerably more negative than the *ESRI's* -0.4 per cent forecast.

CC. Secretary General, Mr. O'Brien, Mr. Cardiff, Mr. McNally, Mr. Connolly, Mr. McGrath, Mr. Beausang, Mr. Gallagher, Mr. Higgins, Mr. O'Murchadha, Mr. O'Leary, Mr. Dorgan, Ms. Herbert

Speaking Points (if required)

- I note the publication of the Central Bank's annual report this morning.

- In terms of economic prospects, the Bank is projecting growth of less than 1 per cent this year.

- The Bank is also expecting a modest pick-up in growth next year to about 2 per cent, as developments in the new house building sector are assumed to be less of a drag on overall growth.

- On the assumption of an improvement in the housing market and a global recovery, the Bank sees growth returning to trend of about 4 per cent by 2010.

- This overall view of the economy over the next few years is broadly in line with my own Department's view. My Department recently published a forecast for GDP growth of 0.5 per cent this year, with a modest pick-up to 2¼ per cent next year and a return to trend by 2010.

- A return to trend growth is, of course, conditional upon a recovery in the global environment and on implementing the right policies now so that we are in a position to take advantage of the global recovery when it emerges. In other words, implementing prudent fiscal policies and improving competitiveness.

- I also note the publication of economic forecasts by other commentators over the past day or so. Differences in these forecasts reflect the inexact nature of economic forecasting. Nevertheless, there forecasts are all consistent in the sense that all economic commentators are revising down their projections.

- In relation to the public finances, the Bank shares our assessment and I note what the Bank says about the SGP targets being a prudent approach to the management

of the public finances and that it will be a major challenge to remain within the limits. This is the difficult task we face and that is why the Government took action this week in relation to public expenditure.

- I note the Bank's assessment that Irish banks are well capitalised with good asset quality and that the banking sector's shock absorption capacity remains strong.

Minister,
from John McCarthy
3rd October 2008

Central Bank Winter Bulletin

Summary: the Central Bank is forecasting a contraction in economic activity – GDP and GNP – both this year and next. Our own current view is that growth this year will contract by 1 – 1½ per cent and our current working estimate for 2009 is that it is difficult to see where there will be any positive growth.

The Central Bank winter bulletin will be published later this morning (copy of the 'comment' section is attached). The Bank is forecasting that GDP will contract by -0.8 per cent this year, while GNP is forecast to contract by -1.4 per cent. A further contraction is expected next year: GDP is forecast to decline by -0.9 per cent while GNP is forecast to decline by -1.3 per cent. Employment is forecast to decline in both years, with unemployment reaching 7.5 per cent next year. Inflation is projected to ease.

Not surprisingly, the Bank sees the sharp slowdown in growth as the result of lower housing output being amplified by external developments, especially the global financial market problems.

Central Bank Macro-Economic Forecasts (growth rates unless otherwise stated)

	2008	2009
GDP	-0.8	-0.9
GNP	-1.4	-1.3
Employment ('000)	-6,000	-20,000
Unemployment (rate)	5.9	7.5
CPI inflation	4.4	1.9
House completions	47,000	25,000

The Bank highlights the fact that the economy's potential growth rate is fairly high, but that the recovery path back towards potential will depend on the response to the current situation. To create the conditions for recovery, the Bank identifies the importance of fiscal prudence and of improving competitiveness.

In relation to fiscal policy, the Bank argues against the use of discretionary fiscal policy to stimulate the economy, while the need to increase the efficiency of public spending and to limit the increase in current spending are emphasised. The desirability of maintaining infrastructural investment is highlighted, while the Bank also suggests that broadening the tax base should be examined.

CC. Secretary General, Mr. O'Brien, Mr. McNally, Mr. Connolly, Mr. Cardiff, Mr. McGrath, Mr. Gallagher, Ms. Cunningham, Ms. O'Sullivan, Mr. O'Leary, Ms. Herbert, Press Office

Speaking Points (if required)

- I note the publication of the Central Bank's quarterly bulletin this morning.

- The Bank is forecasting that GDP will contract by -0.8 per cent this year, with GNP contracting by -1.4 per cent.

- The Bank is projecting a further contraction next year, with GDP forecast to decline by -0.9 per cent (GNP by -1.3 per cent).

- As part of my forthcoming Budget I will present revised forecasts for this year and the following three years. However, in relation to 2008, on the basis of data published by the CSO, a contraction in activity is now highly likely this year.

- We are clearly in a very difficult economic environment. The slowdown in the construction sector is being compounded by negative external events, including global financial market problems.

- I share the Bank's views that the best way to ensure a recovery is to maintain fiscal prudence and to implement competitiveness-enhancing measures.

- Bringing forward the Budget will also help provide certainty in this regard. The recently announced draft national pay deal will help meet these objectives, by providing a climate of stability, certainty and industrial peace.

Briefing on ESRI Spring 2005 Quarterly Economic Commentary

Economic Forecasts, % change

	ESRI		Dept Finance (Budget Day)	
	2005	2006	2005	2006
GDP	5.7	5.5	5.1	5.2
GNP	5.0	5.8	4.7	4.8
Employment	1.8	1.9	1.9	1.5
Unemployment (rate)	4.3	4.3	4.4	4.5
Inflation	2.4	2.2	2.5	2.4

The economy in 2004 – strongest GNP growth rate since 2000

The ESRI argue that the Irish economy grew in line with its trend growth rate last year. In GNP terms, the (estimated) growth rate of 5.1 per cent was the strongest since the year 2000, and resulted in favourable employment growth, with the total number in work increasing by 54,400 (3.0 per cent). CPI inflation averaged 2.2 per cent last year, the lowest rate of increase since 1999. The main factors driving growth last year were the buoyant construction sector (housing output amounted to just under 77,000 units last year, the largest ever number of completions in a single year) and the buoyant world economy.

The economy in 2005 – broadly favourable outlook

The ESRI views the prospects for the Irish economy in 2005 as broadly favourable. Growth in the international economy is likely to be reasonably robust, and this should support Irish exports and continued FDI inflows. However, the ESRI identifies some downside risks to the international economy; in particular, the current high level of the euro vis-à-vis the dollar may impact on Ireland's competitiveness position. The current high level of oil prices is also identified as a concern, although the ESRI believe that prices are likely to decline during the year.

Notwithstanding these risks, the ESRI assess the international outlook as broadly favourable and this should support Irish GDP growth of 5.7 per cent this year (GNP growth of 5.0 per cent). Total employment is forecast to rise by 34,000 (1.8 per cent), resulting in an unemployment rate of 4.3 per cent. Inflation is forecast to remain moderate at 2.4 per cent.

The economy in 2006 – slight moderation in GDP growth

The ESRI are forecasting a slight moderation in GDP growth next year to 5.5 per cent (GNP is forecast to accelerate to 5.8 per cent). Conditions in the labour market are projected to remain broadly favourable, while inflation is forecast to remain modest.

Policy Issues

- living standards: GNP per capita is a better measure of living standards in Ireland

The ESRI highlight the fact that GDP per capita is not an ideal measure for comparing living standards in Ireland with those elsewhere (OECD data show that Ireland is ranked in the top four countries in terms of GDP per capita). The ESRI correctly point out that because GDP includes the profits of multinationals (which do not accrue to Irish residents) it overstates the 'true' income of Irish residents. In this context GNP per capita (which excludes multinational profits) is a better indicator of living standards for Ireland. On this measure, Ireland is ranked 15th internationally, which is still a credible ranking. We would support this analysis.

- slower growth in per capita income going forward

It is also argued that the rise in living standards (as measured by income per capita) cannot be expected to continue at the same rate as in the 1990s. This is because the increase in the 1990s was mainly attributable to increases in labour supply from domestic sources, i.e. an increase in participation rates and the movement from unemployment into employment, thereby substantially raising the per capita income of the existing population. Going forward, the economic pie may increase, but this will be shared by a larger population as immigration will account for a larger part of the increase in the labour force (given that the economy is close to, if not at, full employment and the fact that the scope for increased participation is lower than was the case in the 1990s).

- productivity and immigration: immigrants employed below their skills levels

The ESRI point to the moderation in productivity growth in Ireland since the boom years during the 1990s. In part, this reflects the move towards greater services sector activity in recent years. In terms of improving living standards, increasing productivity is essential. In this context, the ESRI argue that if immigrants were employed in line with their skills it would boost productivity (the ESRI have undertaken research which suggests that, as a whole, immigrants in Ireland are employed in occupations which do not fully reflect their educational attainment – a so-called "occupational gap").

- exposure to construction sector: supply in excess of medium-term demand

The ESRI identify the current high level of output in the construction sector as a risk to the economy. This stems from the fact that the economy is now very reliant on the construction sector (for example, in 2004, construction employment accounted for 11½ per cent of total employment, a figure which is very high by both historical and international standards).

Moreover, it is generally accepted that the current level of housing output (i.e. supply) exceeds housing demand, so that at some stage output and employment must revert back to more 'normal' levels, which will have negative implications for the economy.

- *uncertain outlook for consumer expenditure: SSIA related expenditure unpredictable*

The ESRI identify the SSIAs as being one of the factors underlying the modest growth in consumer expenditure last year. They also argue that forecasting consumption growth next year and in 2007 is complicated by the release of the SSIA funds. This uncertainty regarding personal expenditure over this period was also highlighted by the Department of Finance in the Budget Day documentation.

- *competitiveness crucial for a small open economy*

The ESRI argue that the competitiveness of the economy remains critical for continued economic success. In this context, it is argued that the task for the social partners is to maintain full employment without damaging the economy through excessive wage claims.

Assessment

The growth rates are somewhat higher than those produced by the Department of Finance on Budget Day. The Department is forecasting GDP growth of 5.1 per cent this year and 5.2 per cent next year. GNP is forecast to increase by 4.7 per cent this year and 4.8 per cent next year. The Departments figures for this year are closer to those of the Central Bank.

Despite these differences, the overall outlook for the economy is broadly similar, namely an economy growing at close to its potential growth rate. Moreover, growth is likely to considerably exceed that in the rest of the euro area. At the same time, conditions in the labour market are projected to remain favourable, while inflation should be relatively modest.

We would share many of the concerns / risks identified by the ESRI. In particular, risks surrounding the potential evolution of the euro-dollar exchange rate as well as uncertainty regarding oil price developments were identified on Budget Day. Similar to the ESRI, the Department's forecasts are based on a gradual easing back of housing output over the period 2005-2007, although this is expected to be offset by increases in other components of building and construction (assisted by a continuation of a strong public capital programme).

We would strongly support the ESRI's analysis of comparing Irish income standards internationally. By excluding the profits of multinationals, GNP is a more accurate measure of Irish per capita incomes.

Minister,
from John McCarthy

Central Bank Annual Report

The Central Bank Annual Report for 2004 will be published this morning. Against the background of reasonably strong growth in the global economy, GDP **growth in Ireland** is projected to be 5½ per cent (GNP growth of 5¼ per cent) this year. These growth rates are slightly higher than our own forecasts published on Budget day, and reflect more up-to-date data available to the Bank. Employment is forecast to increase by 42,000 (2¼ per cent), resulting in an unemployment rate of 4¼ per cent this year.

Notwithstanding this broadly favourable outlook, the Bank identifies a number of **risks** to the short- and medium-term outlook to the economy. These include:

- the current high level of oil prices and uncertainty regarding the future path;
- developments in the euro-dollar bilateral exchange rate, given the large current account deficit in the US and the fact that some Asian currencies are pegged to the dollar (which places greater pressure on the euro-dollar rate);
- weak growth in domestic demand in the euro area;
- the unsustainably high level of output in the construction sector which must revert to more "normal" levels at some stage in the future.

The Bank highlights the improvement in Ireland's **inflation performance** last year and in the first half of this year. However, after a number of years of high inflation, the price level in Ireland is now the highest in the euro area (exceeding the euro area average by 15 per cent). Moreover, the current tight labour market and reasonably strong growth are identified as risks to the inflation outlook. The Bank argues that pay increases must recognise the new low inflation environment.

The Bank makes a number of observations on **fiscal policy**. In particular, the current stance of fiscal policy is judged to be somewhat expansionary. In policy terms, the Bank argues that fiscal policy should be framed in a manner which provides a capacity to cope in the event of downside risks to the economy materialising. We would support this latter analysis.

In terms of **house price inflation**, the Bank is encouraged by the recent moderation in the rate of house price inflation, which it argues, stems from the large increase in supply coming on stream in recent years. Nevertheless, the Bank expresses concern about the current high rate of credit growth, including mortgage credit, which has been increasing by around 25 per cent. As a result of this, the ratio of **household debt** to disposable income in Ireland is now in excess of 120 per cent. While servicing this debt is not generally a problem at present (at least at the aggregate level), the Bank highlights the fact that nominal interest rates are currently cyclically low, and increases (whenever they occur) could present difficulties for some borrowers, especially for new more indebted borrowers.

Speaking Points

- The Central Bank views the prospects for the Irish economy as broadly favourable this year. In overall terms, the Bank is forecasting GDP growth of 5½ per cent; GNP is forecast to increase by 5¼ per cent.
- The Bank's forecasts for this year are slightly higher than my own Department's projections, published with the Budget day documentation.
- My Department will publish revised forecasts for this year in the Economic Review and Outlook in August.
- I share the Bank's concern regarding the importance of maintaining and indeed improving the competitiveness of the economy. In this context, I note that inflation declined to 2.2 per cent last year, the lowest rate of increase since 1999. Moreover, I made no increases to indirect taxes in the Budget and this will help to maintain low inflation this year.
- The Bank identifies the uncertainty regarding oil price developments and the potential for further exchange rate appreciation as risks to the Irish economy this year. I agree with these risks and highlighted them on Budget day.
- We have no control over many of the external risks facing the economy. We can, however, seek to ensure that our domestic cost base does not exacerbate competitiveness difficulties. This is why we need sensible income policies and a greater role for competition in the economy. This is the best way we can protect jobs.
- The Bank expresses concern regarding the current level of household debt. In the current environment of historically low interest rates the level of private sector credit has been increasing strongly in a number of countries, including Ireland, and also other eurozone countries. In our case this is occurring in a context of strong economic growth and increasing employment. Of course, it is important that borrowers act sensibly taking into account the prospect that interest rates will be higher in the medium term. I would encourage the Central Bank and the Financial Regulator to remain vigilant on the issue of personal credit and mortgage debt, and to remind the lending institutions of the need for prudence on their part.

Minister, for information
from John McCarthy
18th December 2008

ESRI Winter 2008 Quarterly Economic Commentary

Summary: the ESRI will publish revised economic forecasts tomorrow. GDP is now projected to contract by 3.9 per cent (GNP by 4.6 per cent) next year. This is a substantial downward revision from their forecasts published in October. In terms of policy, the Institute argue that the public finances must be put on a more sustainable path so as not to act as a constraint on future growth. The Institute have also conducted research which shows there is a wage premium of over 20 per cent in the public sector when experience, qualifications, etc are controlled for.

The Economic and Social Research Institute (ESRI) winter 2008 Quarterly Economic Commentary will be published tomorrow, in time for the morning media. The Institute is forecasting that GDP will contract by 2.4 per cent this year and by 3.9 per cent next year. The forecast for next year is a downward revision from the contraction of 0.7 per cent which was projected last October – this revision is similar in magnitude to that of our own current thinking. GNP is now forecast to decline by 2.6 per cent this year and by 4.6 per cent next year.

ESRI Macro-Economic Forecasts (per cent growth rates unless otherwise stated)

	2008	2009
GDP	-2.4	-3.9
GNP	-2.6	-4.6
Employment	-0.5	-5.5
Unemployment (rate)	6.1	9.4
CPI	4.2	-2.0
GGB (per cent of GDP)	-6.9	-10.2

The Institute is projecting a major deterioration in labour market conditions: employment is forecast to decline by 116,000 (5.5 per cent) next year with unemployment rising to 9.4 per cent. This is one of the most negative labour market assessments we have seen. While it is clear that employment is going to contract, we would not expect it to reach these levels. Outward migration is projected to be 50,000 next year.

Mainly because of lower interest rates, CPI is projected to turn negative next year, averaging -2.0 per cent for the year as a whole. In terms of negative price developments, the Institute correctly distinguish between good (short-lived decline in prices boosting real incomes) and bad (sustained negative prices feeding into expectations) outcomes.

The focus of the policy recommendations is the public finances (see General Assessment section of the Commentary which is attached). The Institute is projecting a general government deficit of 10.2 per cent of GDP next year, while public debt is forecast to rise to 47.5 per cent of GDP. In order to ensure that the public finances do not act as a constraint on growth, the ESRI argue that there is an immediate need to begin the multi-annual process of putting the public finances back onto a sustainable path. In this context, the researchers believe that it will be difficult for Government to pay the 3½ per cent increase due next September. In addition, the Institute have undertaken research, based on data from the National Employment Survey (NES), which shows that once differences in education, experience, skills, etc. are controlled for, average earnings in the public sector were over 20 per cent higher than in the private sector in 2006.

This may be helpful to us in later discussions with the public service unions but the unions have argued in the past that findings such as these based on average earnings do not necessarily mean that any individual public service post is paid more than a comparable job in the private sector. The second Public Service Benchmarking Body as part of its examination commissioned an econometric study based on 2003 NES data. This also found that average public service earnings were higher after allowance is made for the factors mentioned but the average public service premium was lower on that occasion. The previous study also found that the premium varied by occupation and that there was little or no premium when comparison was made with employees in the larger private sector companies. It is not clear at this stage if similar results are emerging from the ESRI study. The Benchmarking Body also stated in its report last year that in examining specific public service posts it was necessary to look beyond the broad occupational classifications used in the NES and to compare the jobs of specific grades in the public service with jobs of comparable size in the private sector.

The Institute argues that Budget 2010 will need to consider the incentive structure to take up employment given that wages are falling and unemployment benefits rising. Finally, the Institute identify the need for more competition in various sectors of the economy.

CC Secretary General, Mr. O'Brien, Mr. McNally, Mr. Cardiff, Mr. Connolly, Mr. McGrath, Mr. Duffy, Mr. Gallagher, Mr. Higgins, Mr. Hogan, Ms. O'Sullivan, Ms. Cunningham, Mr. Counihan, Mr. Dorgan, Ms. Herbert

Speaking Points (if required)

- I note the publication of the ESRI's quarterly economic commentary this morning.

- For next year, the ESRI is forecasting that GDP will contract by 3.9 per cent.

- The scale of the downward revision to the ESRI's forecasts since October is similar to the view I stated in the Dail last week. Activity may well contract by between 3 – 4 per cent next year, compared to a forecast contraction of 1 per cent at Budget time.

- As I've already stated, I will bring forward revised economic and fiscal forecasts early in the new year when the end-year fiscal data and all the relevant economic data have been assessed.

- What is clear is that we are living in a highly uncertain economic environment, and the scale of the downward revisions reflect the dramatic changes in the economic landscape in a relatively short period of time.

- The outlook for our major trading partners has been revised down significantly, the euro has reached its highest level ever against sterling, and the economic and fiscal data which have emerged for the Irish economy have been extremely poor. Yesterday's national accounts data show an annual GNP decline of nearly 5 per cent in the third quarter.

- So we are in a very difficult climate and one in which the outlook is changing rapidly.

- The need to put the public finances on a more sustainable path is Government's priority, as once again stated by the Taoiseach at yesterday's

launch of the Economic Renewal Framework. Borrowing to fund day-to-day spending is simply not sustainable and my first priority is to eliminate this deficit over a reasonable period of time.

- I note what the ESRI say about pay in the public service and this will require careful consideration.

Minister,
from John McCarthy

Central Bank Annual Report

The Central Bank Annual Report for 2005 will be published this morning. The Bank does not traditionally change its economic forecasts in the Annual report; rather the Annual report highlights some of the key issues facing the economy. Thus, the Bank is still forecasting a growth rate of 5 per cent this year, unchanged from the Spring quarterly bulletin.

The Bank will make a stronger statement than usual regarding recent house price developments. This stems from the recent pick-up in house price inflation (house price inflation had eased to around 6 per cent this time last year but re-accelerated to double-digit growth rates in the second half of last year and into this year). The Bank will signal that this re-acceleration in price inflation is not fully explained by fundamental factors, implying that there is some overvaluation in the market. However, it will also be stressed that even if there is an overvaluation, this does not imply that prices must fall sharply (for instance, if prices stabilised, then the fundamentals could 'catch up').

The Bank will argue that residential mortgage lending is currently running at 30 per cent per annum, and that the ratio of household debt to income is amongst the highest in the advanced economies. This increased indebtedness is likely to bear heavily on the more leveraged segment of borrowers.

The Bank will also highlight other domestic concerns, including:

- the loss in cost competitiveness in recent years, which has been associated with a slowdown in export growth and hence an over-reliance on domestic demand as a source of growth;
- the fact that new housing output will eventually have to revert to lower, more sustainable levels;
- the large tax-take from the property sector;
- the decline in productivity growth over the last number of years.

In relation to fiscal policy, the Bank will argue that no slack in the economy, there is little need for fiscal policy to impart a stimulus to demand.

Speaking Points

- The Central Bank views the prospects for the Irish economy as broadly favourable this year. In overall terms, the Bank is forecasting growth of 5 per cent this year (for both GDP and GNP).

Housing risks

- I note the Central Bank's concern regarding the re-acceleration of house price inflation since the Autumn of last year.
- On balance, they say that a soft landing remains the most likely outcome for the housing market. The large increase in housing supply in recent years can reasonably be expected to restore balance between housing demand and supply and have a moderating impact on house price inflation.
- Nevertheless, there are risks and we must be cognisant of these. However, while these risks may have increased, they are still containable.
- As I have highlighted before, it is important that both borrowers and lenders take into account the likelihood of higher mortgage interest rates.

Other risks

- I share the Bank's concern regarding the importance of maintaining and indeed improving the competitiveness of the economy.
- We are seeking to address this by:
  - Specific productivity gains in the public sector;
  - Keeping down taxes on labour;
  - Re-focussing our industrial policy on higher value-added jobs;
  - Removing barriers to competition in the domestic economy;
  - We are also investing strongly in supply-side infrastructure to ensure competitiveness in the future.
- As for exports, growth has been slow and industrial employment (which is strongly export-led) has fallen in the last few years. However, in the year to

March 2006 employment in industry has grown noticeably and the June Purchasing Managers Index showed the highest growth in industrial output, employment and new orders for some time. So, perhaps, our fall in competitiveness is not as bad as we thought and we will see exports pick up again.

Minister from David Hegarty

ESRI Medium Term Review

Introduction

The ESRI *Medium Term Review 2005 – 2012* will be published on Friday December 16th.

Economic Outlook

The ESRI believe that the fundamental factors driving the Irish economy, such as demographic circumstances, remain encouraging. The economy, particularly the labour market, remains flexible. Allied with the benefits of past investment in education, this will support productivity growth in the medium term. A structural change in the economy away from more traditional manufacturing output to a service driven economy is envisaged.

The MTR presents two growth scenarios for the economy, based on different assumptions about the evolution of the international economy. Under the "high growth" scenario, the US economy continues to grow rapidly with a worsening of its external and government deficits. Under the alternative, "low growth"scenario, they assume a gradual unwinding of the global imbalances, particularly in the US, starting in 2007. According to the ESRI, when looking forward beyond 2010, the low growth scenario is the more likely of the two to materialise.

Under the favourable **high growth scenario**, the ESRI project growth in GNP of 4.9% over the period 2005-2010. This is close to the Department's Budget-day forecasts of GNP growth of 4.7% over the 2005 to 2008 period. The ESRI forecast continued strong growth in employment, a high level of housing output (70,000 units per annum) and a comfortable fiscal position over the period (average GGB surplus of 0.3% of GNP).

Under the **low growth scenario**, the more unfavourable international environment would result in significantly lower growth in Ireland. Under this scenario GNP is forecast to rise by 3.5% over the 2005-2010 period, compared with 4.9% under the high growth scenario. The lower growth rates would lead to higher unemployment, projected to reach 7% by 2010. This scenario also assumes a gradual slowdown in housing output and prices.

Risks

The ESRI identify the housing market and the economy's "exceptional dependence" on the construction sector as considerable domestic risk factors. While the ESRI are forecasting a soft landing for the housing market, they warn that a number of potential shocks could undermine this. They present a scenario where a sharp correction in the global imbalances undermines confidence and results in house prices falling by up to a third and output by 40 per cent with significant adverse knock-on effects on the wider economy.

Main Policy Conclusions

Some of main policy issues which the ESRI identify from their analysis are as follows:

- They believe that it is appropriate for **fiscal policy** to run significant surpluses so long as the economy is growing rapidly. Any accumulated surpluses could be used to fund public investment in the event of a sudden slowdown in the economy.

- Because of the economy's dependence on the **building sector**, they argue that policy should aim to take money out of the sector (thereby reducing demand), through, inter alia, removal of tax incentives or other options such as a property tax or ending mortgage tax relief.

- Because future growth will be primarily driven by services, they identify a number of policy adaptations across a range of areas. In particular, they state that Ireland "needs to wean itself away from excessive dependence on the low **corporation tax** regime". They cite increased competition from other countries and our exposure to the possibility of legislative changes in other jurisdictions as arguments in this regard. They conclude that "This does not men that the regime should be abolished. Rather it means that we should cease to see it as a key policy instrument for promoting business in Ireland in the future".

Speaking Points

- I welcome the publication of the ESRI's Medium Term Review. It is encouraging to see that the ESRI believe that the prospects for the economy remain positive in overall terms. This is in line with my own view.

- The ESRI identify a number of risk factors going forward. I agree that there are a number of external risks associated with the current account imbalances in the US and other economies. We have no control over these factors. What we must continue to do is to manage our affairs in a prudent way so that we can deal with any downturn in the international economy. My Budget announced last week continues the Government's prudent approach to managing the public finances and of investing in infrastructure so as to enhance the economy's long-term growth prospects.

- I would acknowledge that there are risks associated with the fact that the construction sector now accounts for a historically high share of economic activity and employment. However, a soft landing is now in prospect. The Government's approach to curtailing tax incentives with transitional provisions in the Budget is a sensible one which seeks to avoid unnecessary disruption to this important sector of our economy.

- The Government's commitment to the 12½% corporation tax regime is beyond doubt. Our policy does not rely solely on tax advantages but on the skills, qualities and dynamism of our people. Tax is not the only factor which makes Ireland an attractive place to do business in. The Government intends to build on these advantages and to continue to invest heavily in education and infrastructure as set out in my recent Budget. For these reasons, I do not accept the ESRI view that the economy is excessively dependent on our low corporation tax regime

MEDIUM-TERM REVIEW

2005-2012

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MEDIUM-TERM REVIEW

2005-2012

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Finally, the authors themselves are solely responsible for the analysis, views and conclusions reached throughout the *Review*.

CONTENTS

EXECUTIVE SUMMARY

Introduction

After a decade of generally high growth and low unemployment there is a growing aura of invincibility about the Irish economy. Even the short slowdown of 2001-03 did not lead to an appreciable rise in unemployment. Today investment in housing is running at an unprecedented rate fuelling growth elsewhere in the economy. The unemployment rate is close to the full-employment level, the lowest in the EU, and Ireland is seen to be the most attractive labour market in Europe for many of its young mobile population.

The pattern of behaviour by households reflects a high degree of certainty about the future. The level of gross (and net) household debt is rising rapidly as households have confidence that they will be able to service this in the future. While some firms, especially in the manufacturing sector, are facing difficulties, their woes are masked by the feeling of bonhomie elsewhere in the business sector, especially in all those businesses that depend on building and construction for their success.

The fundamental factors driving the Irish economy, which are considered in Chapter 2, remain quite favourable. In particular, the economy faces a very fortunate set of demographic circumstances over the next fifteen years. However, there are considerable dangers in the current situation: in particular the very high level of dependence on the building industry. This is compounded by apparent insouciance about the future manifested by many borrowers in the household sector.

These internal risks to future prosperity must be seen against the background of the global economic imbalances that, if anything, are growing in magnitude. A key part of the story of this *Review* is the future evolution of these global imbalances.

When Odysseus undertook his long voyage home from Troy he encountered many dangers. Not least were the distractions that the Lotus-eaters provided for his crew. The lure of good times with the Lotus-eaters nearly derailed the voyage and tough measures had to be taken by Odysseus to get the crew back on board. Today, one of the key issues for policy-makers is how to tackle the dangerous imbalances that are building up in the economy at a time when euphoria in the household sector is possibly clouding the judgement of individual households. However, the nature and dimensions of the risks that the economy is likely to face over the coming decade suggest the need for public policy to take action to promote a soft landing.

Background Assumptions

While fears of a painful adjustment by the US economy to restore it to a sustainable growth path have been frequently expressed there is, as yet, no sign of it happening. In the light of this uncertainty we have developed two fully worked out scenarios for the US and the world economy: one where the US continues on its current unsustainable growth path with an ever rising balance of payments deficit and a second where the US undergoes an adjustment process bringing the external deficit under control.

In the more favourable, *High Growth* scenario, teased out in detail in Chapters 4 and 5, we assume that the US economy can go on growing at a rapid pace until 2015, with a gradual worsening in its external and government

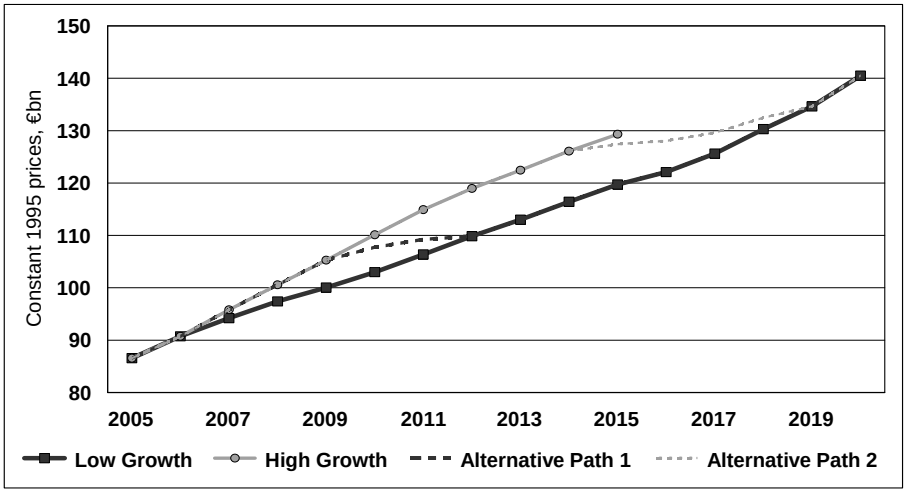
deficits. If realised, this scenario would provide a very favourable backdrop for the Irish economy for the next decade. However, it is not possible for the US to continue forever on this path and we do not pursue the details of this scenario beyond 2015.

When looking out to 2020 we feel that an alternative *Low Growth* world scenario is more realistic. This scenario, discussed in detail in Chapters 4 and 6, assumes that the US economy begins a gradual adjustment to a more sustainable growth path from 2007 onwards. The transition to the *Low Growth* trajectory could occur at any point from 2007 onwards. Initially this adjustment process would be painful for the US and for the rest of the world. With the global imbalances continually increasing the adjustment process could be more painful the longer it is delayed.

Forecast

Like a clockwork mouse that was fully wound up in the late 1990s, the Irish economy is gradually running down. Its potential to grow is less today than five years ago and it will be lower still in the next decade. The changing demographics play a key role in this slowdown. The unutilised resources available in the economy, not least the skilled labour, are being used up and, while there has been a major improvement in the quality of the infrastructure of the economy over the last decade, this development has been partially matched by the growth in pressures on that same infrastructure. As a result, the economy remains constrained by the limited stock of dwellings and infrastructure and consequent high prices and congestion. However, it still has the potential to grow at between 4 and 5 per cent a year out to the end of the decade. If realised, this would represent an unusually robust prospect compared to most of our EU neighbours.

Figure 1: Alternative Growth Paths for Real GNP



Given the uncertainty about the development of the US and other major world economies over the period to 2020 we have developed two separate scenarios for the Irish economy – a *High Growth* and a *Low Growth* scenario. Possible paths for real GNP implied by these two scenarios are shown in Figure 1. Our conclusion is that by 2020 Ireland will end up closer to the lower growth path for GNP. However, when the economy will switch from the high growth path to the lower will depend on how long the necessary adjustment is delayed in the US. Two alternative adjustment paths are illustrated in Figure 1, one starting in 2010 and the other in 2015.

High Growth Forecast

The *High Growth* scenario provides a forecast for the economy assuming that the current pattern of growth in the world economy continues. On this basis it seems likely that the economy will show quite robust growth out to the end of the decade (Table 1). This should see living standards, measured in terms of the more appropriate indicator of GNP per head, also rising quite rapidly by around 3.4 per cent a year. The growth in output per worker (productivity), which has been particularly slow over the first half of the decade, is expected to grow at 2.5 per cent a year out to 2010, more in line with the pre-1995 experience. The growth in wage rates is expected to be between 4 and 4.5 per cent a year for the rest of the decade. Given that the rate of inflation is expected to remain close to 2 per cent a year, this should see continuing significant rises in real wage rates.

The government is assumed to maintain a small surplus over the forecast horizon. As a result, the net indebtedness of the government sector will fall. The external balance should remain close to balance in spite of the continuing high level of investment in housing.

Table 1: Forecast Summary, *High Growth*

	1990-95	1995-00	2000-05	2005-10	2010-15
	Average Annual Growth, %				
GNP	4.4	8.8	4.0	4.9	3.3
GNP per head	3.9	7.7	2.2	3.4	1.6
GNP per worker	2.5	3.7	0.9	2.5	1.5
Non-Agricultural Wage Rates	4.4	6.0	5.5	4.3	6.9
Consumption Deflator	2.7	3.2	3.4	2.1	4.1
Employment, April	1.9	5.0	3.1	2.4	1.7
Labour Force, April	1.9	3.4	2.9	2.3	1.5
For end Year:	**1995**	**2000**	**2005**	**2010**	**2015**
Net Immigration, thousands	-2	26	53	31	44
Unemployment rate, ILO Basis %	12.2	4.3	4.2	3.6	2.7
Balance of Payments, % of GNP	3.2	-0.3	-1.8	0.1	2.1
General Government Balance, % of GNP	-2.3	5.1	-0.6	0.3	0.1
Debt/GNP Ratio[1]	83.6	34.3	22.4	17.2	12.5
Housing Completions	31	50	79	70	80

After the spectacular employment performance of the recent past, growth is expected to revert to a more normal rate of around 2.4 per cent a year out to 2010. This growth should be accompanied by a small fall in the unemployment rate. With the supply of labour domestically slowing this will require a substantial continuing net inflow of skilled labour from abroad. However, the fact that GNP per head is expected to rise quite rapidly would suggest that the additional growth which is made possible by the immigration of skilled labour will enhance the living standards of the population as a whole.

After 2010, under this scenario, increasing pressures build up within the economy resulting in accelerating inflation in prices and wages and a serious loss of competitiveness. The tightness of the labour market is reflected in the continuing fall in the unemployment rate. The housing market also shows pressures with a continuing very high level of output and corresponding improbably high prices. All this would suggest that even if the US growth were to continue unchecked, the Irish economy could begin to encounter serious problems early in the next decade as a result of a prolonged period of exceptional growth.

[1] The National Pension Reserve Fund has been netted off the debt.

Low Growth Forecast

The *Low Growth* scenario assumes that market forces will produce an adjustment in the US and the world economies beginning in 2007, moving the US back onto a sustainable growth path. The result of this adjustment process is that US and world growth would be significantly lower in the five years 2007-11 than in the high growth scenario. Because of the openness of the Irish economy it would result in significantly lower growth in Ireland than in the alternative scenario where the US does not adjust.

Table 2: Forecast Summary, *Low Growth*

	1990-95	1995-00	2000-05	2005-10	2010-15	2015-20
	Average Annual Growth Rates					
GNP	4.4	8.8	4.0	3.5	3.1	3.3
GNP per head	3.9	7.7	2.2	2.1	1.8	2.2
GNP per worker	2.5	3.7	0.9	2.0	1.8	1.9
Non-Agricultural Wage Rates	4.4	6.0	5.5	4.1	2.8	3.2
Consumption Deflator	2.7	3.2	3.4	2.1	2.0	1.9
Employment, April	1.9	5.0	3.1	1.5	1.2	1.4
Labour Force, April	1.9	3.4	2.9	2.1	1.1	0.7
For end Year:	**1995**	**2000**	**2005**	**2010**	**2015**	**2020**
Net Immigration, thousands	-2	26	53	23	18	13
Unemployment rate, ILO Basis %	12.2	4.3	4.2	7.1	6.4	4.0
Balance of Payments, % of GNP	3.2	-0.3	-1.8	-0.4	3.0	6.0
General Government Balance, % of GNP	-2.3	5.1	-0.6	0.4	0.4	0.3
Debt/GNP Ratio	83.6	34.3	22.4	18.6	15.5	12.5
Housing Completions, thousands	31	50	79	62	60	56

In this scenario the Irish economy grows at less than its potential in the period to 2010 resulting in a significant rise in the unemployment rate to over 7 per cent of the labour force in 2010. However, the growth in GNP per head would be rather similar to that of the last five years. There would be a much lower level of net immigration corresponding to the disimproved labour market circumstances. After 2010 the economy should grow at something over 3 per cent a year giving rise to a growth in GNP per head averaging around 2 per cent a year – comparable to the growth in the current decade.

The rate of inflation in both consumer prices and wages would be much more moderate than in the high growth scenario reflecting the weaker labour market conditions. Also it is assumed in this scenario that there is a gradual slowdown in the building sector with house prices relatively stable in real terms.

Housing Market Risks

The Irish economy is now exceptionally dependent on the building industry for growth and employment. The continued growth in prices, well above the rate of inflation in most of the other rich EU countries, looks increasingly threatening. While a soft landing remains a possibility, one can envisage a range of shocks that could cause a dramatic turnaround in the sector. For example, a more extreme or sudden US adjustment process, through its negative effects on world growth generally and on Ireland in particular, could cause a sudden loss of confidence bringing about a rapid and substantial fall in house prices of up to a third. In Chapter 6 we consider just such an outcome.

The results of our analysis suggest that the impact could be very painful. The loss of confidence and the related fall in prices could bring about a fall in housing output of around 40 per cent. Superimposed on the low growth

scenario it could push growth in GNP down to near 1 per cent in the year that the collapse occurred and GNP per head could actually fall marginally that year. Over the first three years the unemployment rate could move temporarily above 10 per cent of the labour force.

This *Review* is not suggesting that such a serious shock is inevitable. However, as the building and construction sector continues to grow it is becoming increasingly likely that some major shock will affect it and, as a result, the whole economy. Until the shock actually occurs it remains possible for wise economic policy to steadily reduce the economy's exposure to such an unfavourable risk and to increase the chances of a genuinely soft landing over the coming decade.

Given the size of the building and construction sector anything that causes a collapse in activity would immediately transmit itself to the rest of the economy. The aim of policy should be to try and reduce this danger. This could best be done by removing all incentives that are fuelling the boom and then by consideration of measures that can reduce demand for building and construction, either directly through moderating state spending, or indirectly through appropriate fiscal instruments. At the level of the economy a tight fiscal policy would help turn down the heat and it would also provide spare capacity for the state to intervene in the event that things go wrong in the future.

Medium-Term Challenges

In spite of the dangers that exist, the Irish economy is basically robust and can look forward to an average growth rate in GNP per head of around 2 per cent a year out to the end of the next decade. If realised such a performance would be pretty remarkable.

The demographic changes that are now inevitable are going to change society as well as the economy in many different ways. With the ageing of the very numerous cohort currently in their mid-20s, by 2015 it will be the care of infants rather than the lure of nightclubs that will have them up late at night! As a result, the demand for child-care outside the home will rise further and at the same time changes in the labour market are likely to reduce the supply of child-care workers with corresponding upward pressure on wages and prices.

The continuing inflow of workers from abroad with a high level of education will add to the growth potential of the economy and will help raise GNP per head with consequential benefits for those already resident in Ireland. It should also see low skilled wage rates rising more rapidly than high skilled rates narrowing the existing wide dispersion of wage rates. Any tightness in the labour market for less skilled workers is a necessary consequence of Ireland moving up the value-added chain. It would not be appropriate to try and attract large numbers of low skilled workers from outside the EU to halt this process.

The Irish economy's future lies more in services that are produced using skilled labour rather than in the traditional manufacturing sector. Many of these services are tradable and they constitute an ever-increasing share of our exports. As with most other developed economies, it is quite possible to envisage the Irish economy continuing to grow in a sustainable manner supported by such exports, even if the manufacturing sector is no longer the motor of growth. The analysis reported in Chapter 2 examines how this process is already taking place.

This shift in the factors driving growth does not mean that the manufacturing sector is no longer important. On the contrary, it will continue to be a key sector of the economy and its future success will remain very important. More than ever it will be the high technology part of manufacturing that will continue to thrive. However, it will no longer be a key generator of new employment opportunities.

Promoting a successful services based economy will require a change in policy focus. More than ever making Ireland an attractive place for skilled workers as much as for employers will help guarantee success. Research and Development (R&D) will of course be crucial. However, the priorities for support for R&D may need rethinking if it is to contribute to the success of business in the evolving services sectors. Finally, Ireland needs to wean itself away from excessive dependence on the low corporation tax regime. With increasing competition in this field we are no longer unique. In addition, we can not be certain that our neighbours' frustration with the policy will not eventually provoke an unpleasant response. This does not mean that the regime should be abolished. Rather it means that we should cease to see it as a key policy instrument for promoting business in Ireland in the future. By 2020 we need to have evolved an economy where the vast bulk of successful business activity is in Ireland because of all the other features that can confer competitive advantage.

Finally, Ireland is ageing, albeit slowly by the standards of the rest of the EU. We have the time to prepare for the burdens that that will impose.

Conclusions

This *Review* has tried to tell a complex story, a story that reflects the reality of the Irish economy today. The next decade should see significant further progress in terms of rising living standards. However, the tone of this report is more ominous in the face of gathering clouds on the horizon. In particular, the very success of the building and construction sector holds the seeds of future potential problems. Economic policy needs to manage the exposure of the economy to any future crisis in the building sector: to reduce the possibility that a crisis may occur and to provide a buffer of resources to deal with the consequences of any future shocks.

1. INTRODUCTION

1.1 Background

After a decade of generally high growth and low unemployment there is a growing feeling among households and companies that the Irish economy is invincible. Even the short slowdown of 2001-03 did not lead to an appreciable rise in unemployment and, as a consequence, it did not significantly dent confidence in the future. Today investment in housing is running at an unprecedented rate, fuelling growth elsewhere in the economy. The unemployment rate is bouncing around close to the full-employment level, and Ireland is seen to be the most attractive labour market in Europe for many of the mobile young population.

The pattern of behaviour by households reflects a high degree of certainty about the future. The level of gross (and net) household debt is rising rapidly; households have confidence that they will be able to service this in the future. Many companies also appear to be sanguine about the future. This is reflected in very substantial increases in employment. While some firms, especially in the tradable manufacturing sector, are facing difficulties, their woes are masked by the feeling of bonhomie elsewhere in the business sector, especially in all those businesses that depend on the building sector for their success.

As discussed later in this *Review*, the fundamental factors driving the Irish economy remain favourable. The economy faces a very fortunate set of demographic circumstances over the next fifteen years. Together these circumstances will conspire to give Ireland one of the lowest rates of economic dependency in the OECD area. The benefits of past investment in education will also continue to produce a significant boost to productivity for some time to come. In addition, the economy, including the labour market, shows considerable flexibility. The limited impact of the recent economic slowdown on the unemployment rate was indicative of this flexibility. Also the very elastic labour supply through migration means that the labour market is fast to react to changes in demand.

While the underlying structure of the economy is evolving in a manner that should be favourable to future growth, there are considerable dangers in the current situation. In particular, the extremely high level of dependence on the continuing success of the building industry is a serious cause for concern. This is compounded by the certainty with which many in the household sector view the future prospects for growth.

These internal risks to future prosperity must be seen against the background of the global economic imbalances that, if anything, are growing in magnitude. A key part of the story of this *Review* is the future evolution of these global imbalances. In the more favourable, *High Growth* scenario, teased out in detail in Chapters 3 and 5, we assume that the US economy will continue growing at a rapid pace indefinitely in spite of a gradual worsening in its external and government deficits. We continue this scenario out for the next decade and, if realised, it would provide a very favourable backdrop for the Irish economy. However, it is not possible for the US to continue forever on this path and the results of this scenario suggest that other domestic factors, in particular the gradual loss of competitiveness, could in any event bring the period of high growth to an end.

When looking beyond 2010 we feel that an alternative *Low Growth* scenario is more realistic. This scenario, discussed in detail in Chapters 3 and 6, assumes that the US economy begins a gradual adjustment to a more sustainable growth path from 2007 onwards. This adjustment process would be painful for the US and for the rest of the world in the short term. We do not attempt to predict when this adjustment will actually occur. It could begin as early as 2007 or it could be postponed until well into the next decade. With the global imbalances increasing year by year the adjustment process is likely to be more painful the longer it is delayed. In addition, in the *Low Growth* scenario we assume that the adjustment process is fairly gradual and spread over a number of years. In practice, if it is to occur, the adjustment may be more of a short sharp shock. This could portend a much more unpleasant environment for the Irish economy in the year it happened, but the more rapid restoration of the world to a sustainable growth path could prove beneficial in the longer term.

In this *Review* we have only considered two alternative scenarios for the world economy in detail. Obviously there is an infinite set of possibilities, some of which might produce a less painful resolution to the problem of international imbalances. However, it is equally true that things could be more difficult than we envisage in this *Review* and in Chapter 6 we consider how problems in the building and construction sector could interact with an unfavourable external environment to produce a serious domestic slowdown.

While our forecasting record (see Appendix 1) has been acceptable, the one certainty is that the world will not turn out exactly as it is modelled in any of our scenarios. The purpose of this *Review* is primarily to provide an explanation of the factors driving the Irish economy and to explore a range of possible future economic outturns. This range of possibilities highlights the uncertain world in which policy-makers must operate. Their objective in forming economic policy should be to choose a strategy that will be robust in the face of a wide range of possibilities. It is also important to adopt policies that may reduce or eliminate the danger of some future shocks. To the extent that the range of forecasts in this *Review* helps policy-makers hone their policies to avoid future shocks, the actual economic outturn could be enhanced (and the forecasts rendered obsolete).

When Odysseus undertook his long voyage home from Troy he encountered many dangers. Not least were the distractions that the Lotus-eaters provided for his crew. The lure of good times with the Lotus-eaters nearly derailed the voyage and tough measures had to be taken by Odysseus to get the crew back on board. Today, one of the key issues for policy-makers is how to tackle the dangerous imbalances that are building up in the economy at a time when euphoria in the household sector is possibly clouding the judgement of individual households. Trying to get households and companies to focus on future dangers at a time when the economy is thriving is always difficult. However, the nature and dimensions of the risks that the economy is likely to face over the coming decade does underline the importance of commencing this task.

1.2 Outline of the *Review*

In Chapter 2, we bring together the results of recent work on the changing structure of the Irish economy, in an effort to develop our understanding of the mechanisms underpinning recent trends. As will be seen in that Chapter, services are playing an ever increasing role in the economy, both in terms of domestic consumption patterns and exports. Given the historic concentration on manufacturing in the policy arena and in discourse on the drivers of economic growth, this shift will be critical from a number of perspectives. In Chapter 2, we also return to some more traditional themes such as the role of human capital and immigration. While these themes have been discussed before, the work presented in Chapter 2 places developments in these areas in the broader context of Ireland's recent economic experience.

Turning next to the international context, a number of uncertainties exist which could have potentially large impacts on the Irish economy. Foremost among these are the on-going large imbalances in the US economy, in particular the deficit on the current account of the balance of payments. The US balance of payments deficit has been growing in recent years and has now reached over 6 per cent of GDP. This situation is unsustainable in the long run and at some stage the US economy will have to adjust to return it to a sustainable path. As the adjustment could involve a large dollar depreciation and/or a dramatic cutback in US consumption, the implications for the Irish economy could be significant.

In Chapter 3, using the *NiGEM*[1] model of the world economy, we quantify by how much US private and public consumption might have to fall in order to bring the US economy to a point where the balance of payments deficit is sustainable. The results are used in the rest of this *Review* when we quantify the possible impact on the Irish economy of a US adjustment. As will be seen, the estimated impact is large and provides one of the key findings of this *Review*. We also look at the German economy to assess the prospects for recovery based on improved consumer sentiment as this, along with investment, appears to be the missing link in the potential German (and hence euro-zone) recovery.

In Chapter 4, we provide a broad overview of our forecasts before going into greater detail in Chapters 5 and 6. Chapter 5 contains the *High Growth* forecast. In a sense, the crucial assumption that underlies this forecast is that no adjustment occurs in the US in response to its imbalances until after 2012. We have opted to present this as our detailed forecast to 2012 based on a belief that adjustment in the US is unlikely to occur in the immediate future. We are less certain as to whether or not an adjustment will occur after 2008/9. However, a working assumption is needed and so we have opted for the no-adjustment story as the baseline. In the absence of a US adjustment, the picture that emerges of the Irish economy in the medium term is one of continued economic growth averaging over 4.5 per cent per annum out to 2010.

In Chapter 6, we alter the crucial "no-adjustment" assumption and estimate the impact on Ireland of an adjustment in US private and public consumption commencing in 2007. This Chapter presents details of our *Low Growth* scenario. This adjustment could begin in any year from 2007 onwards. The later it occurs the bigger the adjustment that is likely to be necessary. In modelling the adjustment in this way we do not imply that this is when and how we necessarily see adjustment occurring. Rather our goal is to quantify the impact of an adjustment and to examine the implications for Ireland. As noted already, the impact is large and so a core conclusion of this *Review* is that the on-going US imbalances pose a substantial threat to Ireland's economy.

Chapter 6 also includes an analysis of what would happen if the world slowdown, consequent on the US adjustment scenario, triggered a major fall in domestic housing prices. This scenario shows just how vulnerable the Irish economy now is to any downturn that has a major impact on the building industry. In this scenario where housing prices and output drop very substantially, the unemployment rate rises dramatically to over 10 per cent of the labour force towards the end of the decade.

In Chapter 7, we discuss the implications of these scenarios for public policy over the coming decade. While there are dangers for future development, prudent policy could minimise these risks and help ensure that the Irish economy realises its considerable potential.

[1] The *NiGEM* world model has been developed and maintained by the National Institute of Economic and Social Research in the United Kingdom.

1.3 Methodology

In the discussion of the *High Growth* scenario in Chapters 4 and 5 we emphasise the annual average change in key variables for each five-year period. This is because we feel that much wider margins of error attach to the forecasts for individual years than to the forecast trend growth rates. While we still present year-by-year forecasts out to 2012, this could give a misleading impression of the degree of precision that can be expected from such an exercise. In addition to the detailed numbers for the years to 2012, we have also included some summary measures for average growth rates for the subsequent decade. Obviously, there can be even less precision about such numbers than for the current decade, but these numbers are useful in illustrating important structural changes that are likely to occur in the economy. We do not feel it sensible to include numbers for the period after 2015 for the *High Growth* scenario.

As discussed in Appendix 1, our forecasting record, while better than average, is still not perfect. As a result, in preparing our forecasts we have examined a number of scenarios reflecting the range of uncertainty that surrounds our forecast of the potential output growth of the Irish economy.

The forecast presented in this *Review*, and the analysis underlying the range of different scenarios, has been developed with the assistance of three different economic models. In developing our forecast for the world economy and the external environment for the Irish economy we have used the *NiGEM* world model of the National Institute of Economic and Social Research in the United Kingdom. This model allows us to simulate different options on how the US economy is likely to cope with its internal imbalances and how these different options are likely to affect the rest of the world. It also allows us to examine how changes in exchange rates may affect the economic prospects for the major world economies. The benefit of such a model is that it allows "what if" experiments to see how sensitive forecasts are to changes in different assumptions. This model has proved an essential tool in preparing a consistent set of forecasts for the major world economies of relevance to Ireland.

In analysing changes in the population structure that are taking place we have used a demographic model of the Irish economy. This model uses very detailed data from successive CSO *Labour Force Surveys* and *Quarterly National Household Surveys* on labour force status broken down by level of education, age and sex. The model is driven by the educational attainment of the population. In the model individuals, as they reach the age of 20 years, are assigned a level of education based on current trends. This level of education has a major impact on their labour force behaviour. The model is used to project births, deaths, the population, the labour force, the number of households, and the human capital of the work force. The level of migration is input into the demographic model, having itself been determined in the macroeconomic model.

The *HERMES*[2] macroeconomic model has been used for fifteen years in preparing successive *Medium-Term Reviews*. The latest version of *HERMES* has been re-estimated using data from *National Income and Expenditure*, 2003. A limited calibration to *National Income and Expenditure*, 2004, has been undertaken for the purpose of this *Review*. The forecasts for 2005 and 2006 are based on the Autumn *Quarterly Economic Commentary*. Appendix 1 of the last *Review* provided a description of the key mechanisms in that model.

While any forecast involves many assumptions that rely on the authors' judgement, this model is an essential tool in ensuring the coherence of the resulting forecast. In addition, the model is an indispensable tool for undertaking the kind of sensitivity testing we have used extensively in this *Review*, and in developing a range of scenarios that are internally consistent.

[2] Homer in the *Odyssey* referred to the god *Hermes* as "the green-eyed giant-slayer".

2. WHAT DRIVES THE ECONOMY?

2.1 Introduction

In recent years much has been written on the successful convergence since 1990 of Irish living standards to those of the best performing EU member states. Previous *Reviews* have dealt with this topic, considering the driving forces behind this transition (in particular, ESRI, 1999 and ESRI, 2001). While there is a considerable degree of consensus on the factors underlying the apparent success, summarised in Honohan and Walsh (2002), there still remain significant areas of controversy. One element of this controversy is whether the story of the Irish economy over the last fifteen years is best seen as belated convergence due to the reform of policies that had previously prevented convergence (for example Ó Gráda, 2002) or, alternatively, whether the success derives from an especially efficacious policy stance adopted in Ireland (Barry, 2003). While there are elements of truth in both approaches, successive *Reviews* have leant more towards the former, "belated convergence", approach.

The purpose of this chapter is to examine three areas of the economy where rapid changes have occurred over the last decade and where research suggests that the future behaviour of the economy may be rather different from the past. Understanding this changing economic environment is an essential first step in formulating scenarios for the likely future development of the Irish economy over the coming decade. The future will not be the same as the past!

The first area of change, which we consider in Section 2.2, is the underlying sectoral structure of the economy. As the economy moved from being one of the most closed in Western Europe in 1960, to being one of the most open in 1990 there was a major shift in its underlying structure. Whereas in 1960 the bulk of the goods that were consumed in Ireland were made in Ireland, by 1990 most of the goods consumed were imported. Since 1990 that trend has slowed and even seen a small reversal. The counterpart to this increasing openness was the dramatic growth in exports as a share of output, substantially underpinned by the inflow of foreign direct investment into manufacturing.

The characteristics of the goods exported also saw major changes. In 1970 exports were dominated by agricultural products with a high share of domestic value added. By contrast, in the 1980s agricultural exports were diminishing rapidly in significance and the export of manufactured goods, which had a low share of domestic value added, had begun to grow rapidly. Since the late 1990s this pattern has begun to evolve so that today, services are the fastest growing category of exports.

Recent changes in the structure of the economy suggest that the historically low domestic multiplier may be stabilising. The rising importance of services in total exports implies a slightly higher multiplier impact from exogenous changes in domestic activity. Furthermore, the pattern of personal consumption for goods and services has witnessed a big change in recent years, with services (which have a relatively high domestic value-added content) accounting for a growing share of total expenditure. In addition investment in Ireland now accounts for a very high share of national income and expenditure. Housing, which now accounts for almost half of the very high

volume of investment, has a high domestic value added share. Thus investment in housing, with a low leakage through imported inputs, has a major impact on economic activity.

The changing sectoral structure of output also has important implications for what will drive growth in the future. The prospects for the agricultural sector, which so dominated the Irish economic history of the 20th century, are now of little significance for the future well being of the economy. Manufacturing, which played such an important role in fuelling growth in the last quarter of the 20th century, is now showing signs of "tiring". Instead, as in many of the other most developed world economies of today, the services sector is taking up the "baton" driving growth. For any one who harks back to the mercantilist world of the past such a development would seem unsustainable. However, the dramatic growth in services exports, now accounting for almost a third of all exports, shows that such a model of economic development is potentially sustainable for the future.

The second area where there have been major changes is in the labour market. Demographic change has played a key role in making Ireland a unique and exciting economic story. The legacy effects of past decisions by individuals in the fields of fertility and migration will continue to pattern demographic developments for at least the next half century. For the coming decade the demographic drivers are already fairly predictable (with the exception of migration). These drivers will be very different from what they were over the last twenty years, with a change in the age structure of the population, a further rise in female labour force participation and considerable immigration. These issues are considered in Section 2.3

The Irish labour market has always been one of the most open in Europe with major flows of labour out of it in the past and, more recently, very large net inflows. This has meant that labour supply has been very elastic – responsive to real after tax wage rates and to unemployment rates. The full implications of this for public policy were not completely understood in the past and even today research is still throwing new light on how the labour market behaves. Section 2.4 examines the changing characteristics of the labour market. It argues that the behaviour of the market is likely to be rather different to what it was in the past, not least because of the success in maintaining the economy close to full employment since the end of the 1990s.

Examining these three drivers of change in the economy provides an essential backdrop to the rest of the *Review*. Whether the changing structure of the economy will provide the basis for stable and sustainable growth will depend on how the economy adjusts to change. It will require an exceptionally flexible labour market to handle the eventual reallocation of resources away from building. Also, if the growth in the economy is to be sustainable the shift to exports of services will have to continue. The external competitiveness of the economy will be affected by new factors and a failure to adjust to this changing world could see the sustainability of growth called into question.

2.2 Living High on Services

2.2.1 BACKGROUND

There is considerable uncertainty and even disbelief that the Irish economy could continue to expand through growth in the services sector, with the manufacturing sector playing a less significant role. To some extent this view stems from a mercantilist approach to economics – a feeling that services are not "true" output. However, some of the scepticism also stems from a more sophisticated understanding of how the economy works. There is a concern that, without a continued increase in manufactured exports to leverage growth elsewhere in the economy, the improvement in domestic living standards will eventually be constrained by the balance of payments: the increased flow of

goods which consumers will demand will not be affordable unless we can produce goods that foreigners, in turn, will demand.

There are three areas where the change in the structure of the economy has altered the impact and role of manufacturing and services exports as drivers of economic growth in Ireland:

- First, the import content (including profit repatriations) of exports of goods is high relative to the import content of traditional services exports. This means that euro for euro services exports provide a bigger injection into the domestic economy than do exports of goods.
- Second, the terms of trade have moved continuously against the price of goods. This is reflected in the fact that merchandise export and import prices have risen much more slowly than the price of services trade, of domestically produced services, and also of domestic output. This means that the purchasing power of services output, measured in terms of internationally traded goods, has risen over time.
- Finally, the import content of household expenditure, in terms of both consumption and investment, has fallen. The most significant change has been the huge increase in household resources devoted to investment in housing – a product with a very low import content. Rising incomes have, through an accelerator effect (Duffy, 2002 and Murphy, 1998), generated a big increase in housing investment. To a lesser extent demographic change and rising incomes has resulted in an increase in the share of consumption going on services, as the income elasticity of demand for services tends to be higher than for goods. As both services and housing investment tend to have relatively low import contents, this has increased the domestic multiplier effects of injections to the economy from the growth in net exports.

As a result of these changes, which will be discussed further in Section 2.2.2, the effect of external stimuli on the economy, such as a growth in net exports, has been substantially enhanced in recent years.

2.2.2 THE IMPORT CONTENT OF EXPORTS

The Irish economy is very open. Following the moves to liberalise trade that began in the 1960s, the Irish economy became more reliant on foreign markets both for the sale of its products and as a source for the purchase of foreign goods and services. Underlying this change in structure was a major rise in the propensity to import out of final demand, especially out of consumption.

Table 2.1 shows how much of a unit of each component of final expenditure is derived from imports, either directly through the import of final products or indirectly through imports embodied in goods and services that are produced domestically.[3] Following the initial phase of trade liberalisation that occurred in the 1960s, the composition of total consumption changed relatively rapidly, with the proportion of the total accounted for by imports increasing significantly from 27.7 per cent in 1964 to 34.5 per cent in 1975, before edging up further to 35.7 per cent by 1985. Since then, however, there has been a reversal of this trend, so that in 1998 the import content of consumption, at 33.8 per cent was lower than in 1975.

[3] These estimates are taken from Curtis and Fitz Gerald (1993) and McCarthy (2005). They use successive input-output tables for the Irish economy to calculate the direct and indirect import content of a unit of each component of final demand. These numbers represent the average import contents for the years in question.

Table 2.1: The Import Content, Direct and Indirect, of Final Demand

	1964	1969	1975	1985	1998
Consumption	27.7	29.5	34.5	35.7	33.8
Food & Drink	NA	21.9	28.3	29.0	41.1
Clothing & Footwear	NA	45.4	59.7	65.2	57.5
Govt. Current Expenditure on Goods & Services	8.0	9.0	10.4	8.1	15.5
Building Investment	25.5	23.9	26.3	23.4	26.4
Machinery & Equipment Investment	73.2	73.6	70.9	69.0	62.6
Agricultural Exports	18.6	22.0	19.0	31.1	42.0
Industrial Exports	44.7	40.0	46.5	49.8	53.1
Services Exports	24.0	NA	NA	28.7	41.9
Final Demand	NA	NA	33.9	37.2	42.8

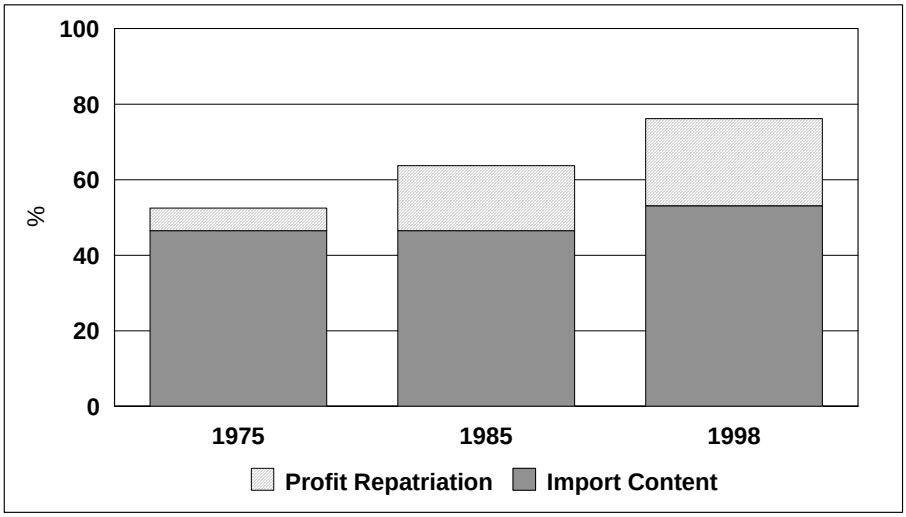
This reduction is primarily due to the change in the composition of consumption at the margin and it reflects the effects of differing income elasticities of demand for goods and services. The income elasticity of demand for services is on average higher than for goods, so that the strong growth in income in the Irish economy in recent times has led to a higher share of services in total consumption. Since goods are much more import intensive than services, this has led to a fall in the import content of a unit of consumption, as is evident in Table 2.1.

The import content of government expenditure has risen over time; in 1985 imported goods and services accounted for 8.1 per cent of government expenditure, much the same as it was in the 1960s. However, by 1998 the import content of government expenditure was 15.5 per cent, almost double the 1985 figure.

In the case of other investment, largely machinery and equipment, the import content in 1998 was 62.6 per cent, significantly lower than in 1985. While this reflects some increase in domestic sourcing of capital goods the primary reason for the decline is the increase in the share of indirect taxes in the cost of a unit of non-building investment. Investment in building and construction has shown a different pattern with the total import content of building investment still only 26.4 per cent in 1998. This was very similar to what it was in the 1960s, and it is much lower than the import content for total consumption. Thus the allocation of a very large share of household income to investment in housing has substantially reduced the average import content of the combined outlays by the household sector on consumption and investment. Given the relatively low import content and the relatively high domestic value added content in the building and construction sector, this means that a unit of investment in building and construction has a much bigger multiplier effect on the domestic economy than a unit of investment in machinery and equipment.

All components of exports have shown an increase in import content since 1969 with the most significant increase occurring in agricultural exports between 1975 and 1998, when the total import content more than doubled from 19.0 per cent to 42.0 per cent. However, this change is somewhat misleading as a significant part of the increase in agricultural exports related to food processing, including the processing of cola concentrates. In addition, the statistics on agricultural exports are affected by the extent of the distortion in the value of these exports due to EU subsidies.

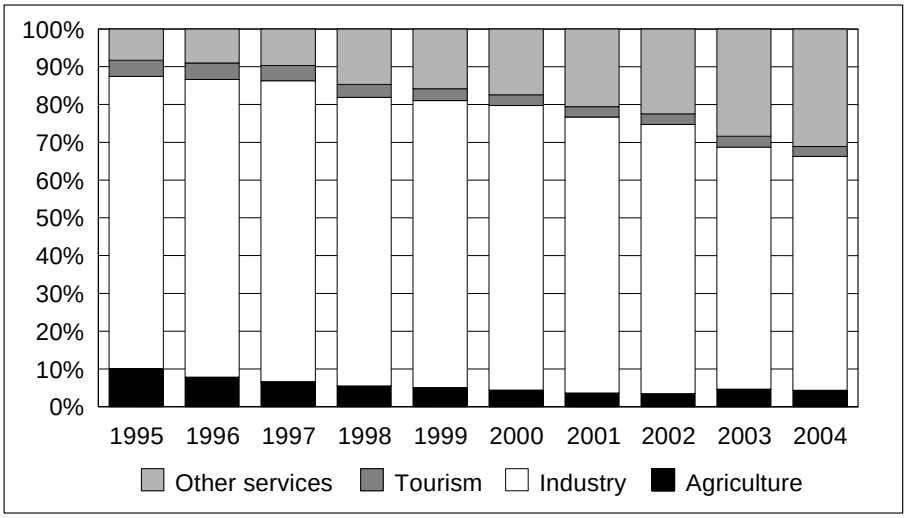
Figure 2.1: Leakage from a Unit of Industrial Exports



With regard to industrial exports, even in the 1960s over 40 per cent of a unit of industrial exports was accounted for by imports. This share rose steadily over the 1970s and the 1980s and by 1998 more than half of the value of industrial exports was sourced abroad. This figure still substantially overestimates the underlying domestic value added from a unit of industrial exports as it takes no account of profit repatriations. In 1998 profit repatriations from the manufacturing sector amounted to around 23 per cent of all exports, up from 17 per cent in 1985. When this factor is taken into account the combined leakage from a unit of industrial exports rose from 67 per cent in 1985 to 76 per cent in 1998 (Figure 2.1).

For services exports (excluding tourism) the import content has risen from 29 per cent in 1985 to 42 per cent in 1998. At the same time the share of such exports in total exports rose from 11 per cent to around 15 per cent in 1998. Since then there has been a further dramatic increase in this share to over 33 per cent by 2004 (Figure 2.2). As with industrial exports there is probably a significant share of the value added from this component of final demand which flows out of the economy as profit repatriations. Nonetheless, the domestic value added from this type of exports is significantly higher than for industrial exports.

Figure 2.2: Composition of Exports



The very rapid growth in services exports is further illustrated in Table 2.2. The three big components of total services exports in 2004 were insurance, computer services and business services. These three were also among the fastest growing categories of services exports in the period 1998 to 2004, growing at an average annual rate of over 20 per cent a year. If services exports continue to grow much more rapidly than exports of goods in the future, they will play an ever-increasing role in driving the economy. While the import content of such exports was significantly lower than for industrial exports in 1998, exports of both computer services and of insurance are likely to result in significant profit repatriations.[4]

Table 2.2: Services Exports, 1998-2004

	Share of Total, 2004	Change in Value, 1998-2004, %
Transport	4.5	7.3
Tourism and Travel	8.2	5.9
Communications	1.8	18.2
Insurance	19.4	23.3
Financial Services	9.6	23.9
Computer Services	35.5	22.0
Royalties/Licences	0.4	-6.2
Business Services	19.3	23.2
Trade Related	7.7	85.4
Operational Leasing	4.9	22.4
Miscellaneous Business Services	6.7	11.2
Other Services Not Elsewhere Stated	1.4	20.6
Total	100.0	18.9

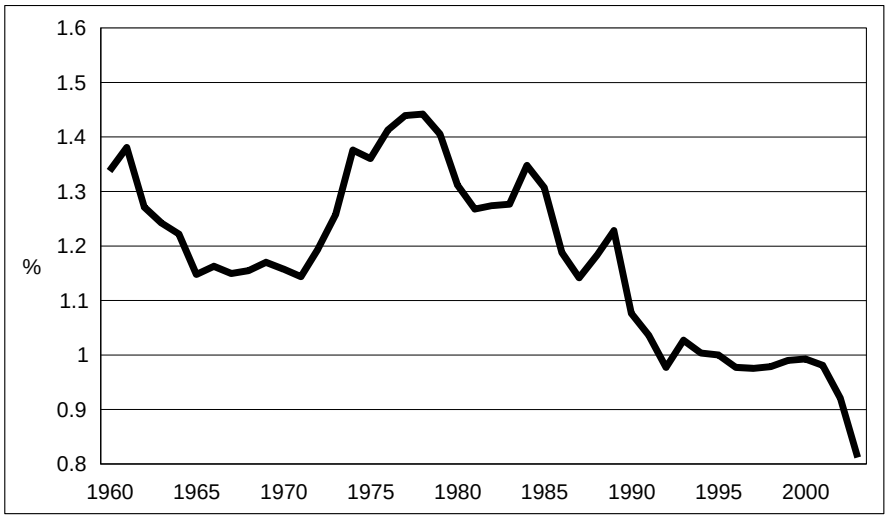
In summary, the import content of final demand has increased steadily since the 1960s to an estimated 42.8 per cent by 1998. This increase was to a large extent driven by the changing composition of final demand over the period, and in particular by the rise in the exports share of GNP. The growing importance of services in total exports and total consumption, together with the very strong growth in building investment in recent years, all point to a compositional shift towards a relatively lower import content of final demand.

TERMS OF TRADE FOR GOODS AND SERVICES

Over the last twenty years there have been very different patterns observed in the movement of prices of goods and services. In the case of domestic value added, the price deflator for the industrial sector rose by an average of 2.6 per cent a year over the twenty years to 2002, whereas for GDP as a whole, the rise in the deflator was 4.3 per cent a year. In the case of market services the rise was 6.3 per cent a year. This meant that over time those working in the industrial sector had to produce an ever-increasing quantity of goods just to buy the same volume of services. By contrast, producers in the services sector generating the same volume of services as twenty years ago could enjoy a much higher standard of living in terms of goods purchasable with their enhanced incomes.

[4] In the case of the "computer and related activities sector" 85 per cent of the value added in 2003 was accounted for by foreign owned firms while 63 per cent of value added was accounted for by profits (CSO: *Census of Services, 2003).*

Figure 2.3: Relative Price of Industrial to Service Exports



This pattern is also reflected in the case of exports. Figure 2.3 shows the movement in the deflator for industrial exports relative to that for exports of services over the last forty years. Since the late 1970s the services export deflator has risen significantly more rapidly than that for industrial exports; the services exports deflator rose by 3.6 per cent a year in the twenty years ended 2001 whereas for industrial exports it rose by only 2.3 per cent a year. The terms of trade moved against goods and in favour of services over that period.[5] This trend is replicated throughout the developed world. The production of goods generally involves a lower share of educated labour than for much of the output of the services sector. This, together with the greater tradability of goods, has seen output of goods shift continuously to less developed economies where labour with limited education is cheapest. The developed economies have specialised into services production, including tradable services, and the production of goods involving skilled labour. This has allowed the price of goods (increasingly produced in less-developed economies) to fall relative to the price of services. In turn, the differential returns have encouraged firms in developed economies to specialise into the production of increasingly valuable services.

For Ireland, the continuing fall in the real value of goods exported means that the economy has to steadily increase its sales abroad to keep purchasing power constant. Where services can be exported they are generally likely to hold their value to a much greater extent in the medium term. This means that while industrial exports continue to be much more important for the Irish economy than for many other developed economies, it would not be surprising to see a greater specialisation over time into production of services for export. Such exports will play an ever-increasing role in sustaining Irish growth.

2.2.3 HOUSEHOLD SECTOR SAVINGS, INVESTMENT AND THE MULTIPLIER

The household savings ratio is an important variable in understanding the behaviour of any economy. If aggregate domestic savings are inadequate to fund investment this will result in a balance of payments deficit. As discussed in the next chapter, the current low savings rate in the US will probably need to change if the US is to move onto a more sustainable growth path. The next Chapter also considers how a change in the savings behaviour by German

[5] Because of the difficulty in data collection the services exports deflator may not be a very reliable series. Originally it was deemed to be the deflator for consumption.

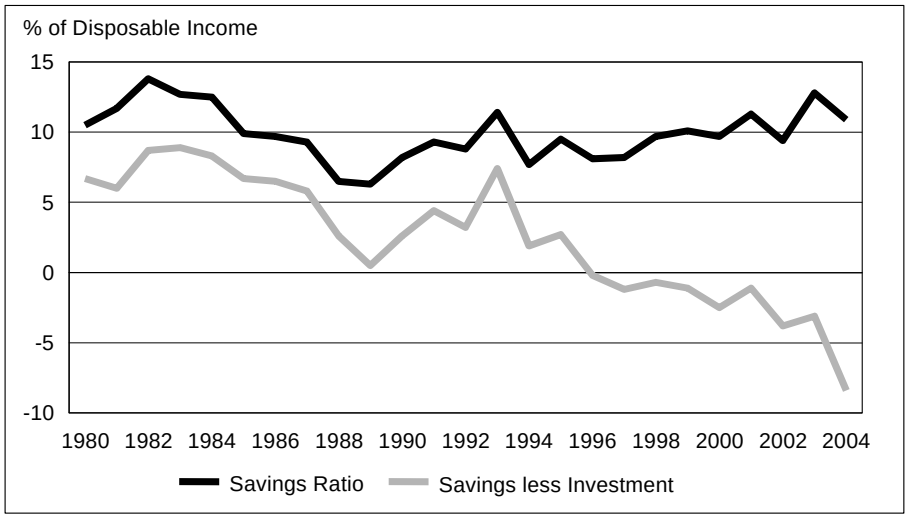
households would impact on the German economy in the short-term. In Ireland, the personal savings rate has been maintained at quite a high level over a sustained period.

The personal savings rate plays a role in determining how an economy reacts to external shocks. Where, for example, exports rise, leading to higher employment and incomes, the extent to which households spend their income will determine the indirect effects of the shock on the economy. In the short run the higher the savings ratio, the lower the multiplier effects of an injection of money into an economy.

The household savings ratio is calculated by subtracting household consumption from household disposable income and expressing the resulting savings as a percentage of disposable household income. Figure 2.4 shows the trend in household sector savings over the last twenty-five years. However, if private investment in housing (and agriculture) is treated as being an expenditure out of household personal disposable income, a rather different pattern emerges. As shown in Figure 2.4, today the household sector is spending more than it earns on consumption and housing, resulting in an increase in the sector's net indebtedness (or a fall in its net asset position).

Since 1980 the personal savings ratio has fluctuated around 10 per cent of disposable income, indicating a continuing relatively high savings rate. However, the massive growth in investment in housing since the mid-1990s has moved the household sector from a position as net saver, lending to the rest of the economy and abroad, to one where it is borrowing at a very high rate. While twenty-five years ago a unit increase in personal disposable income would have resulted in a less than unitary increase in household outlays, this is no longer the case. Today the outlays, when housing is included, may rise by more than the increase in income. While this is not sustainable indefinitely, it is clearly sustainable (if not desirable) for some time to come.

Figure 2.4: Household Savings and Investment



The models developed of the Irish housing sector suggest that a major driver of such investment in the short term is the rise in personal disposable income (see Duffy, 2002 and Murphy, 1998). Generally, the income elasticity of demand for housing is estimated at greater than unity resulting in a substantial accelerator effect. Thus when using a simple model of the multiplier response of Irish demand to an external injection, it is probably appropriate to treat housing investment as being similar to consumption – responding to any rise in disposable income.

What this means is that the leakage for savings assumed in the traditional multiplier model, which was 10 per cent or 15 per cent over much of the last thirty years is zero (or even temporarily negative) today. A unitary increase in

income will lead both to a rise in consumption of 0.8 to 0.9 units and an additional increase in investment. This has the effect of enhancing the leverage effect on output (GNP) of injections of demand into the economy from external forces, such as increasing exports.

Table 2.3 contains a set of illustrative numbers for the propensity of the economy to import and to consume at the margin both in 1980 and in 2002. As argued above, the marginal propensity to consume, when defined to include investment in housing, has risen significantly in recent years so that today it could be considered to be temporarily close to unity. The result of this is to increase the multiplier effect of a unit increase in exports. Also, the marginal propensity to import out of consumption has fallen slightly in recent years. This has also served to increase the multiplier and hence the domestic impact of any increase in exports.

Finally, the import content of services exports is lower than for merchandise exports. A crude allowance is made for profit repatriations from services output in 2002, which would have been close to zero in 1980. On the basis of these purely illustrative numbers, the impact of a unit increase in services exports on the economy may be substantially greater today than it is for a comparable increase in the export of goods, as evidenced by the multiplier.

Table 2.3: Assumptions

	1980	2002
Marginal propensity to import out of consumption[6]	0.34	0.31
Marginal propensity to import out of industrial exports	.75	.75
Marginal propensity to import out of services exports[7]	.29	.62
Marginal propensity to consume	0.9	1.0
Multiplier – industrial exports	**0.6**	**0.8**
Multiplier – services exports	**1.7**	**1.2**

On the basis of the assumptions shown in Table 2.3, a crude "multiplier" is calculated for 1980 and 2002 for injections from the two types of exports (see Appendix 2.1 for details on the calculation of the multiplier).[8] These suggest that the move towards services exports will lead to a larger domestic value added injection per unit of exports. Of course in practice, the effects of any injection are likely to be more complex. For example, the higher the multiplier, the more likely it is to result in higher wage inflation and higher prices for non-tradables. Under such circumstances the effects on real activity would be very much reduced. However, these multipliers are useful in suggesting an order of magnitude for the effects of a change in industrial exports *relative to* a change in services exports.

2.2.4 IMPLICATIONS

The Irish economy has become increasingly more open over the past forty years, with a pattern of steadily increasing import leakages from both domestic demand and exports. However, recent changes in the structure of the Irish economy mean that the multiplier effects of injections of demand from exports are now greater than they were for much of the last thirty years, while

[6] Including housing.

[7] For 2002 it is assumed that profit repatriations account for around 10 per cent of services exports. However, at the margin it is likely to be much higher. Here we assume a figure of 20 per cent. This number is used for illustrative purposes. There is, as yet, no information on the extent of such outflows.

[8] This is a very crude calculation as no attempt has been made to use the appropriate marginal variables – marginal propensities to import and to consume. These can be very different from the averages.

the changing composition of consumption towards services and the growing importance of housing investment mean that the continuous rise in the import content of domestic demand may finally have reached a plateau.

The changing pattern of relative prices and the changing comparative advantage of the Irish economy mean that there are increasing incentives to specialise into services production, including production of tradable services. The much greater domestic input content of many types of services output means that, euro for euro, they are more valuable to the economy than exports of manufactured goods. While services exports with a higher domestic input content may still account for only a third of Irish exports, they are nonetheless very valuable. The significant increase in their share in future years envisaged in the forecasts in subsequent chapters could help sustain continuing growth in the economy.

These changes in economic structure help explain why it is realistic to expect that the Irish economy has the ability to continue growing over the coming decade, facilitated by increasing dependence on the production of tradable services. The model of the last twenty years, where the economy experienced exceptionally rapid growth in manufacturing output, was the exception to the experience of most other developed economies. In that model a very rapid growth in exports of manufactured goods was needed to leverage a significant growth in the domestic economy.

This changing structure of the economy does not mean that new investment in high-tech manufacturing is not needed. In order to simply maintain employment at its current level a constant inflow of projects is needed to replace those that close. However, it does suggest a need to refocus development policy more towards the services sector.

An increasing feature of all Ireland's exports, goods and services, is the key role played in the production process by skilled labour. In addition, investment in research and development (R&D) is likely to be a feature of firms that are successful in the future in the tradable sector. It is, therefore, of importance to develop an effective policy to promote R&D that enhances the capacity of the economy to grow. This theme is taken up again in Chapter 7.

Looking forward it is likely that the Irish economy will grow to look much more like other highly developed economies in the world. It will see the manufacturing sector accounting for a falling share of domestic value added and a falling share of domestic employment. This should not be seen as a failure. Rather it is part of the normal process in a mature developed economy.

2.3 Demographic Structure

The Irish demographic profile is unique. It is characterised by a relatively young population with approximately one-fifth of the adult inhabitants in the 15-24 year age cohort. Such a favourable position means that the problems caused by ageing populations in many other EU and OECD countries are not as prevalent in Ireland today. This benign situation is the result of the interplay of a number of factors in the latter half of the 20th century, among which high birth rates and substantial migratory flows were the most important. However, the favourable structure of the population looks set to deteriorate in the long term, as the now relatively young population ages. As these structural changes occur they will have an important effect on the potential growth rate of the economy, mainly through their effect on labour supply and dependency ratios. It is thus pertinent for policy-makers to incorporate such effects into medium- and long-term plans (Barrett and Bergin, 2005). However, in the time horizon covered by this *Review* the population structure will remain broadly favourable.

Figure: 2.5: Population Structure

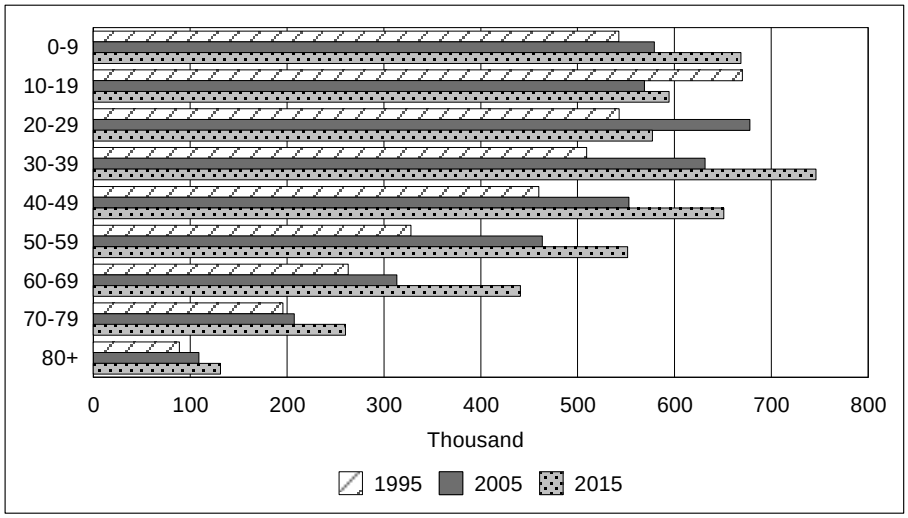
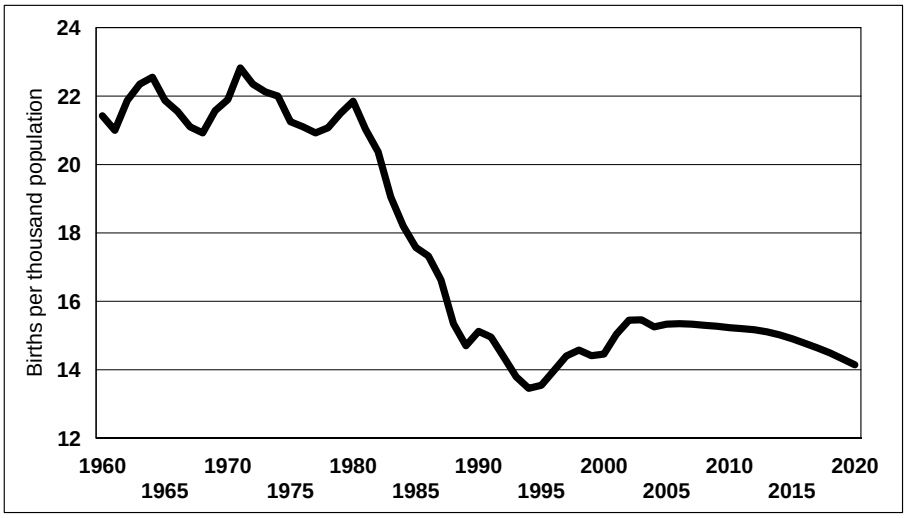


Figure 2.5 highlights the changes that have occurred and are set to occur in the population structure over the twenty year time frame, 1995 to 2015. The snapshot view of the population in 1995, 2005 and 2015 indicates the decreasing number of persons in the younger age cohorts over time. In 1995, over 40 per cent of the population were in the 0-24 year age category. In 2005 this percentage is forecast to fall to 36.2 per cent and in 2015 it will fall further to 33.1 per cent. At the same time, the numbers in older age cohorts are forecast to increase; in 1995, 11.4 per cent of the population were in the 65+ age cohort; in 2005 this percentage stabilised at 11.2 per cent but in 2015 it is forecast to rise to 13.0 per cent. While the rise in this statistic does not portend any significant increase in old-age dependency in the near future, Figure 2.5 does show that there will be a serious rise in dependency in the decades after 2020.

BIRTH RATE

The Irish birth rate has undergone significant change over the last half century, and this is one of the main factors accounting for the changing demographic profile in Ireland today. The path of change can be disaggregated into three distinct time periods, as evidenced in Figure 2.6; the first period, which was characterised by a very high rate, runs from 1960 to 1980. During this time the birth rate increased from 21 births per thousand in 1960, peaked at 23 births per thousand in 1971 and averaged 22 births per thousand over the whole period. These high birth rates account for the current large proportion of the population in the younger age cohorts. The second period ran from 1981 to 1989, during which time the birth rate experienced a marked decline, falling to a low of 15 births per thousand in 1989. The final period saw the birth rate fall to a record low of 13 per thousand in 1994 before rising slowly over the remaining years. Over the next decade, our forecasts suggest that the birth rate will level off at approximately 15 births per thousand of population. This means that in years to come, there will be relatively fewer persons in the younger age cohorts, provided there are no offsetting increases caused by migration.

Figure 2.6: The Birth Rate



The births are forecast on the basis of a fairly constant Total Fertility Rate (TFR) of around 1.9.[9] In addition to the change in the birth rate itself, there have also been changes in the ages at which women are becoming mothers; research suggests that a large proportion of the female population are now becoming mothers later in life than in the 1970s and the 1980s. Such changes have important implications for the supply of labour; when this phenomenon initially took effect, it would have resulted in a once off boost to the labour supply, as those women who traditionally would have become mothers in their twenties instead became mothers in their thirties. This pattern is reflected in the changing pattern of female labour force participation.

The limited rise in the birth rate over the rest of the decade that we forecast reflects the rising number of women in their late twenties and thirties, the age at which women now typically become mothers; the population bulge of young people born in the 1970s is mirrored 30 years later as they themselves begin to have children.

MIGRATION

Migration flows have long played a crucial role in driving changes in both the population structure and the labour force. However, there have been wide fluctuations in flows over time, with some periods characterised by net emigration and others characterised by net immigration; economic research shows that these flows are sensitive to economic circumstances not only in Ireland but also in the main destinations where migrants traditionally go. However, this research was conducted at a time when most of the flows into and out of the country were Irish people. Generally it showed that people would work in Ireland for somewhat less (or at a higher unemployment rate) than in the UK. However, while the underlying processes will remain the same for non-Irish migrants, the sensitivity and speed of response to changes in the standard of living in Ireland relative to the source or destination countries may change. Thus, there is increased uncertainty about the migration figures generated by the model and included in the forecasts in the rest of this *Review*.

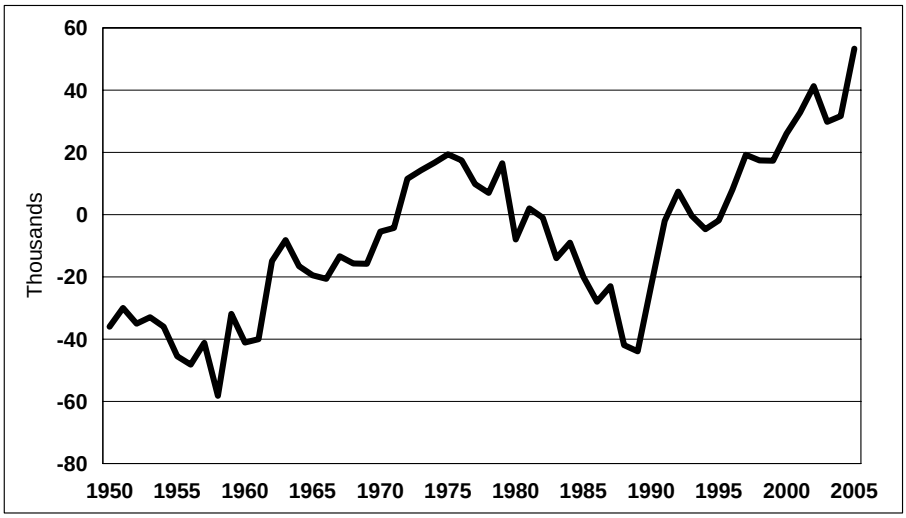
Figure 2.7 highlights the volatile nature of net migration flows in the Irish economy over the last half century. Following the high emigration rates of the 1980s, the improvement in Irish economic fortunes relative to its EU partners in the 1990s resulted in a reversal of this trend; the numbers immigrating

[9] This is an artificial measure that represents the potential number of children over her lifetime for a representative woman.

greatly outweighed the numbers leaving the country since 1996, resulting in positive net migration flows since then. Such flows have reached record highs in the year ended April 2005, when net migration was 53,000. These flows have acted to insulate the economy in a number of ways. In the 1980s the high negative migration flows meant that the rapid rise in unemployment was lower than it otherwise would have been, these flows accounted for over 3.0 per cent of the labour force in 1989.

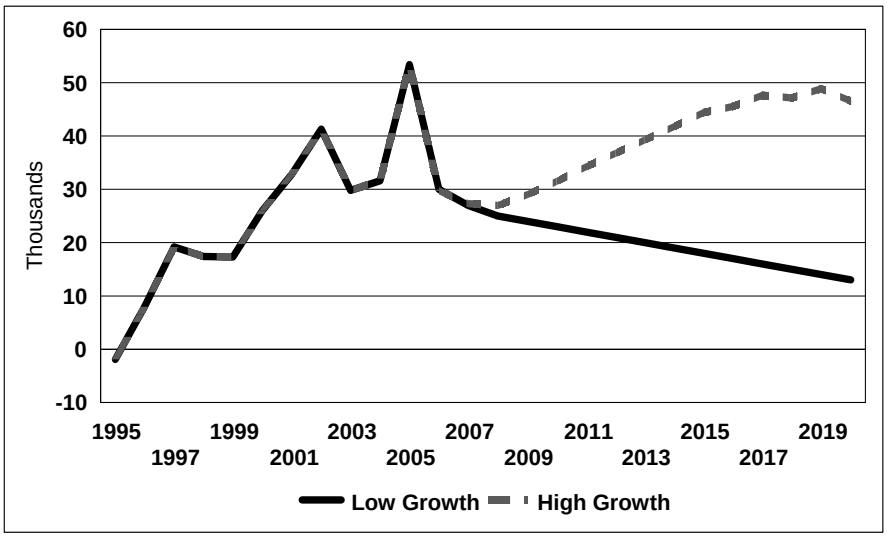
Conversely, the positive net migration flows of the latter half of the 1990s acted to insulate the economy from a constraint on labour supply at a time when the economy was growing rapidly and the unemployment rate was falling to what are effectively full employment levels. As already mentioned, these flows, coupled with high birth rates, have also acted to postpone the problem of ageing now faced by many other countries.

Figure 2.7: Net Immigration



Over the next decade, it is expected that net inward migration will continue. The magnitude of the inflows will depend on the likely growth trajectory of the economy, as discussed in subsequent chapters. The size and nature of these inflows will play an important role in the future growth of the economy and they will impact on the future demand for infrastructure, including housing.

Figure 2.8: Alternative Projections for Net Immigration



Should the economy continue to grow along the *High Growth* trajectory, described in subsequent chapters, immigration would continue at a high level as shown in Figure 2.8. However, should reality turn out to be close to the *Low Growth* scenario, consequent on a major readjustment in the US, immigration would gradually slowdown to around 10,000 a year. These two alternative scenarios would have very different implications for the economy generally and for the housing market in particular.

DEPENDENCY

A major factor in the changing fortunes of the Irish economy has been the evolution of the dependency rate. The economic dependency rate is defined here as the ratio of those who are not working in the population, including children and pensioners, to those who are working. Obviously, the lower the dependency ratio the more money that is available to individuals to spend out of their own income.

The combination of the fall in the birth rate since the 1980s and the high level of emigration in Ireland up to the 1960s, means that both young age and old age dependency has fallen over the last decade; the dependent population is set to decrease further from the currently low levels over the next decade, as shown in Figure 2.9. For decades this ratio was much higher in Ireland than in its EU partners. This placed a serious additional burden on an economy that was already under-performing in the 1950s and 1960s. With rising unemployment aggravating the situation the ratio peaked in the late 1980s. Since that date it has fallen dramatically.

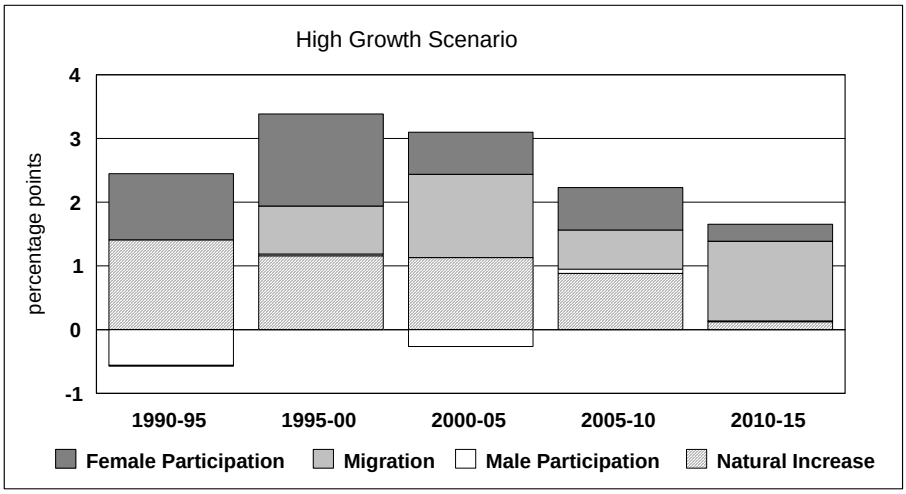
Figure 2.9: Economic Dependency Ratio

Today the economic dependency ratio is at an all time low in Ireland and, under the *High Growth* scenario, it is set to fall even further, stabilising in the next decade at a rate of between 1.0 and 1.1. This means that every individual who is working will only have to support one other individual who is not. It is only after 2020 that the economic dependency rate will begin to rise. This turning point will be postponed a few years as a result of the considerable level of immigration envisaged as part of this scenario. However, the postponement will be very short and the ratio will rise continuously from 2020 onwards. What this means is that Ireland faces an unusual demographic window of opportunity over the next fifteen years when dependency will be at an exceptionally low level. It will be important that public policy uses this demographic dividend to prepare for the long-term problems of rising old-age dependency over the following fifty years.

LABOUR SUPPLY

Labour supply is driven by three main factors: the natural increase in the population, participation rates and migration. Over the last decade, these three factors have combined to produce an expansion in the supply of labour in the economy, causing it to increase from 1044 million in 1995 to an estimated 1.96 million in 2005. Over the next decade, the rate of growth in the supply of labour is likely to decrease significantly, having important implications for the economy and for potential growth rates in particular. There is also likely to be a change in the relative weights of the different factors driving the growth in labour supply, with the role of the natural increase and rising participation rates decreasing over time and that of migration increasing.

Figure 2.10: Decomposition of the Growth in Labour Supply



The changes that have occurred in the demographic structure of the Irish economy since 1960 have had, and will continue to have important implications for labour supply.[10] The high birth rates up to 1980 have meant that there has been a rapid increase in the labour supply throughout the 1990s and into the current decade (Figure 2.10). This natural increase is estimated to have accounted for around a third of the expansion in the labour supply on average over the five year period 1995 to 2000. While the natural increase will continue to account for a significant proportion of the increase in the labour supply over the next five years, it will play a diminishing role.

The rise in female labour force participation played a very important role in the growth in labour supply in the 1990s. (About one half of the increase is attributable to the effect of the rising educational attainment of the female population.) In the second half of the decade, rising female participation contributed about 1.5 percentage points to the growth in labour supply. In the case of female participation rates, between 1995 and 2004, there were increases recorded in rates for all women between 25 and 64 years of age. Participation rates of the age cohort 15 to 24 years have decreased, reflecting a rise in participation in education. Labour force participation is high for women with high levels of education; the most substantial increases in participation over the last decade have occurred in women with a minimum education of Leaving Certificate level. The corollary is that labour force participation is low for women with low levels of education; females with only a primary level of

[10] For the last decade the large cohort of young people born in the 1970s has been replacing the much smaller cohort of people retiring who had remained in Ireland in the 1950s. However, after 2010 the smaller cohort of new entrants born in the late 1980s will be replacing the cohort that joined the labour market in the more favourable late 1960s and the 1970s when emigration had fallen from its 1957 peak.

education exhibit a particularly low participation rate and this trend has not shown much change since 1988.

Looking ahead over the next decade, the effect of increasing female participation rates on labour supply growth will be limited. This is because the increase already registered over the last ten years has meant that the pool of potential market entrants has become much smaller, with a large majority of the 25 to 64 year olds, particularly the younger members of this group, already in the labour force. Participation rates are now high by EU standards for women under 35 years, leaving little scope for further increase. It is thus likely that much of the increase will come from the older age cohorts, whose participation rates are relatively low by EU standards. In terms of the characteristics of participants who will account for the future, albeit relatively modest, expansion in the labour force, it is likely that the majority of these people will be relatively low skilled, as a good number of the skilled cohort are already working. Of course, any changes in future female participation rates will be affected by public policy; in particular, the participation rates of mothers will be affected by the availability and conditions of childcare; the participation of those with lower levels of educational attainment may depend on public policies related to up-skilling and further education as well as the interaction of the welfare system with the world of work.

The story of male participation rates is different from that of female participation rates; while increases in the numbers of females participating in the labour market added substantially to the supply of labour over the last decade, on average the participation of males subtracted from it. Over the next five years, male participation is expected to continue to make a negative contribution to the labour force, before moving to a situation where its contribution will be zero. The main cause of the negative contribution will be a fall in the participation rates of the under twenty-fives, reflecting rising participation in education in the case of the younger cohort.

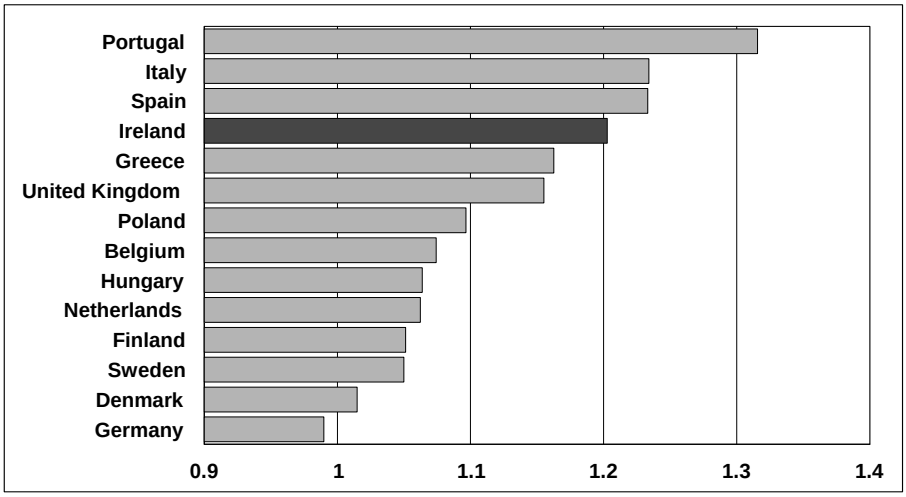
It is anticipated that immigration will contribute around one percentage point a year to the growth in the labour force over the rest of this decade. In the next decade, if the *High Growth* scenario were realised, this might have to increase further. It must be remembered that net migration is extremely sensitive to changes in economic circumstances in Ireland relative to the rest of the world. This means that forecasting this element of labour force growth with any accuracy is very difficult. However, it is likely that because of the high educational attainment of both emigrants and immigrants, the process of migration will adjust to offset much of the long-term labour market effects of future shocks to the economy.

2.4 Changing Characteristics of Labour Supply

It is instructive to distinguish between different types of labour to help our understanding of how the labour market operates and what factors will drive labour supply in the future. One way of making this distinction is to look at the skills level of the population, how it has changed and how it is likely to change over time. The rising educational attainment of the labour force, through investment in human capital, can affect the economy through a number of different channels: it can increase the productivity of the workforce; it can increase labour force participation rates especially those of women; and it can reduce the chances of unemployment. As migration is crucial in explaining how the Irish labour market functions it is also important to look at the skill distribution of migrants. Since the mid 1990s immigration of highly educated non-nationals and the return migration of well-educated Irish people, has substantially supplemented the rapidly growing domestic supply of high skilled labour. At the same time, the demand for labour in the developed world has been shifting towards high-skilled occupations and away from low-skilled occupations. The coincidence of these factors was very beneficial to Irish economic growth.

Over the last twenty years there has been major investment in education in Ireland. While free second level education was first introduced in 1967, the substantial rise in participation only really began in the 1980s, especially in the participation rate at third level. One measure of the investment in education is the ratio of the human capital index for the 55-60 year cohort of the population relative to that of the 25-29 year old cohort.[11] As can be seen from Figure 2.11 there was a 20 per cent increase in the average human capital index over the thirty year period from the 1960s to the 1990s. This represented a much bigger enhancement in educational attainment than was the case for the most developed EU member states. However, Ireland was beginning from a much lower base due to the relatively low participation rates a generation and a half ago.

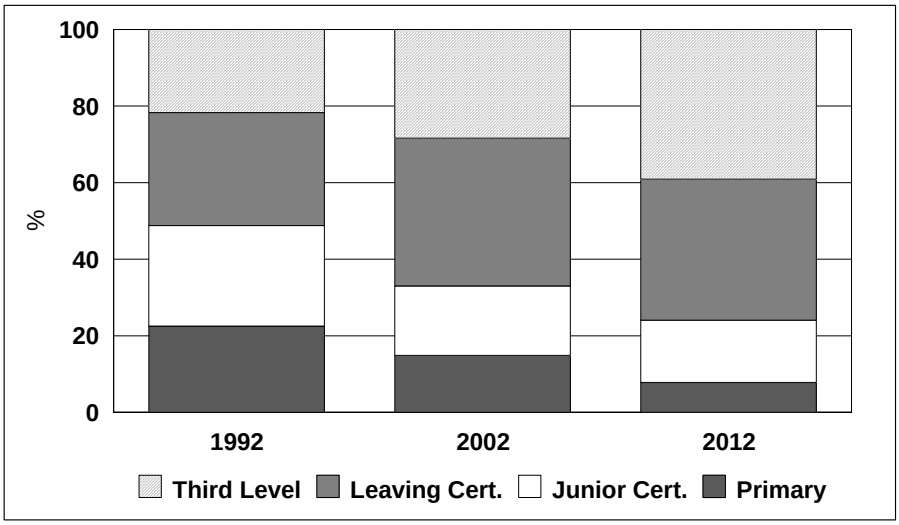
Figure 2.11: Investment in Human Capital-
Ratio of Human Capital Indices for 25-29s / 55-59s



As a result of this investment in human capital, the proportion of people in the labour force in Ireland with a minimum education of primary level only will decrease significantly over the next decade (Figure 2.12); in 1992, 22.5 per cent of the labour force had only a primary level of education, in 2002 this will have fallen to 14.9 per cent and in 2012, it is estimated that it will fall to 7.8 per cent. Similarly, in the case of those with only a Junior Certificate level of education, the numbers will fall from 26.3 per cent in 1992 to 18.1 per cent in 2002, before falling further to 16.3 per cent in 2012. The proportion of the labour force with Leaving Certificate education and third level education will increase, with the most significant upgrading in education levels over the time frame occurring in the proportion of the labour force with a third level qualification, increasing from just under 22 per cent in 1992 to almost 40 per cent in 2012.

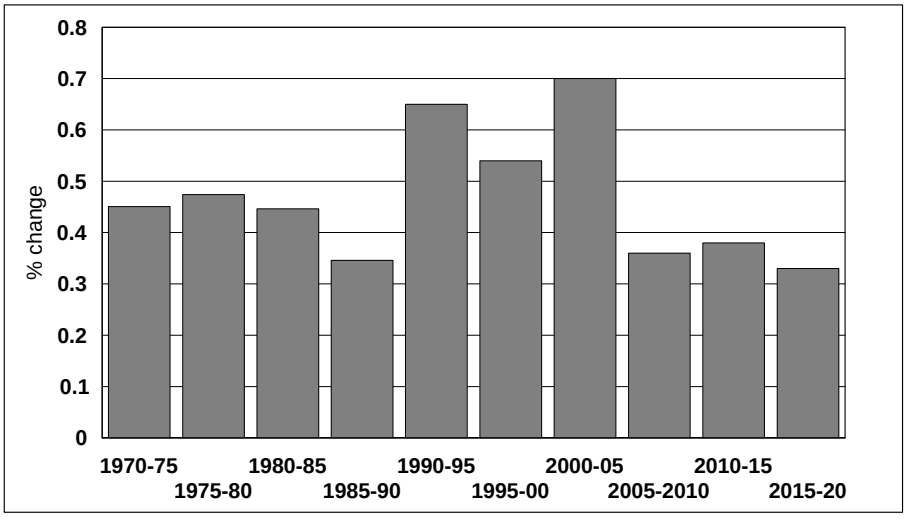
[11] For sources see Fitz Gerald, 2006, "Lessons from 20 Years of Cohesion" in S. Mundschenk, M. Stierle, U. Stierle-von Schütz and I. Traistaru (eds.), *Competitiveness and Growth in Europe: Lessons and Policy Implications for the Lisbon Strategy*, Edward Elgar. This index weights those with each of four levels of education by the estimated returns to the individual from having that level of education. Primary education has a weighting of one. The weights for Ireland are taken from Fitz Gerald, McCarthy, Morgenroth and O'Connell, 2003.

Figure 2.12: Educational Attainment of the Labour Force



In assessing the effects of each of the factors affecting labour supply, it is important to look at them in the context of education and skills since increases in human capital (increased skills and education) raise the growth potential of the economy.[12] The continuing enhancement of the educational attainment of the labour force which we forecast over the coming decade means that there will be a continuing contribution to productivity growth from this source. It will be only after 2020 that the growth in the average human capital of the labour force will fade out. As can be seen from Figure 2.13 the index of human capital grew at between 0.5 and 0.8 per cent a year over the period 1990-2005. While this does not necessarily translate into a similar increase in productivity, it does provide a useful guide to the potential long-term effects of the investment in education and training. While somewhat lower than in the last fifteen years, it is anticipated that as a result of investment already undertaken in education, the index will rise by around 0.4 per cent a year for the coming decade.

Figure 2.13: Growth in the Index of Human Capital



[12] See Romer (1986).

Recent research by Bergin and Kearney (2004) examines the impact of the increase in human capital that helped to transform Ireland in the space of two decades into a high productivity and low unemployment economy. This transformation takes place for a given profile of external demand, which changed dramatically over the period, captured in their model by an outward shift in the demand for Irish output and by skill-biased technical progress. This huge shift in demand is critical to understanding why the change in human capital actually mattered. Had demand remained unchanged then the consequences of the rise in human capital would have been a dramatic fall in the high-skilled wage, a negative effect on living standards and a rise in emigration.

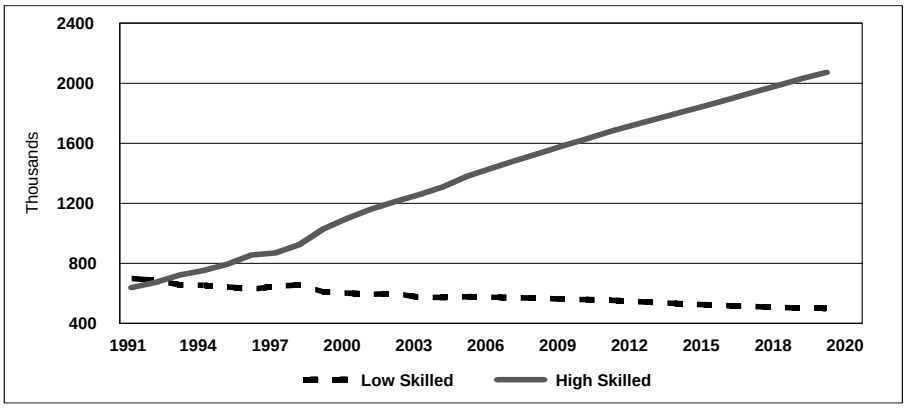
Their key findings suggest that the demand for Irish output is relatively sensitive to Ireland's international competitive position. The openness of the labour market, through migration, has accommodated this in the face of rising demand. By international standards, this open labour market gave Ireland a unique advantage and facilitated the rapid convergence to EU living standards witnessed in recent years. Within this context, the rise in human capital played a pivotal role in increasing output and productivity, slowing the growth in wage dispersion between high-skilled and low-skilled workers and in boosting employment. They find that had Ireland failed to invest in human capital over the past 20 years, GNP per capita would be over 20 percentage points lower. In their numerical simulations the growth in output per head is decomposed into the contributions from employment, participation and productivity. The results suggest that, with unemployed resources, the biggest benefit to the Irish economy in the 1990s from human capital accumulation was in terms of employment rather than productivity. With the economy now at or close to full-employment the biggest benefit in the future is likely to come from rising labour force participation.

The productivity enhancing effects of investment in education was felt much earlier in countries such as Germany and the Netherlands. For Germany the major benefit of its post-war investment in education occurred in the 1970s.[13] As shown in Figure 2.11 there has been little additional upgrading of human capital over the last thirty years in such countries. This goes some way to explain the superior growth performance of Ireland, Spain and Portugal in recent years.

The changing educational attainment of the labour force, together with its continuing rapid rise, has rather different implications for the supply of low skilled (Junior Certificate and less) and high skilled labour. As shown in Figure 2.14 the supply of skilled labour will continue to rise rapidly over the coming decade. However, in spite of the rise in labour force numbers, the numbers of people available for work with limited education will continue to fall.

[13] Koman, R. and D. Marin, 1997. "Human Capital and Macroeconomic Growth: Austria and Germany, 1960-92", London: Centre for Economic Policy Research Discussion Paper No. 1551.

Figure 2.14 Supply of High Skilled and Low Skilled Labour



In producing this projection of the supply of high skilled and low skilled labour we are implicitly assuming that the skill distribution of migrants is identical to that of natives. However, recent research by Barrett, Bergin and Duffy (2005) shows that migrants have a higher level of educational attainment than Irish nationals so assuming they have the same skills mix as Irish nationals may be inappropriate. Their findings on the characteristics of immigrants are summarised in Tables 2.4 and 2.5. Looking at immigrants who had arrived in the ten years up to 2003 and comparing them to Irish nationals (Table 2.4), it can be seen that immigrants into Ireland have notably high levels of education. While 16.7 percent of Irish nationals living in Ireland have degrees, 40 percent of immigrants have this level of educational attainment. This makes Ireland different to many other immigrant-receiving countries where immigration has been largely low skilled. Barrett *et al* do not explore the reasons underlying this "positive selection process". However, the findings on the increasing skill-intensity of labour demand in Ireland raises the possibility that the high-skill labour inflow is a response to this "pull factor".

Table 2.4: Distribution of Educational Attainment for Native and Immigrant Populations, %[14]

	Irish	UK	Rest of EU-15	American	Other	Total Immigrants
No formal/ primary education	13.7	6.7	1.3		6.8	5.5
Lower secondary	19.2	19.6	2.5	4.3	5.8	9.6
Upper secondary	27.5	18.8	24.9	14.9	23.3	22.0
Post Leaving	12.3	10.5	8.1		8.3	8.8
Third level – non-degree	10.6	15.8	14.5	6.4	12.9	14.0
Third level - degree or above	16.7	28.4	48.6	74.5	42.8	40.2
Total	100.0	100.0	100.0	100.0	100.0	100.0
N	41,612	626	393	47	878	1,944

Source: Barrett *et al.* (2005).

Although immigrants into Ireland have high levels of education, these skills were not being fully employed. In Table 2.5, it can be seen that the distribution of immigrants and natives across occupations is similar, in spite of the large difference in educational attainment seen in Table 2.4.

[14] As we are now restricting the sample to labour force participants, cell sizes are getting smaller. For this reason, we need to be cautious in interpreting the figures within immigrant categories, especially the US category.

Table 2.5: Occupational Distribution of Natives and Immigrants (%)

	Irish	UK	Rest of EU-15	American	Other	Total Immigrants
Managers and administrators	17.7	16.8	9.1	22.4	6.9	10.5
Professional	10.5	14.5	15.2	22.4	10.7	12.9
Associate professional and technical	8.7	10.9	10.7	18.4	11.6	11.4
Clerical and secretarial	12.2	11.5	16.8	6.1	6.6	10.0
Craft and related	13.6	13.5	5.6	0.0	10.4	10.1
Personal and protective service	9.8	11.8	19.9	12.2	20.2	17.5
Sales	8.2	5.9	9.3	8.2	6.4	6.9
Plant and machine operatives	9.8	7.2	6.1	4.1	11.6	9.1
Other (includes not stated)	9.6	7.9	7.2	6.1	15.6	11.6
Total	100	100	100	100	100	100
N	41,831	643	428	49	1,108	2,228

Source: Barrett *et al.* (2005).

2.5 Conclusions

The economy has undergone significant transformation since the 1960s. In particular, there have been considerable changes in the sectoral drivers of growth, in the labour market and in the demographic profile of the economy. There has been a shift in the role of different sectors, with the services sector now being the main driver of growth in the economy and the manufacturing sector playing a less significant role. In the labour market, there has been a rise in participation rates and a reversal of the flow from a pattern of net emigration in the past to a period of sustained net immigration since 1996, having important implications for the supply of labour in the economy. There have also been notable changes in the skill composition of the labour force, with the number of skilled persons increasing over time and the number of low skilled falling, accompanying a rise in the stock of human capital in the economy. With regard to the demographic profile, the analysis presented here points to a deterioration after 2020, in the currently favourable demographic trends, which will have important implications for policy formulation going forwards.

Looking ahead, given the extreme openness of the Irish economy and its labour market, it is likely that further changes in structure will occur. Whether these changes will affect the potential of the economy to generate stable and sustainable growth will depend on how adaptable the economy is. The external competitiveness of the economy will be affected by new factors and a failure to adjust to these could see the sustainability of growth called into question.

The changes in demographics and the labour supply will continue to have a number of important implications for the Irish economy over the next decade. While the growth in the labour supply will be much less than it was in the 1990s, it will, nonetheless, remain quite strong well into the next decade.

The rising educational attainment of the population should increase the potential employability of the labour market participants, reducing the risk that future shocks could lead to a return to high levels of long-term unemployment. Past experience suggests that well educated labour market entrants will not remain unemployed in Ireland; they will either obtain employment in Ireland or in other parts of the EU. The increasing investment and participation in education will result in further improvements in the educational attainment of the labour force, which should positively affect productivity.

Migration has played a crucial role in labour supply growth in recent years and is likely to continue to be one of the most important factors in determining changes in labour supply in years to come. This calls into question the choice of GNP growth as a policy objective. In the context of immigration,

an increase in the size of the economy (GNP) does not necessarily imply an increase in average living standards for existing residents (GNP per head). In the rest of this *Review* we pay particular attention to changes in GNP per head. For this reason, attention needs to be paid to the question of what precisely is the policy objective for immigration.

While GNP per head is a better measure of welfare than GNP alone, there are other factors that affect the welfare of the population. One of these is the endowment of infrastructure, especially of housing. The limited endowment of infrastructure that Ireland currently possesses is affecting the standard of living in a manner that is not captured by GNP. For example, the poor endowment of public transport infrastructure leads to enhanced commuting times that impact negatively on welfare. To the extent that a higher population puts increasing pressure on the existing infrastructure this will reduce the welfare of the population in a manner not captured by the traditional measure of GNP. This additional "externality" from rapid growth must be considered in formulating policy for the future. Just because GNP rises, or even because GNP per head rises does not guarantee a welfare improvement of a similar magnitude.

Arguably the Irish economy had too big an endowment of infrastructure in 1960, reflecting a misallocation of resources over the previous decade.[15] However, today the economy shows all the signs of having "outgrown its clothes". Both private infrastructure in the form of housing, and public infrastructure in the form of public transport, roads, sewerage and water supply, and electricity transmission are all constraining growth. This constraint is reflected in very high prices for housing and high indirect costs for individuals reflected in rising commuting times. In turn, these costs are passed on to the business sector through the labour market. Indirectly, through the adverse effect on competitiveness of the cost of maintaining an acceptable life style in Ireland, an infrastructure constraint is operating to reduce Ireland's potential growth over the coming decade.

However, at some point in the future the current very high rate of investment in infrastructure will see the endowment of infrastructure catch up with the economy's needs. When this happens it will both free up major public and private resources for alternative uses, and it will also see a major shift in production within the economy, with a move away from the building sector to other sectors, especially services. Accomplishing such a transition in a limited time frame will require huge flexibility in the economy if the costs to individuals and to society generally are to be minimised.

[15] The over investment in railways over the previous century meant that Ireland had an excessive endowment of this form of infrastructure, the maintenance and operation of which was a major economic burden. This shows that merely providing such infrastructure is not necessarily an aide to future economic development.

APPENDIX 2.1: THE MULTIPLIER

The changes that have occurred in the structure of the Irish economy, as outlined in this chapter, have a number of important implications. Here we consider the issues discussed in terms of a very simplistic model of the economy, and the multiplier effects.[16]

The traditional basic economics formulation of a macro-economy can be characterised in a series of simple equations:

$$Y = C + I + G + X - M \quad (1)$$

$$C = bY \quad (2)$$

$$M = m(C+I+G)+nX \quad (3)$$

$$Y = bY + I + G + X - mbY - mI - mG - nX \quad (4)$$

$$Y(1-b+mb) = (I + G)(1-m) + X(1-n) \quad (5)$$

$$\frac{dY}{dX} = \frac{1-n}{1-b(1-m)} \quad (6)$$

Where:

Y	=	GNP
C	=	Consumption (here taken to include housing investment)
I	=	Investment (here taken to exclude housing investment)
G	=	Government consumption
X	=	Exports
M	=	Imports
b	=	propensity to consume
m	=	propensity to import out of domestic demand
n	=	propensity to import out of exports (including profit repatriations)

Equation (1) is the traditional national income identity. Equation (2) determines consumption as a function of income. Equation (3) determines imports as a function of domestic demand and exports. Equations (4) and (5) substitute Equations (2) and (3) into Equation (1). Finally, Equation (6) determines the impact of a marginal change in exports on GNP (Y). That response is referred to as the multiplier.

[16] The much more sophisticated *HERMES* model is used in our analysis in subsequent chapters.

3. THE EXTERNAL ENVIRONMENT

3.1 Introduction

As a small open economy, Ireland's expected performance is dependent on international economic events and the international economic outlook. Despite being a member of Economic and Monetary Union (EMU), the economy remains exposed to events outside the Euro Area due to the importance of Foreign Direct Investment (FDI), particularly from the US, and the links of the traditional manufacturing sector to the UK. Since the publication of the last *Medium-Term Review,* world growth accelerated to its fastest pace in almost thirty years in 2004. Although the world economy has slowed significantly this year, the short-term outlook remains buoyant. Global growth remains unbalanced, with growth in both the US and Japan rising well above trend last year, while the UK performed moderately well but activity in the Euro Area has remained sluggish.

There is substantial uncertainty about the outlook for the world economy over the medium term. The primary reason for this uncertainty is the large macroeconomic imbalances that are evident in the US economy. The magnitude of the current account balance has focused attention on its sustainability and at some point in the future the US economy will adjust and experience a slow-down in growth. However, considerable uncertainty remains as to the timing of the adjustment, whether it will occur gradually or sharply and the mechanism(s) by which it will take place. As a result, we are presenting two sets of forecasts, one in which the US economy does not adjust and continues to experience robust growth (the *High Growth* scenario), although remaining on an unsustainable growth path, and the second in which the US current account deficit declines gradually to a long-run sustainable level (the *Low Growth* scenario). Although the more benign *High Growth* scenario is more likely for the next few years, when the adjustment eventually takes place the US economy will switch to a lower growth path having negative implications for that economy and also for the global economy, including Ireland.

In this chapter we present medium-term forecasts for the three major economic blocks that impact on the Irish economy: the US, the Euro Area and the UK and then we draw out the major implications of this environment for the Irish economy.[17] In preparing the forecasts we have utilised a number of different sources (especially the National Institute *Economic Review*, July 2005). We used the National Institute of Economic Research (NIESR) July 2005 forecast as an input to the medium-term forecast for the major world economies. This forecast was modified to take account of additional information available to us from a range of different sources. In carrying out these modifications and in constructing the forecast where the US imbalances

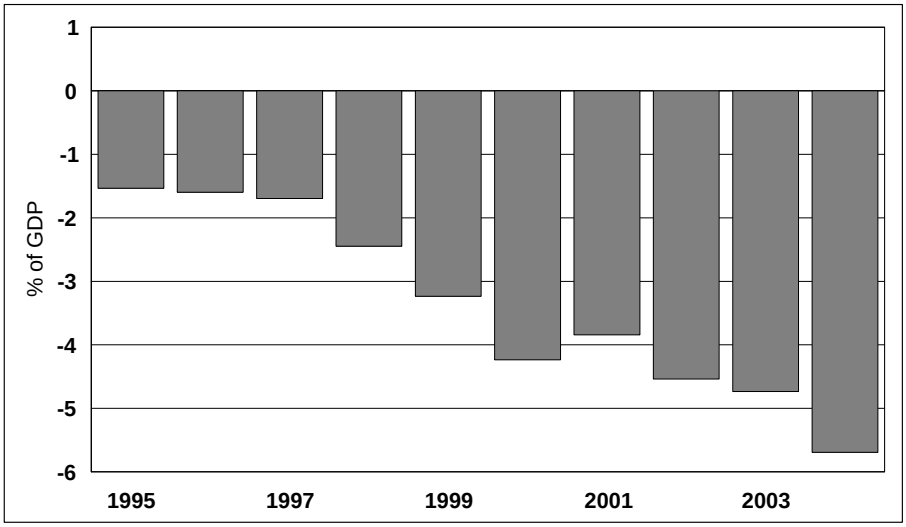
[17] In this chapter, forecasts are presented on an annual basis out to 2010 and on a 5-year annual average basis to 2015. We assume unchanged international forecasts post-2015.

are redressed we have used the NIESR Global Econometric Model (*NiGEM*) to produce our own "adjustment" scenario.[18]

3.2 The United States

Since the early 1990s the US economy has played an important role as the main driver of world economic growth and the main source of world demand. Despite a temporary slowdown following the terrorist attacks in September 2001, the US economy has experienced strong growth in recent years. However, considerable imbalances have arisen over the course of this expansion that give rise to concerns about the medium-term growth prospects for the economy. Most notably the US current account deficit has been widening and in 2004 the deficit stood at almost 6 per cent of GDP (see Figure 3.1). The size of the deficit has focused attention on its sustainability and it is becoming more widely accepted that the US economy will have to adjust at some time in the future.[19] Outgoing Federal Reserve Board Chairman Alan Greenspan recently noted "Of course, deficits that cumulate to ever-increasing net external debt, with its attendant rise in servicing costs, cannot persist indefinitely. At some point investors will balk at further financing".[20]

Figure 3.1: US Current Account Deficit



Source: OECD Statistical Compendium.

In order to understand the implications for long-run sustainability of the ever-widening external deficit in the US, it is instructive to examine the causes of the deficit. One way of characterising the current account balance is that it is the difference between national savings and national investment. During the second half of the 1990s savings sustained rising domestic investment (see Figure 3.2). However, since 2000 there has been a strong decline in the savings rate, largely attributable to a fall in public sector saving due to the growing fiscal deficit and a decline in household saving, albeit from a low base (see Figure 3.3). Two main factors explain the fall in the household savings rate. First, strongly expansionary monetary policy resulted in real interest rates falling by about 4 per cent between 2000 and 2004 making saving less attractive and facilitating borrowing for consumption purposes. Second,

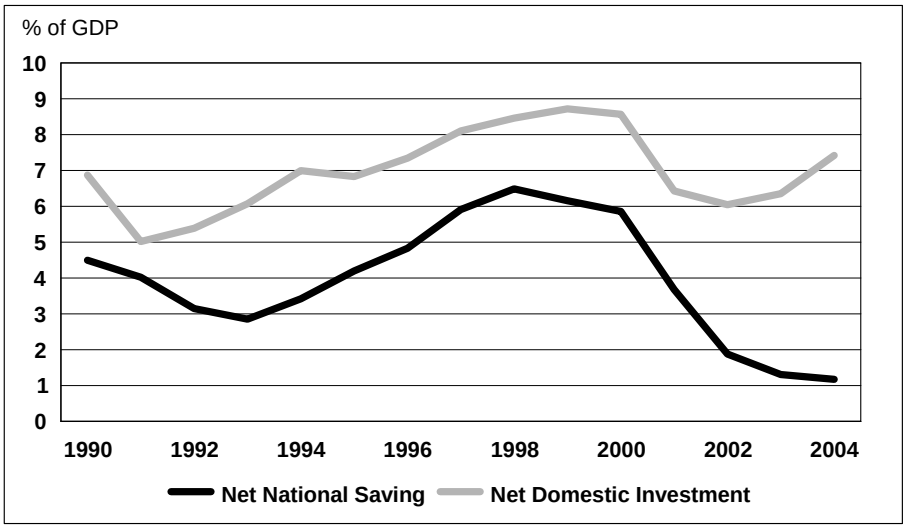
[18] We are very grateful to Ray Barrell and Ian Hurst of NIESR for their assistance in using the *NiGEM* model. The forecast remains the sole responsibility of the authors.

[19] See Mann (2003), Obstfeld and Rogoff (2005), Blanchard, Giavazzi and Sa (2005) and IMF World Economic Outlook, September 2005.

[20] Remarks by Federal Reserve Board Chairman Alan Greenspan, before the Banco de Mexico's 80th Anniversary Conference, Mexico City, November 14th, 2005.

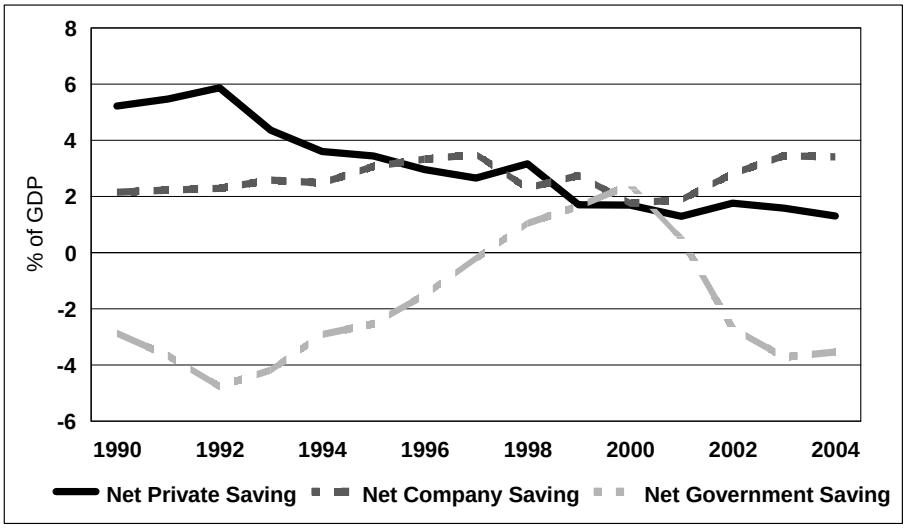
between 1997 and 2004 house prices have risen by about 7 per cent per annum and the associated wealth effect for homeowners has encouraged higher consumer spending.

Figure 3.2: US Savings and Investment as a Share of GDP



Source: Bureau of Economic Analysis.

Figure 3.3: US Saving by Sector



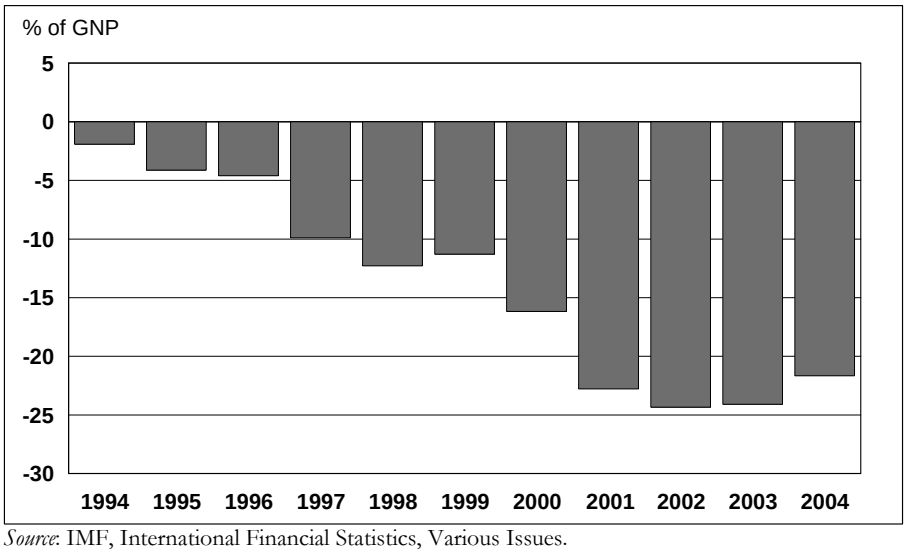
Source: Bureau of Economic Analysis.

The relative rise in US demand for imports compared to demand for its exports has been another important factor contributing to the current account deficit. This is partly explained by faster growth in the US than the Euro Area and Japan in the late 1990s and also by an earlier recovery following the slowdown in 2001. Between 1995 and 2001, the real effective exchange rate appreciated by about 16 per cent supporting the increasing demand for imports by the US. However, between 2002 and 2004 the real effective exchange rate depreciated by around 13 per cent, so one would expect this to negate, at least to some extent, import demand. Blanchard, Giavazzi and Sa (2005) argue that a change in preferences on the part of the US consumer towards foreign goods helps explain the persistent trade deficit.

A further driving force of the current account deficit has been the increase in the foreign demand for US assets.[21] Capital inflows to the US continue as long as foreign investors are willing to purchase US assets at the prevailing price and expected returns. Prior to the stock market correction in 2000, the massive rise in US stock prices increased the foreign demand for US equities. More recently central banks' demand for bonds, particularly from Asian central banks pursuing quasi-fixed exchange rate regimes, have maintained capital inflows into the US. The readiness of foreigners to invest in the US has helped to keep long-term interest rates low fuelling consumption in the US.

Foreign demand for US assets has led to a massive increase in the net external liabilities of the US. The Net National Investment Position (NNIP) of a country is the difference between the value of its external assets and liabilities. Figure 3.4 shows the deterioration of this balance over time. The US currently stands as the world's largest debtor nation and had a negative NNIP of around 22 per cent of GDP in 2004. Tille (2004) notes that only 35 per cent of US assets are denominated in dollars as compared to 95 per cent of its liabilities. This means that a depreciation in the US effective exchange rate increases the value of assets, while leaving the value of liabilities relatively unchanged. Gourinchas and Rey (2005) find that historically a depreciation in the dollar contributes about 30 per cent of the adjustment through the advantageous valuation effects on US assets. A substantial fall in the dollar is seen as one mechanism that will help restore balance to this situation.

Figure 3.4: Net International Investment Position



Source: IMF, International Financial Statistics, Various Issues.

The US cannot live beyond its means forever and at some point, either the negative NNIP and the costs of servicing that debt will become too great a burden on the US or else foreign investors may decide that they hold adequate US assets in their portfolios and stop purchasing them. A fall in the value of the dollar would temporarily improve the trade balance but may be insufficient to put the US current account back on a sustainable path. Obstfeld and Rogoff (2004) and others have argued that structural reform needs to take place in the US to counteract the causes of the deficit. Several leading academics have attempted to estimate the scale of the adjustment necessary to bring the US back on to a sustainable path. Obstfeld and Rogoff (2005) suggest that the real effective exchange rate needs to depreciate by about 30 per cent to bring the current account deficit back onto a sustainable path. They also argue that a change in domestic absorption is necessary for adjustment, not just a fall in the

[21] Blanchard, Giovazzi and Sa (2005).

dollar. Blanchard, Giavazzi and Sa (2005) also find that a substantial dollar depreciation is likely to occur over the medium term.

There are a variety of possible mechanisms that, separately or through some combination of them, could lead to an unwinding in the US imbalances:[22]

- An increase in the household savings rate. This could be triggered by a slowdown in the housing market in the US.
- A fall in US asset prices.
- A substantial tightening of US fiscal policy which would increase domestic savings.
- A major depreciation in the value of the dollar.
- Strong growth in the rest of the world which would increase the demand for US exports.

As there is no consensus about when the adjustment is likely to take place, the mechanism(s) by which it will take place and whether the adjustment will be gradual or rapid, it is difficult to take account of it in medium-term forecasts; yet it very much colours our view about the future prospects of the US economy. Due to this uncertainty, we present two alternative scenarios for the US going forward. In the *High Growth* forecast we assume that there is no adjustment to the US current account deficit.

The key forecasts for the US economy are presented in Table 3.1. Following the slowdown in 2000-2001, growth in the US has gained momentum and short-term prospects remain favourable. Our baseline forecast is for annual average real GDP growth of 3.1 per cent between 2005 and 2010. In the short-term, consumption is expected to remain a significant driver of growth; with much of the consumption growth itself generated by wealth effects from sizeable house price rises, as well as robust equity prices. This leaves the household sector very exposed to house price changes or sharp interest rate increases.

Our forecast for the dollar/euro exchange rate in the *High Growth* forecast incorporates a slight depreciation of the dollar; it is expected to average $1.29 over second half of this decade. A depreciation of the dollar should lead to higher inflation but as the depreciation is quite moderate it will put limited upwards pressure on the rate of price growth. The inflation rate, as measured by the consumer expenditure deflator, is expected to average 3 per cent growth between 2005 and 2010. The main focus of Federal Reserve policy in recent years has been to foster price stability while maintaining sustainable growth in output. The Federal Reserve reacted aggressively in response to the slowdown in 2000-2001 by cutting interest rates to fifty-year historical lows. By 2004 inflationary pressures started to build so the monetary authorities have responded by gradually increasing interest rates. Short-term interest rates are expected to gradually increase over the course of the decade and are expected to average 4.4 per cent over the 2005 to 2010 period.

Underlying this benign growth forecast is a continued deterioration in the current account balance, which as mentioned above, is unsustainable. Using the *NiGEM* model we simulated the impact of a gradual correction in the US. The scenario we examined is one in which the US government reduces its fiscal deficit and in which the household savings rate rises. The increase in personal savings could be triggered by a fall in asset prices, in particular house

[22] There has been much speculation that a major realignment of the Chinese renminbi, which is quasi-pegged to the dollar, could help redress the problems in the US. However, recent research shows that while an appreciation of the renminbi will lead to a fall in Chinese exports, Chinese domestic prices react very quickly and the real exchange rate moves back almost to where it was before such a change (EUROFRAME-EFN, Autumn 2005 Report). As a result, even if the Chinese authorities responded favourably to calls for them to aid the international adjustment process by adjusting their currency it would do little to solve the problem of the US balance of payments deficit.

prices. This is one of the many possible adjustments that could happen in the US. The effect of these changes is to produce a reallocation of resources within the US economy as envisaged by Obstfeld and Rogoff (2005). There is considerable uncertainty as to when this adjustment is likely to happen. For the sake of simplicity we have started our simulation in 2007, though this should not in any way be seen as being a forecast of the timing of such an event; if adjustment starts later it is likely to have more severe consequences. It is also possible that the correction could happen quickly, meaning that the impact on the US and the wider world economy would be more concentrated in the immediate two to three years after the adjustment.

Table 3.1: Forecasts for the US Economy

	2003	2004	2005	2006	2007	2008	2009	2010	2000-2005	2005-2010	2010-2015
***High Growth* Forecast**											
					Per Cent				**Annual Average % Change**		
Real GDP Growth	3.2	4.4	3.9	3.9	3.3	2.9	2.8	2.7	2.8	3.1	2.5
									Annual Average		
Inflation*	1.9	2.2	2.7	3.9	3.1	2.7	2.7	2.8	2.1	3.0	2.8
Short-term interest rate	1.2	1.6	3.4	4.2	4.5	4.7	4.9	5.0	3.0	4.4	5.0
Exchange Rate ($ per €)	1.13	1.24	1.26	1.26	1.27	1.30	1.32	1.34	1.06	1.29	1.39
Fiscal Deficit (as a % of GDP)	-4.6	-4.3	-3.5	-3.7	-3.4	-3.2	-3.2	-3.2	-2.5	-3.4	-3.3
Current Account Balance (as % of GDP)	-4.7	-5.7	-6.6	-5.8	-5.4	-5.3	-5.4	-5.6	-5.1	-5.7	-6.3
US Current Account Adjusts – *Low Growth* Forecast											
					Per Cent				**Annual Average % Change**		
Real GDP Growth					1.6	1.2	1.4	1.7			2.1
									Annual Average		
Inflation*					4.2	3.0	2.1	1.4			0.7
Short-term interest rate					6.2	5.7	5.2	4.6			3.9
Exchange Rate ($ per €)					1.37	1.42	1.46	1.50			1.55
Fiscal Deficit (as a % of GDP)					-2.6	-1.9	-1.3	-0.7			0.2
Current Account Balance (as % of GDP)					-5.0	-4.5	-4.3	-4.1			-3.9

*Consumer Expenditure Deflator.

The fall in the value of households' assets reduces their perceived wealth. Many households will react to this change by reducing consumption and raising their savings to rebuild their wealth. This would have a negative impact on domestic demand. There is an element of circularity here because the expectation of such a decline could actually be the trigger for, say a fall in asset prices. In addition, we have assumed that part of the US imbalances will be corrected with a fiscal tightening over the medium term. This means that taxes will slowly rise and/or expenditure will grow at a lower rate over the medium term. This heightens the negative impact on households because we assume the government does not intervene to try and kick-start the economy by adopting expansionary fiscal policies. Overall, this shock would have a serious negative impact on US growth, knocking around 2 percentage points off the growth rate in the short term.

As a consequence of the downturn in the US economy the dollar would fall by about 10 per cent compared to the *High Growth* forecast in the first four years after the shock leaving the exchange rate at $1.50 by 2010, $0.16 higher than in the *High Growth* forecast. The fall in the value of the dollar would lead to an upturn in US inflation in the short term. Measured by the consumer expenditure deflator, consumer prices could be around 1 percentage point higher in the first year of the shock as compared to the *High Growth* forecast. As a consequence of higher inflation the Federal Reserve would tighten

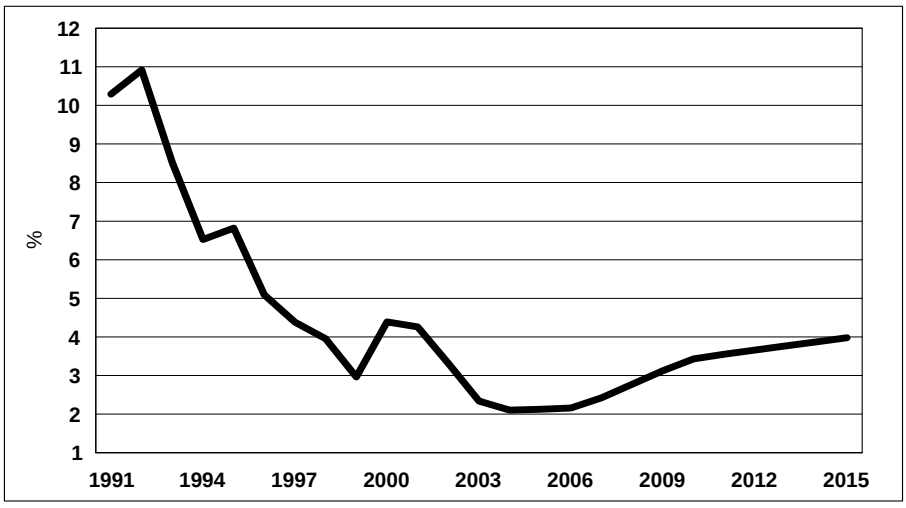
monetary policy in the short term providing a further negative impulse to growth. This helps explain why the impact on growth is more negative in the short term. The rise in US inflation would be temporary so in the medium term the Federal Reserve would cut interest rates again. In the medium term the improved competitiveness of the US economy, as a result of the depreciation of the dollar, coupled with the easing in monetary policy would stimulate the US economy so that it could grow by an average of 2 per cent per annum between 2010 and 2015, half a percentage point lower than in the *High Growth* Forecast. Underlying this scenario is a gradual improvement in the current account balance.

3.3 The Euro Area

Economic activity in the Euro Area has lagged behind the other major economies in the past number of years. Although growth is expected to remain subdued in the short term, the outlook for activity in the medium term is more positive, although we anticipate growth to remain slightly below potential. Real GDP growth is expected to average 1.8 per cent between 2005 and 2010 as compared to annual average growth of 1.3 per cent between 2000 and 2005. As a member of EMU, the outlook of the Euro Area economy is important to Ireland because monetary policy is determined at the Euro Area level.

Since the launch of EMU, monetary policy has been conducted by the European Central Bank (ECB). The primary role of the ECB is to maintain price stability. Without endangering price stability, the ECB is required to support the general economic policies in the EU, including sustainable and non-inflationary growth. The ECB maintained a relatively tight monetary stance in its early years, although rates have come down from their peak of 4.75 per cent in October 2001 in response to the sluggish pace of activity in the Euro Area. Official Euro Area interest rates are forecast to rise gradually over the remainder of this decade, although remaining relatively low, and are expected to average 2.7 per cent between 2005 and 2010.

Figure 3.5: Short Term Interest Rates for the EU Area

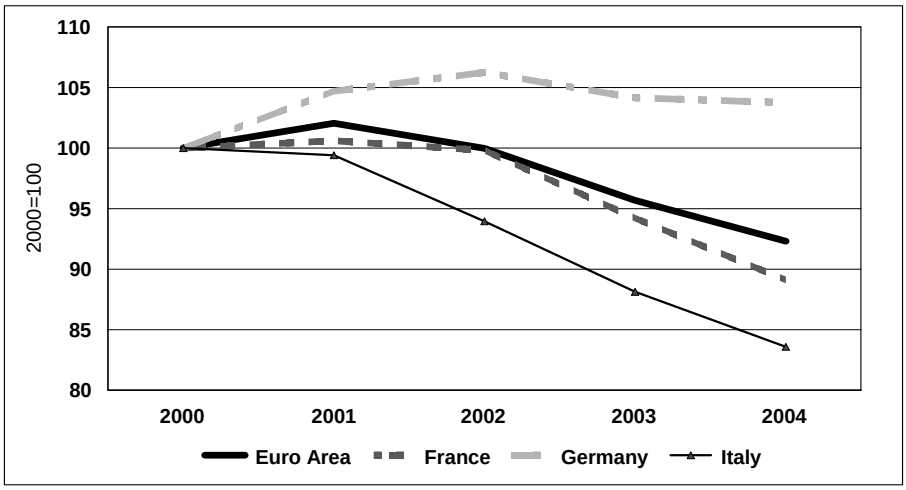


Despite its current depreciation, which we anticipate to be short-lived, the strength of the euro since 2002 has hampered growth in the Euro Area with the real effective exchange rate rising by over 15 per cent in the past three years. While the appreciation of the currency has helped to contain price pressures in the Euro Area, it has restrained export growth, resulting in net trade making a negative contribution to Euro Area growth in 2003 and no contribution to growth in 2004. Within the four largest Euro Area countries, only Germany has been supported by the external sector in recent years. Figure 3.6 shows how the Euro Area as a whole has been losing market share since

2001 yet Germany has managed to retain its external competitiveness despite the strong euro. However, the German economy has failed to translate robust growth in exports into growth led by domestic demand (see Box A.).

Our *High Growth* forecast is based on the assumption that there is a gradual appreciation of the euro over the forecast period, with the dollar/euro exchange rate averaging $1.29 between 2005 and 2010. As a consequence of the appreciation of the euro and relatively modest growth, inflationary pressures will be very subdued in the Euro Area over the forecast period. The Euro Area consumer expenditure deflator is expected to average 1.6 per cent between 2005 and 2010.

Figure 3.6: Export Market Shares



Source: EUROFRAME-EFN Report, Autumn 2005.
Report available at http://www.euroframe.org

Fiscal policy remains a contentious issue in the Euro Area. The aggregate fiscal deficit stood at 2.7 per cent of GDP in 2004, a slight improvement on the 3 per cent deficit in the previous year. Looking at the average deficit masks the differing performance of various member states. Of particular concern for the Euro Area outlook are the fiscal balances of the larger member states with France, Germany, Italy, Portugal and Greece all exceeding the 3 per cent deficit ceiling of the *Stability and Growth Pact* (*SGP*) in 2004. This calls into account the credibility of the *SGP* and also if member states are to abide by its rules it effectively removes the option of using fiscal policy to tackle weak growth. On the basis of stronger growth our forecasts show some progress towards fiscal consolidation in the medium term and we anticipate the Euro Area fiscal deficit to average 2.4 per cent of GDP between 2005 and 2010.

As mentioned previously in this chapter, a correction in the US current account deficit will have a negative impact on growth in the US. It is important to consider the results of the scenario on growth prospects for the Euro Area. The fall in the external value of the dollar would have a negative impact on European competitiveness. This would knock approximately 0.2 percentage points off the Euro Area growth rate in the short run. The impact of the shock would be to put downwards pressure on prices so inflation in the Euro Area would be slightly lower. The ECB would respond to this shock by cutting interest rates in an attempt to raise output growth. The prevailing low level of interest rates means that the scope for expansionary monetary policy is somewhat limited.

Table 3.2: Forecasts for the Euro Area Economy

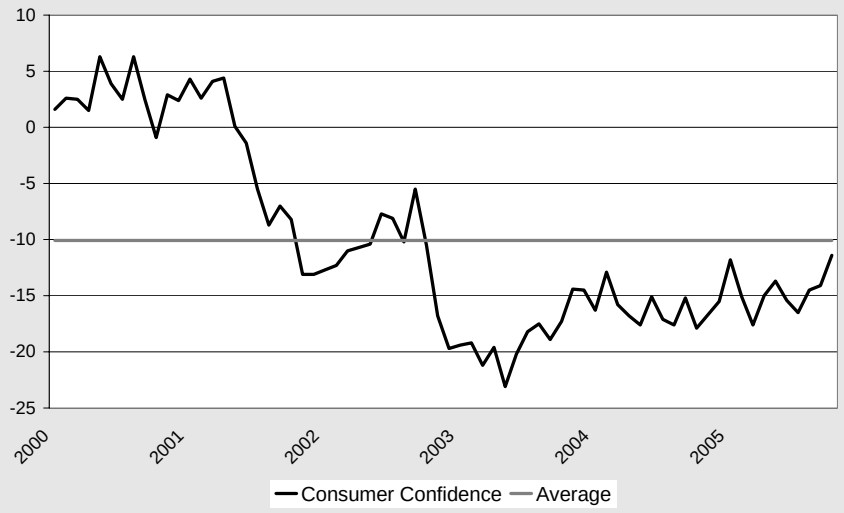
	2003	2004	2005	2006	2007	2008	2009	2010	2000-2005	2005-2010	2010-2015
					***High Growth* Forecast**						
					Per Cent				**Annual Average % Change**		
Real GDP Growth	0.7	1.7	1.4	1.7	1.8	1.8	1.8	1.9	1.3	1.8	2.2
									Annual Average		
Inflation*	1.9	1.9	1.7	1.5	1.6	1.7	1.7	1.7	2.0	1.6	1.8
Short-term interest rate	2.3	2.1	2.1	2.2	2.4	2.8	3.1	3.4	3.1	2.7	3.7
Exchange Rate ($ per €)	1.13	1.24	1.26	1.26	1.27	1.30	1.32	1.34	1.06	1.29	1.39
Fiscal Deficit (as a % of GDP)	-3.0	-2.7	-2.8	-2.8	-2.6	-2.4	-2.1	-1.8	-2.0	-2.4	-1.4
Unemployment Rate	8.7	8.8	8.9	8.8	8.8	8.7	8.6	8.6	8.4	8.7	8.4
					US Current Account Adjusts – *Low Growth* Forecast						
					Per Cent				**Annual Average % Change**		
Real GDP Growth					1.6	1.6	1.7	1.8			2.0
									Annual Average		
Inflation*					1.4	1.6	1.6	1.5			1.6
Short-term interest rate					2.1	2.3	2.5	2.6			2.7
Exchange Rate ($ per €)					1.37	1.42	1.46	1.50			1.55
Fiscal Deficit (as a % of GDP)					-2.4	-2.2	-2.0	-1.7			-1.5
Unemployment Rate					8.6	8.6	8.6	8.6			8.6

*Consumer Expenditure Deflator.

Box A: Happy Germans

The German economy, which accounts for approximately one-third of Euro Area GDP, has been the weakest performer in the Euro Area in recent years. Annual growth in Germany averaged 1.2 per cent for the five-period 1999 to 2004, as compared to the Euro Area average of 2.1 per cent. The majority of the poor economic performance is attributable to slow growth in domestic demand growth. Wage moderation, the bleak outlook for the public finances and the pensions system have all weighed on private consumption. Consequently, the savings rate has been rising since 2001 and the German economy is now running a large current account surplus. This weakness in consumer demand is reflected in the deterioration in German consumer confidence (see Figure below).

Figure: German Consumer Confidence



Source: German Consumer Confidence Indicator, from the EC Business and Consumer Survey, available at: http://europa.eu.int/comm/dgs/economy_finance/index_en.htm

Using the *NiGEM* model, we simulate the impact of the German consumer deciding to shift more of their resources to consumption away from saving, say as a result of a rise in consumer confidence. Specifically, we modelled the impact of a 3-percentage point rise in the level of consumption for the years 2006 to 2008.

Table: Impact of a Rise in German Consumption

	2006	2007	2008
	Percentage Difference from Base		
German GDP	0.8	0.8	0.8
Euro Area GDP	0.3	0.3	0.3
	Absolute Difference from Base		
German GGB (as % of GDP)	0.5	0.2	0.0
German Current Account (% of GDP)	-1.1	-1.1	-1.1

The effect of such a shock on the German economy and the wider Euro Area economy are substantial (see Table above). The level of German GDP would increase by around 0.8 percentage points for each year of the shock compared to what it otherwise would have been and this would add 0.3 percentage points onto Euro Area output. The increase in consumption would have positive knock-on effects for employment and the unemployment rate could come down by 0.4 percentage points in the short term. The German General Government balance would also be improved and the deficit could fall by a half a percentage point of GDP in the first year of the shock. This could further enhance any boost to consumer confidence. The lower level of savings would see the current account surplus being reduced by just over 1 percentage point.

3.4 The United Kingdom

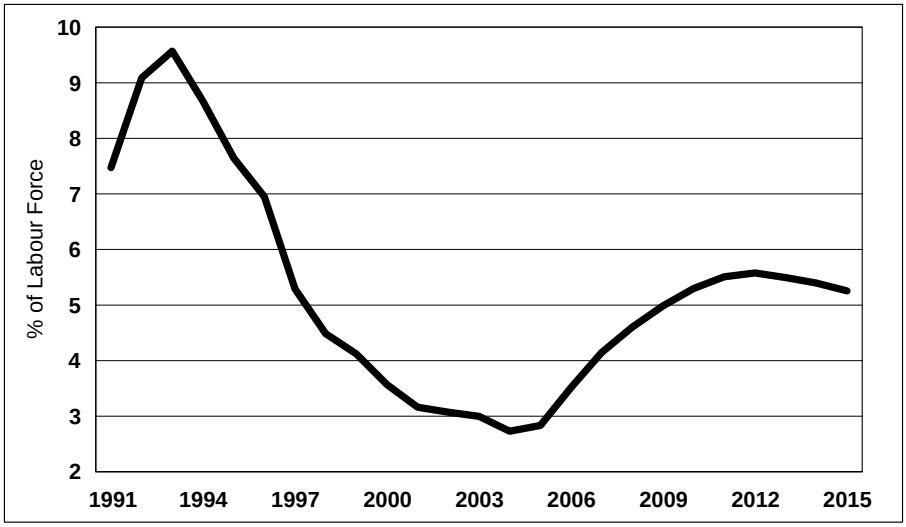
The UK economy continues to be an important trading partner for Ireland despite its relative decline as a destination for exports. In 2004 Irish exports to the UK accounted for approximately 18 per cent of the value of total exports so Ireland is exposed to changes in the bilateral euro/sterling exchange rate and also to future growth prospects in the UK.[23] Despite the slowdown in the international economy since 2000/2001 the UK economy has experienced robust growth, although growth has slowed this year. We anticipate that this slowdown is temporary and prospects for the medium term remain favourable. Real GDP growth is forecast to average 2.1 per cent on an annual basis between 2005 and 2010. Underlying our forecast for the UK economy is a gradual depreciation of sterling against the euro; which will enhance competitiveness in the UK and bolster growth.

UK inflation, as measured by the consumer expenditure deflator, is expected to remain low over the forecast horizon with annual average inflation of 1.5 per cent forecast between 2005 and 2010. While the *Monetary Policy Committee* (MPC) of the Bank of England may cut interest rates in the short run, we expect that short-term rates will gradually rise towards the end of the decade.

A feature of the UK economy in recent years has been the strong performance of the labour market. From an annual average of 10.3 per cent in 1993, the number of unemployed as a percentage of the labour force declined to an annual average of 2.7 per cent in 2004 (see Figure 3.7) or 4.8 per cent on an ILO basis. We expect to see some increase in the unemployment rate over the forecast horizon, with the unemployment rate set to average 4.2 per cent between 2005 and 2010, half of the Euro Area average for the same period.

[23] A continuing issue facing the UK economy, and one that is of importance to Ireland, is the issue of EMU membership. It is assumed, for the purposes of this *Review*, that the UK does not join EMU.

Figure 3.7: UK Unemployment Rate



Source: NIESR Database.

The *High Growth* forecast for the UK economy, together with the implied forecast under the *Low Growth* scenario are presented in Table 3.3. The impact on sterling is more moderate than on the euro and would result in some further depreciation of sterling against the euro. This has a positive impact on UK competitiveness *vis-à-vis* the Euro Area, although the slowdown in the international environment would have a negative impact on growth. The depreciation of sterling against the euro would put upwards pressure on prices yet inflation would remain moderate; leaving scope for the MPC to react by cutting rates to help boost growth.

Table 3.3: Forecasts for the UK Economy

	2003	2004	2005	2006	2007	2008	2009	2010	2000-2005	2005-2010	2010-2015
					***High Growth* Forecast**						
					Per Cent				**Annual Average % Change**		
Real GDP Growth	2.5	3.2	2.0	1.9	2.0	2.2	2.1	2.2	2.4	2.1	2.7
									Annual Average		
Inflation*	2.0	1.3	1.7	1.9	1.5	1.3	1.3	1.2	1.9	1.5	1.0
Short-term interest rate	3.7	4.6	4.7	4.2	4.1	4.3	4.4	4.6	4.7	4.4	4.9
Exchange Rate (£ per €)	0.69	0.68	0.68	0.68	0.69	0.70	0.71	0.72	0.65	0.70	0.74
Fiscal Deficit (as a % of GDP)	-3.2	-3.1	-2.8	-2.4	-2.5	-2.6	-2.5	-2.4	-1.4	-2.5	-2.3
Unemployment Rate	3.0	2.7	2.8	3.5	4.1	4.6	5.0	5.3	3.1	4.2	5.4
					US Current Account Adjusts – *Low Growth* Forecast						
					Per Cent				**Annual Average % Change**		
Real GDP Growth					2.0	2.1	2.1	2.1			2.3
									Annual Average		
Inflation*					2.0	1.8	1.7	1.6			1.5
Short-term interest rate					3.5	3.3	3.1	3.0			3.3
Exchange Rate (£ per €)					0.70	0.71	0.71	0.72			0.73
Fiscal Deficit (as a % of GDP)					-3.0	-3.0	-2.6	-2.4			-2.3
Unemployment Rate					3.7	4.2	4.5	4.8			5.2

*Consumer Expenditure Deflator.

3.5 Context for Ireland

We have not outlined in any detail our forecast for developments in the rest of the world, most notably China and India. However, these economies are likely to continue growing rapidly, contributing an ever increasing share of the momentum in foreign trade. This represents an opportunity rather than a threat for the Irish economy. As argued in Chapter 7, these economies have limited supplies of skilled labour and their very success is raising demand for this scarce resource, and its cost, at an ever-increasing rate. The available skills are needed to manage their rapidly growing economies and it will be many years before their comparative advantage could come to lie in producing on a large scale products and services for export involving a high skilled input. As a result they represent very important markets for Irish firms in the future.

Since the last *Medium-Term Review* Ireland has continued to enjoy strong growth rates compared to other international economies. The bulk of this growth has been domestically driven, especially from the building and construction sector which is not self-sustaining. Although the structure of the economy is changing to a greater importance of services, this does not mean that Ireland is immune to events in the international economy. For example, services exports accounted for a third of the value of total exports in 2004 and total exports accounted for over 60 per cent of GDP in value terms. The relatively sluggish growth forecast for the international economy will have negative implications for the trading environment in which Ireland operates.

The forecast continued appreciation of the euro will adversely affect Ireland's already eroded competitiveness base and reduce the scope of the possible contribution the external sector can make to growth. Ireland has a greater than average exposure to non-Euro Area trade and so is more likely to incur greater competitiveness pressures.

The outlook for interest rates is externally determined by the ECB, and will therefore reflect conditions in the Euro Area rather than domestic conditions. This removes interest rate policy as a mechanism to stabilise the domestic economy, say in the area of housing, if the Irish business cycle is different from that of the larger Euro Area economies. To date, the Irish economy has benefited from lower interest rates than might otherwise have been the case as a result of EMU membership. The forecast modest recovery in the Euro Area will see interest rates rise gradually over the course of the decade although remaining at relatively moderate levels.

Overall, the international environment is more uncertain, with a less positive outlook than at the time of the last *Medium-Term Review*. The biggest risk to the international environment is that, at some point in the future, the imbalances present in the US economy will unwind. In the scenario described in this chapter, this would result in the US economy shifting to a lower growth path and output would grow below potential for several years after the shock. The likely realignment of the dollar would serve to further erode the competitiveness of the Euro Area. A sharp downturn in US economic performance would reduce Irish growth. There are a wide range of channels through which this would happen. Firstly, Ireland has a higher share of exports going to the US than is the case for many of its EU partners. Secondly, because the Euro would appreciate in the *Low Growth* scenario, the EU and Ireland would lose competitiveness. The resulting lower growth in the EU would also affect Ireland. Finally, the likely slowdown in FDI flows from the US and the slower growth in world trade would impact on Ireland. Therefore, such a scenario is likely to have a more negative impact on a country like Ireland. As mentioned previously, we have described one possible scenario in which the imbalances in the US economy are redressed. There is considerable uncertainty about the timing and speed of such an adjustment and it remains the biggest external risk to the medium-term growth prospects of the Irish economy.

4. Overview of Economic Outlook

4.1 Introduction

In this chapter we present an overview of our forecast for the Irish economy out to 2020. A major theme underlying this *Medium-Term Review* revolves around the fact that we expect that the growing external imbalances, that characterise the current growth performance of the US economy cannot continue indefinitely.

As outlined in Chapter 1, we present two different scenarios in this *Review*. The external assumptions underpinning these two macro-economic scenarios have been described in detail in the previous chapter. We assume that the *High Growth* scenario is a reasonable basis for predicting the likely outturn in Ireland over the medium term out to around 2012. This scenario is outlined in detail in Chapter 5.

However this scenario is not a reasonable basis for forecasting Irish growth over the longer term. Because of this we have developed a second *Low Growth* scenario which assumes that market forces will produce an adjustment in the US and the world economies. For illustrative purposes we have assumed that this *Low Growth* scenario begins in 2007. However, it is likely that if such an adjustment occurs, it will happen more suddenly than in the scenario considered here. Furthermore, the earlier an adjustment takes place the lower the likely cost of adjustment. Even though there is considerable doubt as to when this adjustment process will commence we consider that over the longer term this scenario best captures the external environment likely to face the Irish economy out to 2020. This scenario is discussed in detail in Chapter 6.

The *High Growth* and the *Low Growth* scenarios prescribe two paths for the growth of GNP over the next fifteen years.[24] Within the limits described by these two scenarios a range of possible adjustment paths exist. At some point, when and if the adjustment begins, the path of Irish GNP could switch from the *High Growth* to the *Low Growth* scenario. In Section 4.3 we present an overview of these alternative growth paths and their implications for the changing structure of the economy, the labour market, the housing market, the public finances and competitiveness.

The detailed forecasts of the Irish economy, which we produce, are based on simulations of the ESRI *HERMES* medium-term macroeconomic model. In running these simulations we use the demographic assumptions discussed in Chapter 2, and assumptions on world economic conditions discussed in Chapter 3. To simplify the presentation we assume that the government sector runs a small surplus on the General Government Balance (GGB) over the course of both scenarios. This is achieved by varying the volume increase in public consumption and varying the average direct tax rate. The net effects is that the share of GNP accounted for by the public sector changes only slowly over time. Full details of the assumptions on the public finances are given in the next chapter.

[24] These two paths for GNP do not represent "confidence limits". It is quite possible that GNP could perform better than in the *High Growth* scenario or worse than in the *Low Growth* scenario.

We begin however in Section 4.2 with our estimates of the potential growth rate of the Irish economy out to 2020. Assuming also a benign external environment moving forward, these growth rates should be achievable given accommodative domestic policies. However, while we believe that the external environment is currently the major source of uncertainty it is not the only one. The second major uncertainty we identify is the future performance of the housing market in particular, and the provision of sufficient infrastructure to tackle congestion problems in general, in the face of the immigration flows which would be necessary to achieve this potential growth rate over the next fifteen years.

4.2 Potential Growth

The "potential output" of the economy attempts to measure what rate of growth the economy could achieve under favourable circumstances, given its endowment of labour and capital, and without causing inflationary pressures. The measure of potential output is important as it prescribes, in a sense, an upper limit on growth. Growth above potential is possible for a period. However, because it involves very high utilisation rates for the endowment of resources available to an economy, it results in an ever increasing rate of inflation. As such it is not possible to keep growing more rapidly than potential for too long.

Measuring the potential output of an economy is obviously not a simple exercise and there is a range of methods frequently used for the purpose. In addition, because the supply of factors of production is itself endogenous, it is not an easy concept to operationalise over a long time horizon. For example, while the labour force may be fixed in the short term, it can vary through migration in the longer term. Similarly, the capital stock can be increased through investment.

In this *Review* we build up our estimate of the potential growth rate from estimates of the long-term rate of growth in productivity and the growth in the population who are available to work. We begin by assuming a growth path for productivity net of the effects of rising education or skill levels, where education levels are proxied by an index of human capital.[25] This estimated rate of productivity growth should be a function of the capital stock. However, here we simply examine the long-term trend in this key item and use it to project forward. Table 4.1 shows both the actual growth rate of productivity, averaged over five year periods, and what we have assumed to be the long-term trend growth. Assumed productivity growth net of human capital beyond 2005 falls to 1.5 per cent from an average of 2 per cent per annum. This reflects the declining role of high-productivity manufacturing and the increasing role of lower productivity services in total output. To this we add the expected growth in the human capital index – a measure of the additional growth in productivity arising from the increasing average educational attainment of the population. As can be seen from Table 4.1, this factor is still significant but its effect falls gradually out to the end of the next decade.

The labour force is clearly endogenous – it adjusts depending on labour market conditions in Ireland relative to other countries in the EU. This contributes a certain "elasticity" to our measure of potential output.[26] In practise we have estimated what labour force would be consistent with a given scenario.

[25] See Chapter 2, Section 2.4 for a fuller description of this human capital index.

[26] In reality, with a fixed capital stock, more labour (through immigration) would see a fall in productivity measured as output per person employed. While we have not been able to take this into account directly, as discussed in the next chapter we do see the limitations of the endowment of infrastructure as constraining the potential growth rate of the economy.

Table 4.1: Potential Growth Rate, *Low Growth* Scenario, Average Annual Growth, %

	1970-1975	1975-1980	1980-1985	1985-1990	1990-1995	1995-1900	2000-2005	2005-2010	2010-2015	2015-2020
Actual output (GNP)*	4.0	4.1	0.3	3.2	4.4	8.8	4.0	3.5	3.1	3.3
Actual Productivity net of human capital*	3.0	2.1	1.2	1.9	1.8	3.1	0.2	1.7	1.5	1.6
Potential Output (GNP)	3.6	4.8	5.2	4.7	6.8	7.9	5.2	4.4	3.5	2.6
composed of:										
Assumed Productivity net of Human Capital	2.0	2.0	2.0	2.0	2.0	3.0	1.5	1.5	1.5	1.5
Human Capital	0.5	0.5	0.4	0.3	0.7	0.5	0.7	0.3	0.3	0.2
Labour Force*	0.9	1.5	0.9	0.1	1.9	3.4	2.9	2.1	1.1	0.7
Unemployment rate at 4%*	0.2	0.7	1.8	2.2	2.0	0.8	0.0	0.4	0.6	0.2

* *Low Growth* scenario.

In Table 4.1 we also show what would have been the effect on output if the unemployment rate at the beginning of a five year period fell to the assumed full-employment rate of 4 per cent by the end of the period.[27] This treats the unemployed as a potential resource, adding to the labour supply. These numbers suggest that while the economy grew well ahead of potential in the 1995 to 2000 period (by 8.8 per cent a year compared to 7.9 per cent), its performance in the 2000-2005 period is below potential, mainly because the actual growth in measured productivity net of human capital was very low. However, the fact that the unemployment rate still hovers close to *de facto* full employment level suggests that our figure for potential output has overestimated the growth potential for the current period.

The estimates in Table 4.1 suggest that the economy has the potential to grow by about 4.5 per cent a year out to 2010, falling to 3.5 per cent a year to 2015 and to around 2.5 per cent a year to 2020. Under the *Low Growth* scenario we anticipate that the economy will grow well below potential for the next ten years, mainly driven by lower levels of employment than those necessary to clear the labour market with rates of productivity growth mirroring potential. If the *High Growth* scenario proves correct beyond 2010, the economy would be growing above its long-term potential as measured here. However, these estimates are, necessarily, crude and a significant margin of error around the central estimate is possible.

4.3 Overview of Alternative Growth Paths

MEDIUM-TERM FORECASTS

Table 4.2 shows the key economic aggregates under both scenarios over the medium term out to 2012. Under the *High Growth* scenario the economy performs significantly better in terms of growth, productivity and employment. This leads to a lower unemployment rate by 2010 that, despite substantially higher immigration, leads to much higher wage growth under this scenario. Coupled with the very high rate of house completions necessary to sustain the implied labour force growth, this leads to incipient inflationary pressures beyond 2010. In this *Medium-Term Review* we have opted to present the results of this *High Growth* scenario out to 2012 as achievable if the US economy does not adjust until after that time. However, domestic constraints on growth make it likely that even without any US adjustment, this *High Growth* trajectory would not be sustainable over the longer term.

[27] Here we are ignoring differences in the skills of the unemployed relative to the rest of the labour force.

Table 4.2: Forecast of Major Aggregates Under *High Growth* and *Low Growth* Scenarios

***Low Growth* Forecast**	**2004**	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**
GNP, %	4.0	5.6	4.8	3.8	3.4	2.7	3.0	3.3	3.3
GNP per worker, %	0.4	1.0	2.5	2.5	2.0	1.6	1.4	2.0	2.0
Investment, %	6.9	7.3	4.3	1.8	1.8	1.0	2.8	2.6	2.6
Consumption deflator, %	1.2	2.1	2.7	1.9	1.9	1.9	2.2	2.1	2.0
Non ag wage rates, %	5.7	4.8	4.6	4.3	4.3	3.7	3.6	3.1	2.8
Employment (PES), %	3.5	4.5	2.3	1.3	1.3	1.1	1.6	1.2	1.3
Labour Force (PES), %	2.9	4.0	2.4	2.5	2.2	2.0	1.8	1.7	1.1
Unemployment rate – ILO	4.4	4.2	4.2	5.3	6.1	6.9	7.1	7.5	7.3
Net Immigration, 000s	31.7	53.3	29.7	27.3	25.0	24.1	23.1	22.1	21.1
Balance of payments, % of GNP	-1.2	-1.8	-2.1	-1.6	-1.1	-0.6	-0.4	0.3	1.0
Exchequer saving, % of GNP	0.1	-1.5	-1.4	-1.2	-1.1	-1.1	-1.0	-0.9	-0.9
Debt/GNP ratio	24.4	22.4	20.9	20.3	19.7	19.2	18.6	17.9	17.3
Housing Completions, 000s	77.7	78.9	78.1	73.0	67.9	62.8	62.3	61.8	61.4
***High Growth* Forecast**									
GNP, %	4.0	5.6	4.8	5.6	5.0	4.7	4.6	4.4	3.5
GNP per worker, %	0.4	1.0	2.5	3.6	2.6	2.1	1.6	1.8	1.2
Investment, %	6.9	7.3	4.3	2.5	3.1	2.9	4.9	4.3	3.8
Consumption deflator, %	1.2	2.1	2.7	1.8	1.7	1.9	2.6	3.1	3.6
Non ag wage rates, %	5.7	4.8	4.6	4.1	4.0	4.0	4.7	5.4	6.3
Employment (PES), %	3.5	4.5	2.3	1.9	2.4	2.5	3.0	2.5	2.3
Labour Force (PES), %	2.9	4.0	2.4	2.5	2.3	2.2	2.1	2.1	1.6
Unemployment rate - ILO	4.4	4.2	4.2	4.8	4.7	4.4	3.6	3.2	2.6
Net Immigration, 000s	31.7	53.3	29.7	27.3	27.0	29.0	31.5	34.2	36.7
Balance of payments, % of GNP	-1.2	-1.8	-2.1	-0.8	-0.3	0.2	0.1	0.5	0.6
Exchequer saving, % of GNP	0.1	-1.5	-1.4	-1.2	-1.1	-1.0	-1.0	-0.9	-0.9
Debt/GNP ratio	24.4	22.4	20.9	19.9	19.1	18.2	17.2	16.1	15.2
Housing Completions, 000s	77.7	78.9	78.1	73.5	70.1	67.5	70.5	73.5	76.2

To understand more fully the productive capacity of the economy it is useful to decompose GNP per capita into a number of individual components, namely productivity, the employment rate, participation and dependency.[28] Figures 4.1 and 4.2 plot the growth in each of the components of GNP per capita under the *Low Growth* and *High Growth* scenarios respectively.

As shown in the figures, productivity growth is much greater and the unemployment rate is much lower under the *High Growth* scenario than under the *Low Growth* scenario between 2007 and 2011. As a result, by 2012, GNP per head is 6.9 percentage points higher under the *High Growth* scenario. Between 2011 and 2012, the growth rate in GNP per capita under both scenarios is similar, given that under the *Low Growth* scenario, the effects of the US adjustment are more or less completed during the period 2007 to 2011.

[28] In equation below *LTOT* is total employment, *LF* is the labour force, *N1564* is the population of working age (15-64) and *N* is the total population. The first term on the right hand side of the equation measures productivity (output per employee), the second term measures employment as a proportion of the labour force (equal to one minus the unemployment rate), the third term measures the participation rate and the fourth term is the inverse of the dependency rate.

$$\underbrace{\frac{GNP}{N}}_{\text{GNP per capita}} = \underbrace{\frac{GNP}{LTOT}}_{\text{Productivity}} \cdot \underbrace{\frac{LTOT}{LF}}_{\text{Employment Rate}} \cdot \underbrace{\frac{LF}{N1564}}_{\text{Participation Rate}} \cdot \underbrace{\frac{N1564}{N}}_{\text{Dependency Ratio (inverse)}}$$

Figure 4.1: Decomposition of GNP Per Capita Growth Rate, *Low Growth* Scenario

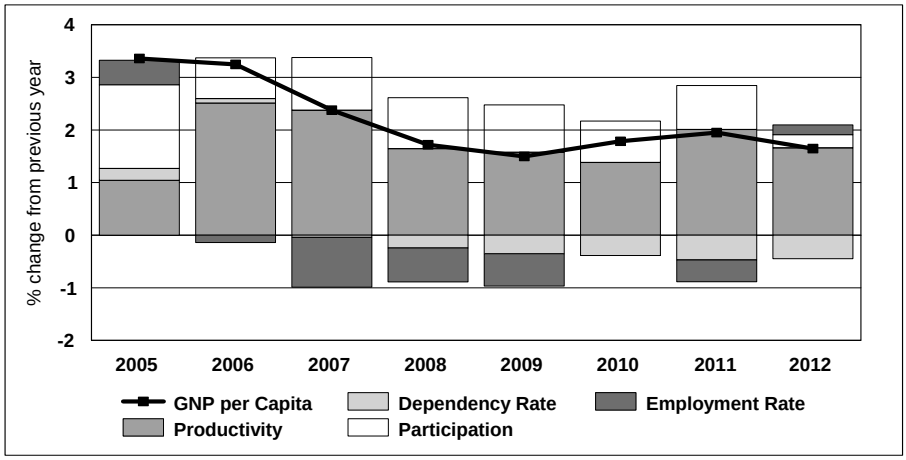
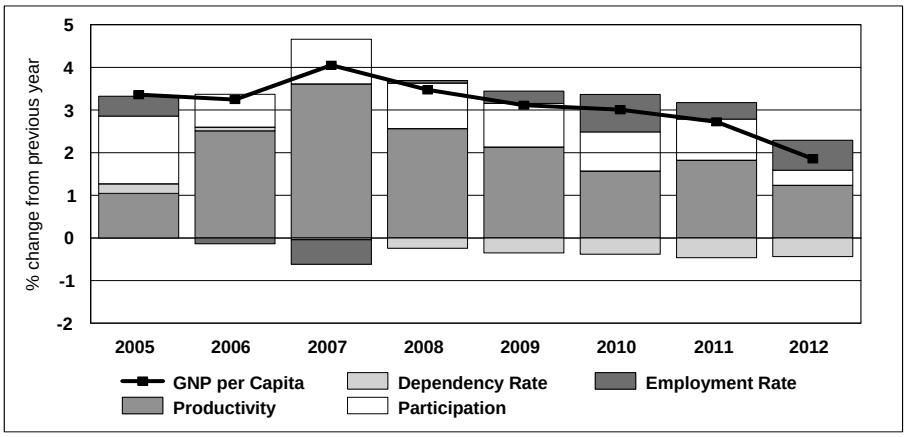


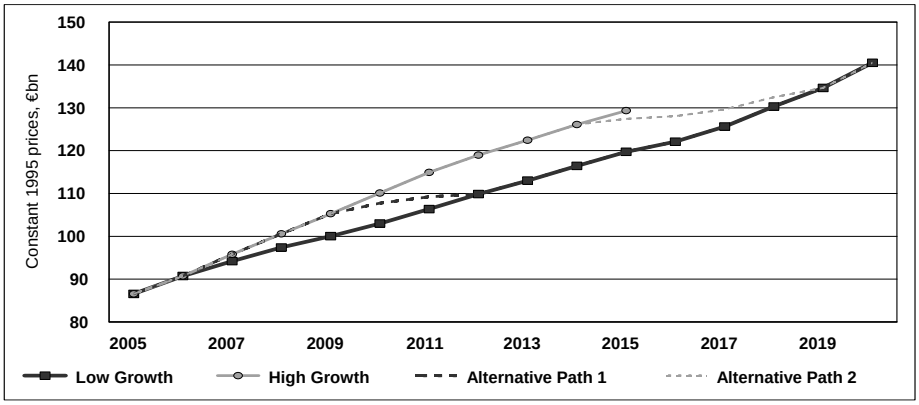
Figure 4.2: Decomposition of GNP Per Capital Growth Rate, *High Growth* Scenario



4.4 Longer Term Growth Prospects out to 2020

As already mentioned in the Introduction, in this *Medium-Term Review* we have opted to present our baseline forecast under two scenarios. These scenarios are stylised as "high" and "low" within which there are a whole host of different adjustment paths for the US and consequently for the Irish economy. We consider that if there were no adjustment in the US until 2012 then the Irish economy could follow the *High Growth* path as shown in Figure 4.3. However beyond that point we argue that the Irish economy must adjust to the *Lower Growth* path, and that this path traces the ultimate end point which the economy is likely to arrive at by 2020. In addition Figure 4.3 illustrates a couple of possible adjustment paths between these two trajectories.

Figure 4.3: Alternative Adjustment Paths for GNP, Constant Prices



CHANGING STRUCTURE OF ECONOMY

The Irish economy has for many years relied on industry as the main engine of growth. Structural change is currently underway in the economy and it is expected that manufacturing, while still very important, will make a declining contribution to growth in the long term. The counterpart to this is that market services will become more important in driving growth in the economy, as discussed in Chapter 2. There has been a dramatic increase in the share of services exports in total exports and this trend is forecast to continue in the coming years.

This move to a greater share of services in total exports means that terms of trade movements are likely to be more favourable than in the past. The huge technical progress (and productivity) in the high technology sector means that prices have fallen pretty continuously. Output prices today for the high technology sector are below the level they were twenty years ago. Table 4.3 shows the average growth rate of GNP before and after adjustment for the terms of trade. The shift to production of services for export, where the price is expected to rise slowly rather than fall, means that a smaller volume increase in exports will be needed to sustain the same rate of growth in living standards, while also maintaining external balance. In the case of the *High Growth* scenario the positive terms of trade effect post-2010 looks unrealistically large. It arises from a high rate of increase in domestic wage rates, discussed later, consequent on a tight labour market. It seems improbable that the tradable services sector would be able to pass through such an increase and it suggests that the competitiveness problems in this scenario could force adjustment to a lower growth path, even if there were no adjustment in the US economy.

Table 4.3: Effects of Terms of Trade on Average Growth in GNP, Percentage Points

	GNP	GNP Adjusted for Terms of Trade	Difference
1970-75	4.0	3.7	-0.3
1975-80	4.1	3.8	-0.3
1980-85	0.3	0.7	0.4
1985-90	3.2	3.3	0.1
1990-95	4.4	3.8	-0.6
1995-00	8.8	8.6	-0.2
2000-05	4.0	3.7	-0.3
Low Growth:			
2005-10	3.5	3.2	-0.3
2010-15	3.1	3.0	-0.1
2015-20	3.3	3.5	0.2
High Growth:			
2005-10	4.9	4.7	-0.2
2010-15	3.3	4.5	1.2

Table 4.4 shows the sectoral shares in GDP out to 2020. In both scenarios the market services sector accounts for around 55 per cent of output by 2020. The counterpart to this is a steady decline in the share of industry, although this decline is halted temporarily in the *High Growth* scenario out to 2010 due to strong growth in the high-tech sector. The non-market services sector is likely to increase its share in the total economy under both scenarios, reflecting increased demands for public services.

Table 4.4: Value-Added Shares in GDP at Factor Cost, Per Cent

	2000	2005	2010	2015	2020
Low Growth					
Agriculture	3.9	2.7	2.4	2.4	2.2
Industry	42.1	37.4	35.5	33.4	28.0
Market Services	47.6	47.6	48.5	50.8	56.5
Non-Market Services	11.2	13.3	14.2	14.0	13.8
High Growth					
Agriculture	3.9	2.7	2.2	1.8	1.4
Industry	42.1	37.4	38.7	35.6	29.2
Market Services	47.6	47.6	45.8	48.4	54.9
Non-Market Services	11.2	13.3	13.9	14.6	14.8

LABOUR MARKET

Under the *High Growth* scenario investment continues to grow strongly from a very high base in 2006. Ireland is currently devoting a dramatically larger share of national resources to investment than its EU neighbours, much of it in public and private infrastructure where the latter is primarily housing. For the EU 15, investment as a share of GDP averaged around 20 per cent over the last decade whereas for Ireland it averaged close to 30 per cent of GNP since 2000. The strong growth in housing leads to continued strong demand for labour in the building sector. Figure 4.4 shows that by 2015 there are 40,000 extra workers employed in the industrial sector, of whom the bulk are in the building and construction sector. The difference in manufacturing employment is more modest since under both scenarios manufacturing employment falls over the medium term.

Figure 4.4: Industrial Employment Levels, in Thousands

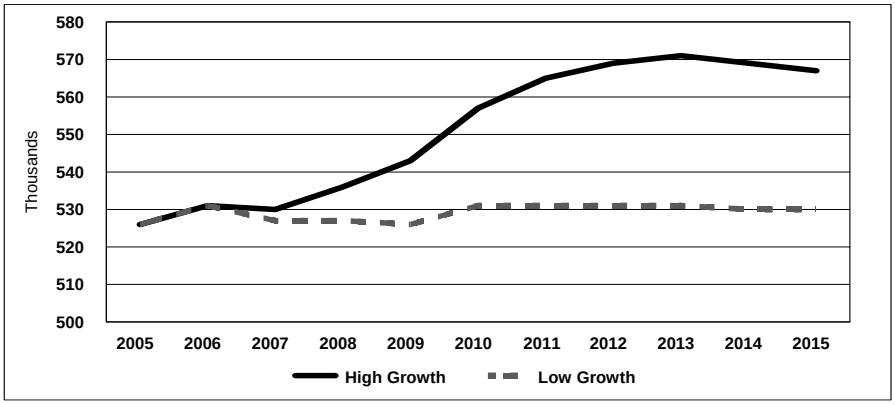


Figure 4.5 plots the total employment in levels under both scenarios. Under the *Low Growth* scenario employment is 150,000 lower by 2015 as a result of the slower growth in output. In addition the *Low Growth* scenario sees lower immigration, the difference in the growth in labour supply is more modest as labour supply is also driven by rising participation rates under both scenarios. This means that under the *Low Growth* scenario the unemployment rate is 4.6 percentage points higher by 2012 (Figure 4.6).

Figure 4.5: Total Employment, Thousands

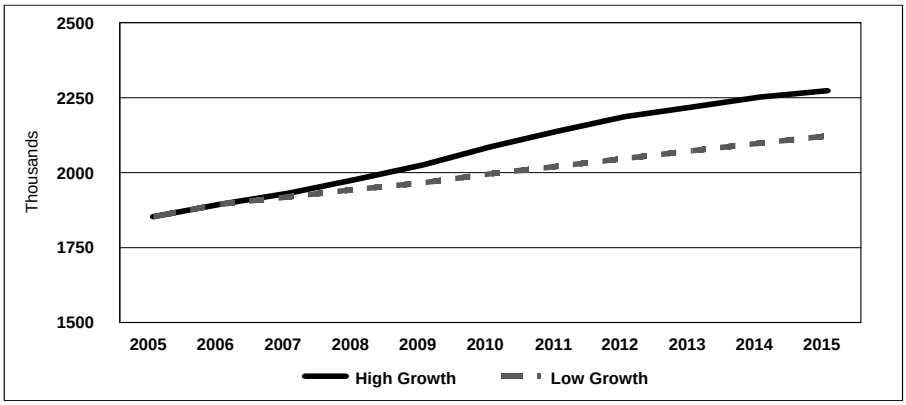


Figure 4.6: Unemployment Rate, PES, Per Cent of Labour Force

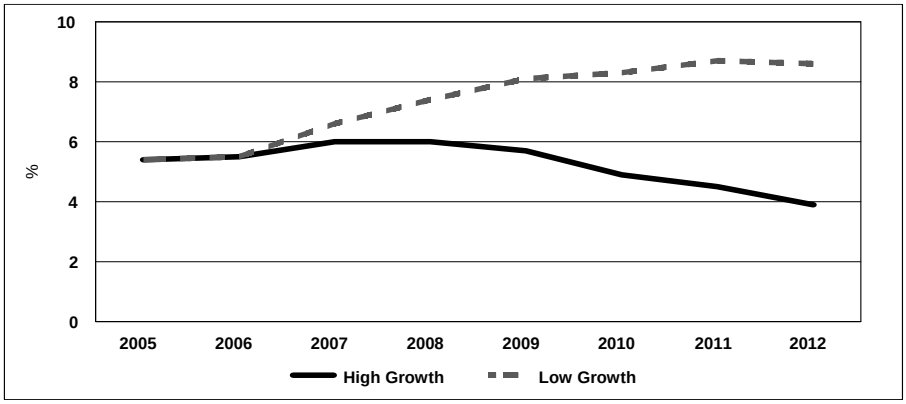
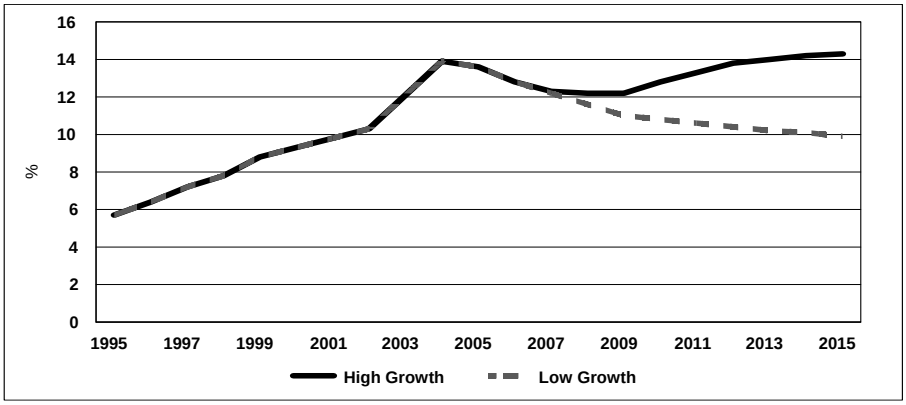


Figure 4.7: Housing Investment as Share of GNP, Per Cent



HOUSING MARKET

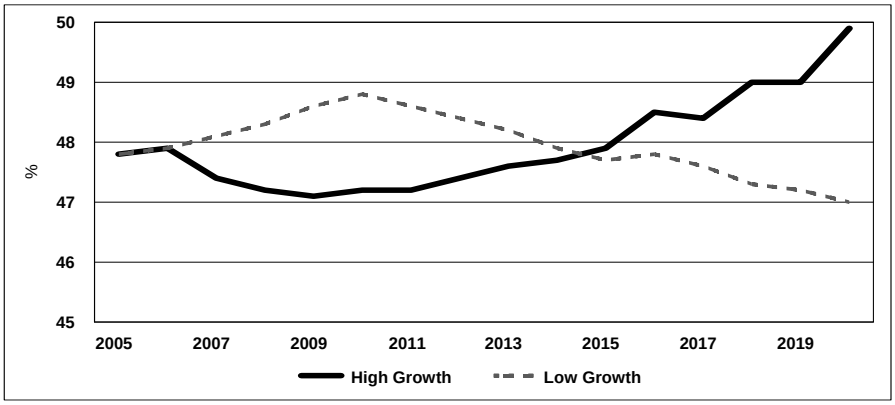
We consider that the housing sector is vulnerable to any shock. Housing investment in 2004 peaked at 14 per cent of the value of GNP, a truly exceptional share. This measure does not take account of the additional role of manufacturing and distribution sector business in supplying materials and services to housing. This is a much higher share than in any other EU economy. Because this sector sources so much of its material inputs in the domestic economy the multiplier effects of this injection are high. Figure 4.7 plots the forecast path of housing investment's share of GNP under the *High* and *Low Growth* scenarios. Under the *Low Growth* scenario the share of housing investment in GNP adjusts gradually downwards to a more sustainable long-

term path. These numbers imply a rate of housing completions of around 62,000 per annum in the *Low Growth* scenario. Under the *High Growth* scenario the very strong inflows of migrants pushes this share back to its 2004 peak by the end of the period.

MEASURES OF COMPETITIVENESS

Previous sub-sections have illustrated the loss to the economy in terms of employment, investment and public services from the *Low Growth* scenario relative to the *High Growth* scenario. However, Figure 4.8 highlights the longer term problems which would ensue if the economy followed such a *High Growth* trajectory for more than five years, in other words beyond our medium-term horizon as presented in Chapter 5. Figure 4.8 plots labour's share of value added in the economy under the *High Growth* and *Low Growth* scenarios. Out to 2009 under the *High Growth* scenario, the labour share falls as strong growth boosts profitability and employment. However, beyond that point wage

Figure 4.8: Labour Share of Value Added, Excluding Agriculture, Per Cent



demands lead to a slow but inexorable elimination of this competitive advantage so that by 2020 the economy is much less competitive under the *High Growth* scenario than the *Low Growth* scenario. This highlights the fact that the *High Growth* scenario is unlikely to be sustainable for more than a decade whether or not the US undergoes a significant adjustment. Because of the continuing tightness of the labour market in the *High Growth* scenario, from early in the next decade the growth in nominal wage rates would rise above 6 per cent a year, more than double the rate envisaged for our EU competitors. By contrast, in the *Low Growth* scenario wage rates in the next decade grow by around 3 per cent a year, maintaining competitiveness roughly unchanged relative to the rest of the EU 15.

4.5 Conclusions

In this chapter we present an overview of the future prospects for the Irish economy over two horizons. In the first horizon, the five years 2007 to 2012, which we dub the "medium term", we project that, if the US economy does not adjust over this period, the Irish economy could grow at a rate slightly above its long-term potential growth rate, averaging 4.6 per cent per annum. However, such a strong rate of growth, and the attendant high immigration flows it would require to maintain sufficient labour supply, would put strong pressure on the capacity of the economy to accommodate such growth, particularly in the housing market and the delivery of infrastructure more generally. In addition, the Irish labour market has been operating at or around full employment for a number of years now so that a further six years of strong growth and low unemployment, coupled with rising congestion costs, could see the emergence of a wage-price spiral which would eventually

challenge the competitiveness of the economy. Therefore, we do not envisage the path of the Irish economy following this *High Growth* path beyond 2012.

The choice of this end date is essentially arbitrary. This uncertainty centres around when the US economy is likely to adjust to correct imbalances. We have prepared a *Low Growth* scenario based on the assumption that the US economy begins to adjust in 2007. We believe that this scenario traces the future growth trajectory of the Irish economy over what we dub the "longer term", and that at some point the economy will shift from the *High Growth* to the *Low Growth* path outlined in this chapter. If the US were to begin to adjust in 2007 then the *Low Growth* path would see the economy growing out to 2011 below potential; beyond that point the economy gradually begins to recover and by 2020 it would have regained competitiveness. This scenario is ultimately more benign for the long-term prospects of the Irish economy, with migration flows and housing demands which can more easily be absorbed.

5. THE *HIGH GROWTH* FORECAST

5.1 Introduction

This chapter presents the *High Growth* forecast for the Irish economy to 2012. It is based on the *High Growth* scenario in Chapter 3 where there is no adjustment in the US current account deficit in the short to medium term. While we do expect that the US will over the medium term adjust to correct its external imbalances, we feel that this is unlikely to begin in 2007 and is more likely to commence towards the end of the decade. For that reason we have chosen to forecast the medium term growth prospects for the Irish economy on the assumption that there are no sharp adjustments to the US economy within that time horizon.

In this *High Growth* forecast the economy performs well out to the end of the decade with GNP growth averaging just under 5 per cent per annum. This rate of growth is above an estimated potential growth rate of 4.5 per cent per annum in this period,[29] driven by strong growth in the manufacturing sector. The attendant growth in employment leads to strong net immigration flows and a fall in the unemployment rate. Beyond 2009 this tightening of the labour market leads to the emergence of incipient inflationary pressures with rising wage and price inflation and a gradual slowing in the growth rate. Detailed forecast tables are given in Appendix 2.

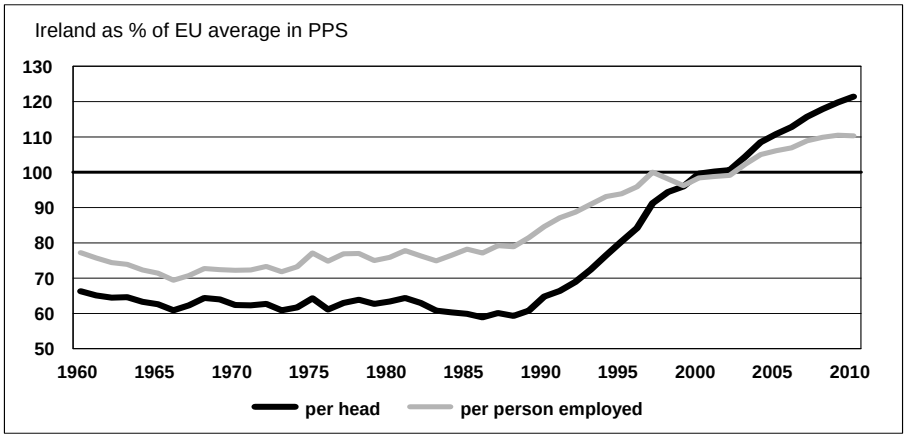
Table 5.1: *High Growth* Forecast, Growth in Major Aggregates

	2004	2005	2006	2007	2008	2009	2010	2011	2012	1995-2000	2000-2005	2005-2010	2010-2015
	Per Cent									Average Annual % Growth			
GDP	4.5	5.7	4.9	6.2	6.0	5.5	5.6	4.7	4.1	9.8	5.4	5.7	3.9
GNP	4.0	5.6	4.8	5.6	5.0	4.7	4.6	4.4	3.5	8.8	4.0	4.9	3.3
GNDI	3.3	4.5	4.6	5.2	4.4	4.0	4.5	4.7	4.2	8.2	3.5	4.5	4.4
Investment/ GNP ratio	29.6	29.9	29.7	28.9	28.7	28.6	29.0	29.2	29.4	25.6	28.6	29.0	29.2
Consumption Deflator	1.2	2.1	2.7	1.8	1.7	1.9	2.6	3.1	3.6	3.2	3.4	2.1	4.1
Employment(PES) - % change	3.5	4.5	2.3	1.9	2.4	2.5	3.0	2.5	2.3	5.0	3.1	2.4	1.7
Real after tax non ag. wages, % change	2.7	2.9	1.5	2.4	2.3	2.0	3.4	2.5	2.5	2.8	2.3	2.3	2.7
	Per Cent of GNP									For End Year			
										2000	2005	2010	2015
Balance of payments surplus	-1.2	-1.8	-2.1	-0.8	-0.3	0.2	0.1	0.5	0.6	-0.3	-1.8	0.1	2.1
Debt/GNP ratio	24.4	22.4	20.9	19.9	19.1	18.2	17.2	16.1	15.2	34.3	22.4	17.2	12.5
General government balance as % of GNP	1.7	-0.6	0.3	0.4	0.4	0.3	0.3	0.3	0.2	5.1	-0.6	0.3	0.1
	Per Cent of Labour Force (ILO Basis)												
Unemployment rate - ILO	4.4	4.2	4.2	4.8	4.7	4.4	3.6	3.2	2.6	4.3	4.2	3.6	2.7
	In Thousands												
Net Immigration, Thousands	32	53	30	27	27	29	31	34	37	26	53	31	44

[29] See Chapter 4 for an outline of how potential growth is estimated for a given scenario.

Beyond 2010 the strong growth performance of the manufacturing sector begins to slow, with a greater contribution to growth coming from the services sector. This is reflected in a continuation of the gradual move to a higher share of services exports in total exports and an improvement in the terms of trade. The gap between GNP and GNDI, which is driven by changes in the terms of trade and transfer income, finally closes by 2010. The exceptionally strong growth in the Irish economy in the 1990s led to full convergence with the EU average in terms of GNP per head by the end of that decade. In our *High Growth* forecast the growth in GNP per head continues to outperform the EU-15 average so that by 2010 Irish GNP per head is an astonishing 11 percentage points higher than the EU-15 average (see Figure 5.1).

Figure 5.1: GNP Per Head Relative to EU-15 Average



Beyond 2010 the performance of the economy begins to slow. The gradual shift to lower productivity services output coupled with a very tight labour market, rising wage demands and very substantial immigration flows fuelling congestion costs, means that the economy is no longer on a sustainable growth path and at some time in the next decade an adjustment to a lower growth path must occur no matter what happens in the external environment. We discuss the longer-term growth prospects in Chapter 6.

In this Chapter, we present detailed annual forecasts out to 2012, together with indicative forecasts out to 2015. Our forecasts are based on the *National Income and Expenditure (NIE) 2004*[30] accounts together with the Autumn 2005 *Quarterly Economic Commentary*[31] forecasts for 2005 and 2006. The ESRI's medium-term macroeconomic model, *HERMES*, was used to produce the majority of the forecasts.

Section 5.2 looks at the crucially important supply side of the economy, the driving force behind the growth process. Given the supply side, we then move on to look at incomes, expenditure and prices in Section 5.3, clearly of much importance in terms of likely future implications of growth in living standards. Within this section our forecasts for income levels, consumption, and prices are discussed. Section 5.4 then looks at the labour market with forecasts for employment and unemployment presented out to 2012. Section 5.5 discusses the balance of payments, savings and sets out our assumptions for the public

[30] The databank we used for estimation of the HERMES model was based on the *NIE* 2003 accounts since the full NIE 2004 accounts have yet to become available. This means that reported growth rates in some aggregates may differ slightly from the official NIE 2004 numbers.

[31] Barrett, A. *et al.*, 2005. *Quarterly Economic Commentary*, Autumn, Dublin: The Economic and Social Research Institute.

finances. The implications of the overall economic forecasts for the housing market and for the environment are analysed in Sections 5.6 and 5.7.

5.2 The Supply Side

The supply side of the economy determines the long-term potential to generate output and employment growth and thus improvements in living standards in the country. It comprises both the tradable and non-tradable sectors. Output in the tradable sector is driven by world demand, which in turn is determined by two main factors, the rate of growth in the world economy and the international cost competitiveness of the traded sector's output. Output in the non-tradable sector is driven by domestic demand. The non-tradable sector is closely linked to the overall competitiveness of the economy, as prices and wages in that sector affect the costs of production of output in the traded sector.

The structure of the supply side of the economy has changed over time with a shift from a largely agrarian driven economy to an industrial and manufacturing driven one having occurred. A shift towards a services driven economy is now underway, as the role of the services sector has increased consistently over time; for example, in 1980 the services sector accounted for around 50 per cent of employment in the economy and by 2004 its contribution had increased to over 65 per cent. Not only is the services sector accounting for larger proportions of employment, but also of value added.

The economy witnessed record levels of output growth throughout the 1990s, before a sharp slowdown at the beginning of this decade in 2001 and 2002. Since then growth rates have gradually recovered and we are forecasting that this recovery will continue to accelerate out to the end of the decade, with output growing above potential. We predict that real GNP will increase by an average of 4.9 per cent per annum over the latter half of the current decade.

INDUSTRY

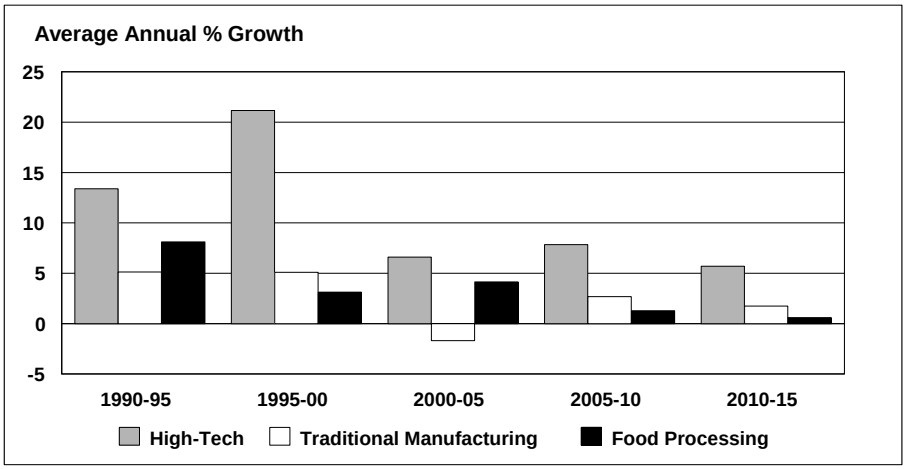
The ESRI *HERMES* macroeconomic model makes a distinction between that part of the industrial sector which is tradable and that part which is generally non-tradable. The tradable sector includes the manufacturing industries while the non-tradable sector includes industries in the building and utilities sectors. Within the tradable sector, manufacturing is further disaggregated into three components; the high-technology sector, the traditional manufacturing sector and the food processing sector.[32]

MANUFACTURING

The manufacturing sector performed extremely well throughout the 1990s, with average annual growth rates of almost 11.0 per cent recorded in the volume of output in the sector over the decade. In the early years of the current decade, the sector has witnessed a significantly slower rate of growth, averaging an estimated 5.4 per cent per annum to 2005 on average. Looking ahead to the end of the decade, it is expected that growth in the sector will accelerate to an average of around 7.0 per cent per annum. The contribution of the sector to economy wide growth is gradually falling over time, however under this *High Growth* scenario its contribution remains strong out to 2010, mainly driven by strong growth in the high-tech sector. Within manufacturing, the role of the traditional and food processing sectors is expected to decline, given the increasing competitiveness pressures these sectors will face.

[32] The high-technology sector includes industries involved in chemical, metal and engineering activities. The traditional manufacturing group of industries includes mining and quarrying, drink and tobacco, textiles, leather, wood products, clothing and footwear, paper and printing, and other miscellaneous industries.

Figure 5.2: Output in Manufacturing



Throughout the 1990s growth in the high-technology industries significantly outpaced growth in the rest of the manufacturing sector; gross output in the high-technology sectors expanded by an average 15.7 per cent between 1990 and 1999 while gross output in traditional manufacturing expanded by 4.9 per cent and that of the food processing industries grew by 5.9 per cent over the same period. The phenomenal growth in the high-technology sector was driven largely by significant productivity gains in the sector as well as substantial investment in the form of FDI. This pattern came to an abrupt halt in the global recession period for the high-technology sector during 2001-2002; since then growth rates have recovered and this sector is expected to grow at an annual average of 7.8 per cent per annum out to the end of the decade.

The traditional manufacturing industries while lagging behind the high-technology industries in terms of output growth, nonetheless performed well over the 1990s. These industries have come under increasing competitiveness pressures in recent times given the emergence of lower cost manufacturing sources throughout Asia and the new EU member states, the sustained appreciation of the euro *vis-à-vis* the dollar, as well as increasing domestic cost bases. We thus expect lower growth rates in the sector out to 2012 averaging 2.7 per cent per annum between 2005 and 2010, and approximately 1.7 per cent thereafter.

The performance of the food processing industry is closely linked to the performance of the agricultural sector, primarily because the industry draws most of its inputs from the agricultural sector, though this dependence has decreased somewhat in recent years. The food-processing sector performed well between 1980 and 1995, deteriorating significantly thereafter, owing in large part to the loss of competitiveness *vis-à-vis* the UK as well as exogenous shocks in the agricultural sector such as the BSE scare; gross output in the sector expanded by around 5.5 per cent per annum between 1980 and 1995. Performance in the sector decelerated between 1995 and 2000, as gross output expanded by 3.1 per cent per annum, mirroring the slowdown in the agricultural sector. Between 2000 and 2005, gross output is estimated to have recovered slightly to an annual growth rate of 4.1 per cent per year. Moving out over the next decade, we forecast that growth in the sector will decelerate, with an average annual growth rate in gross output of 1.3 per cent forecast for 2005 to 2010, and a further slowdown to 0.4 per cent in 2012.

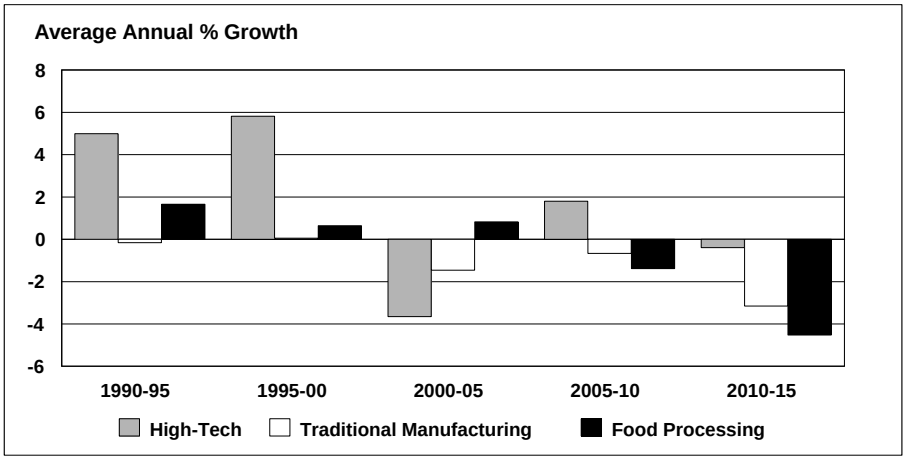
Table 5.2: Percentage Change in Output, GDP at Factor Cost at Constant 1995 Prices

	2004	2005	2006	2007	2008	2009	2010	2011	2012	1995-2000	2000-2005	2005-2010	2010-2015
	Per Cent									Annual Average % Growth			
Agriculture	1.8	-0.5	-0.6	1.8	2.3	1.3	1.8	1.1	1.1	1.1	0.6	1.3	1.0
Industry	3.9	5.6	4.0	8.4	7.8	6.9	6.3	4.7	4.3	13.5	5.4	6.7	3.8
Manufacturing	2.9	5.4	3.9	8.5	8.0	7.6	7.3	5.5	4.7	14.4	5.4	7.0	4.6
Utilities	8.0	8.0	6.8	5.9	7.3	5.2	1.8	0.8	9.6	5.3	5.8	5.4	3.4
Building	9.5	6.1	3.5	8.3	6.1	2.7	0.8	-0.5	-1.4	10.8	5.4	4.3	-3.1
Market Services	4.8	7.5	5.2	5.3	5.2	5.1	5.6	5.1	4.3	8.4	5.8	5.3	4.3
Distribution	2.8	6.4	4.8	4.2	4.4	4.3	5.6	5.0	4.6	10.4	4.9	4.7	4.3
Transport & Communications	2.8	6.5	4.8	5.0	5.2	5.3	6.0	5.5	5.0	12.8	4.8	5.3	4.9
Other Market Services	6.2	8.3	5.5	5.8	5.5	5.4	5.5	5.1	4.0	6.7	6.5	5.6	4.1
Non-Market Services	3.0	3.3	3.6	4.2	4.1	4.1	4.1	3.6	3.6	3.2	4.2	4.0	2.7
Health & Education	4.0	3.4	3.0	4.0	4.0	4.0	4.0	4.0	4.0	3.8	5.2	3.8	2.8
Public Administration	0.6	3.0	5.0	4.6	4.4	4.3	4.2	2.6	2.5	1.7	1.9	4.5	2.5
Adjustment for Fin. Services (-)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.3	2.4	0.0	0.0
GDP at Factor Cost	4.1	5.3	4.4	6.5	6.2	5.8	5.7	4.7	4.2	9.6	5.5	5.7	3.8
Taxes on Expenditure	6.1	8.7	7.9	3.8	3.6	3.4	4.6	4.0	3.7	8.9	4.0	4.6	3.6
Subsidies	-5.2	7.2	-0.6	1.9	2.1	1.5	2.2	1.4	1.3	1.3	1.8	1.4	1.1
GDP at Market Prices	4.5	5.7	4.9	6.2	6.0	5.5	5.6	4.7	4.1	9.8	5.4	5.7	3.9
Net Factor Income	6.9	6.1	5.4	8.6	9.6	8.7	9.2	5.7	6.2	16.4	11.9	8.3	5.7
GNP at Market Prices	4.0	5.6	4.8	5.6	5.0	4.7	4.6	4.4	3.5	8.8	4.0	4.9	3.3

Accompanying the robust expansion in output in the manufacturing sector throughout the 1990s was respectable employment growth which increased Ireland's share of total manufacturing employment in the EU[33] (See Figure 5.3), employment grew by an average 2.6 per cent per annum up to 1999 and continued up to 2001 when strong growth of 3.5 per cent was registered. Thereafter, employment fell in the sector, with a contraction in the numbers engaged in the high-technology industries being the main cause. Given the expected upturn in output growth in total manufacturing to the end of this decade, it is also forecast that employment growth in the sector will pick up slightly. Accordingly, we predict that employment will increase by an average of 0.4 per cent per annum between 2005 and 2010, before contracting in the years thereafter. This reversal in the trend of falling employment numbers occurs solely in the high- technology sector post 2006, such that these industries will drive the small rise in the numbers employed in total manufacturing over the forecast period. We predict that employment in the high-technology sector will increase by an average of 1.8 per cent per annum while employment in the traditional and food processing sectors are expected to contract by 0.7 and 1.4 per cent respectively.

[33] O'Malley, E., 2004. "Competitive Performance in Irish Industry" in D. McCoy *et al.*, *Quarterly Economic Commentary*, Winter 2004, Dublin: The Economic and Social Research Institute.

Figure 5.3: Employment in Manufacturing



The divergence in the growth rates of output and employment in manufacturing throughout the latter half of the 1990s means that productivity was high in that decade, averaging around 11.1 per cent per annum in value-added terms between 1995 and 2000 and driven in large part by significant productivity growth in the high-technology sector. Since then, productivity growth has fallen, though estimated to have remained significant at around 6.5 per cent per annum in value added terms between 2000 and 2005. Average annual productivity growth in manufacturing is expected to be around 7 per cent out to 2010.

BUILDING

The robust growth in the economy and incomes throughout the period of high growth was accompanied by an accelerator effect in the housing sector, contributing to significant growth in investment in building over these years. In addition, the expansion in the industrial and services sectors resulted in increased demand for commercial and industrial properties, while the government objective of increasing the stock of infrastructure also meant increased investment in this area. As a result, real output in building grew by an annual average of 10.8 per cent between 1995 and 2000 (Table 5.2). The pace of growth tapered off in the following years, though still remaining strong; the average annual growth in output between 2000 and 2005 is estimated at 5.4 per cent. Over the next five years, it is anticipated that the demand for housing output will remain strong (as discussed in Section 5.6) as well as robust demand for commercial building output and continued investment in infrastructure. Accordingly, we forecast that output will expand by an average of 4.3 per cent per annum between 2005 and 2010.

Trends in employment in building closely follow output trends in the sector; by its nature, the building sector is highly employment intensive and thus strong employment growth coincided with strong output growth throughout the 1990s. There was phenomenal employment growth during the 1995 to 2000 period, with annual averages of 14.6 per cent growth registered, while in the years 2000 to 2005, it is estimated that annual growth in employment will average 7.4 per cent. By 2005 it is estimated that the building sector accounted for 13 per cent of total employment. Given the continued strong growth in the sector out to 2010 we forecast that this share will remain stable, with an average 2 per cent growth per year expected, equating to an increase of 25,000 jobs in the sector between these years.

Productivity in the building sector has traditionally been low and this trend looks set to continue in the medium term with a minor increase in productivity levels of approximately 2 per cent in value-added terms expected per annum over the 2005 to 2010 period.

UTILITIES

Growth in the utilities sector (which includes electricity, gas and water) has been fairly stable since 1990, with average increases of over 5.0 per cent recorded in real output per annum. Growth in the sector is driven by demand for energy in the rest of the economy (see Section 5.7), particularly in the commercial sector. Given the sustained expansion expected out to 2010 in the economy and the commercial sector, we forecast that real output will grow by around 5.4 per cent per annum on average. Beyond this, growth is expected to slow.

The performance of the sector in terms of employment growth has varied over time. The numbers engaged in the sector increased by 1.6 per cent per annum between 1990 and 1995. Despite the output expansion between 1995 and 2000, employment actually fell by 2.5 per cent, due primarily to restructuring in the electricity sector. It is anticipated that employment growth will average 3.2 per cent per annum over the 2000 to 2005 period, before falling to 0.8 per cent per annum between 2005 and 2010.

AGRICULTURE

The agricultural sector (including forestry and fishing) performed poorly relative to its sectoral counterparts during the 1990s; real output growth averaged a mere 0.1 per cent per annum over the period 1990 to 1995 and 1.1 per cent per annum over the period 1995 to 2000. Prospects for the sector remain poor with a 0.6 per cent average yearly growth rate expected for the 2000 to 2005 period. We expect growth to remain weak over the remainder of the decade and envisage that output growth will remain low in the medium term.

Employment in the sector has been declining steadily for the past three decades and we expect this trend to continue over the forecast horizon. In particular we expect the numbers employed in the sector to fall by an average of over 2.5 per cent per annum between 2005 and 2010. This rate of decline is expected to continue in the medium term.

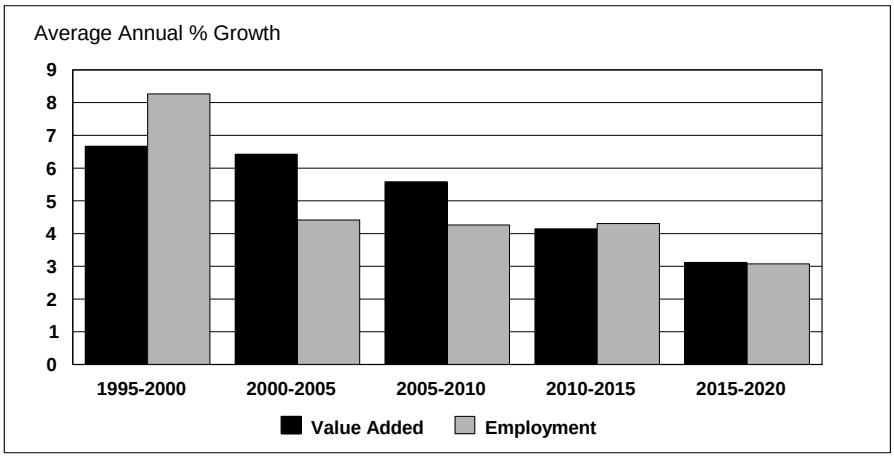
MARKET SERVICES

The market services sector is modelled under three separate headings: distribution, transport and communications, and other market services. In the past, output in market services was driven solely by domestic demand, as these sectors comprised mainly non-tradables. The rapid economic growth in the latter half of the 1990s was accompanied by significant growth in personal disposable incomes. There has been a marked expansion in the sector during these years; over the period 1995 to 2000, real output in market services grew by an average 8.4 per cent per annum, as compared to an average annual 3.1 per cent expansion over the 1990 to 1995 period. In recent years, the external market has become an important driver of growth in the sector, as technological advancements and the move towards trade liberalisation in services markets have contributed to an expansion in invisible exports. The role played by the external market is likely to increase further in the future. Accompanying this will be an increasing exposure to competitiveness pressures in the sector. Our forecasts are for growth in real output to average 5.8 per cent per annum over the 2000 to 2005 period and 5.3 per cent per annum over the 2005 to 2010 period.

Given the labour intensity of market services, output trends have important implications for employment in the sector. Throughout the 1990s, employment growth in market services was higher than for any other sector in the economy, with an average of almost 5.0 per cent increases recorded per annum. Over the current decade, 2000 to 2009, we forecast that the market services sector will continue to account for the largest proportion of

employment growth, with around 3.6 per cent per annum projected. Looking beyond the current decade, the role of the market services sector will increase further, as it continues to account for ever increasing proportions of output and employment growth, as the economy shifts more towards a services driven economy.

Figure 5.4: Output and Employment in Market Services



DISTRIBUTION

The performance of the distribution sector (which includes wholesale and retail services) is highly dependent on domestic demand and in particular on the volume of consumption in the domestic economy. Consumption in turn is driven by a wide variety of factors, changes in personal disposable incomes being key. The demographic profile of a country also tends to be important for the distribution sector, as for example, a relatively young and employed population leads to a demand for specific types of goods and services, many of which tend to have relatively high margins. The changes that have occurred in the Irish economy over the last two decades have thus had important implications for consumption patterns and the distribution sector. There have been changes in the supply of output from the sector; with the advent of technological advances (such as internet shopping), efficiency in the sector has increased on a number of levels (for example, there has been a fall in the use of wholesalers as one can often purchase directly from the manufacturer), and this is set to continue in the future. The Irish wholesale and retail sectors have also become increasingly internationalised. Given these changes, real output in the sector expanded substantially over the 1995 to 2000 period, when average annual growth rates of 10.4 per cent were recorded. Output growth over the current decade is expected to stabilise at a much lower average of 4.8 per cent per annum. Beyond the current decade, growth in the sector is likely to remain strong at around this level.

Between 1995 and 2000, the numbers employed in the sector rose by an average 4.4 per cent per annum, as compared to a 1.8 per cent expansion in the previous five year period. However, given the rapid pace of change in technology used in the sector, and in particular the move towards increased computerisation, there has been a fall off in employment growth in recent times. Over the period 2000 to 2005, it is expected that employment growth will average 3.6 per cent per annum, before slowing to 1.8 per cent over the 2005 to 2010 period. Employment growth is expected to slow further over the next decade.

TRANSPORT AND COMMUNICATIONS

The composition of the transport and communications sector is different from the other market services sectors in a number of respects because of government involvement and intervention in semi-state bodies. The structure of the sector has changed over time with deregulation leading to increased competition in the sector, particularly in the aviation and telecommunications industries. However, like the other market services sectors, domestic demand is the main driver of output in the sector. In addition, given the changes in regulation in the sector, and the increased competition and efficiency, the role of output from the transport and communications sector has become increasingly important for other productive sectors in the economy, as the degree of contracting out to this sector appears to be increasing over time. Given these facts, the sector expanded significantly throughout the 1990s, with growth in the latter years proving most substantial. The 1995 to 2000 period saw average growth in real output of 12.8 per cent per annum. This exceptional growth was driven in large part by significant investment in expanding the stock of capital in the sector. Following this period, a slowdown in growth was recorded, though still remaining high with 4.8 per cent average annual growth over the 2000 to 2005 period. In light of forecasts for the economy as a whole, continued strong output growth is expected over the next five years, with 5.3 per cent increases forecast per year over the 2005 to 2010 period. We anticipate that growth will remain strong early into the next decade.

Trends in employment growth have followed trends in output growth throughout the 1990s, with the exceptionally high output growth of the 1995 to 2000 period accompanied by significant employment growth of 5.6 per cent. With the fall in the pace of output growth from 2001, the rate of employment growth also fell, with an average annual expansion in the numbers employed over the 2000 to 2005 expected at 2.3 per cent, before falling slightly to 1.7 per cent over the 2005 to 2010 period, with continued restructuring in the sector responsible for some of the slowdown. Employment growth in the next decade is likely to remain low.

OTHER MARKET SERVICES

The other market services sector comprises a broad range of diverse service activities, including both personal services (for example, hairdressing, motor repairs, hotels) and professional services (for example, banking, insurance and legal services). Like the other market services sectors, a key driver of output in this sector is domestic demand, though external demand now also plays an important role, and given technological advances and continued liberalisation of international services markets, it is likely to play an increasingly important role in the future.

In line with the phenomenal growth in the Irish economy throughout the latter half of the 1990s, output in the other market services sector grew substantially, with average annual growth in real output of 6.7 per cent registered over the 1995 to 2000 period. The sector continued to perform well into the early 21st century as growth averaged 6.5 per cent over the 2000 to 2005 period and is expected to average 5.6 per cent per annum over the 2005 to 2010 period, driven in large part by strong predicted growth in private consumption and production. As such, growth in the other market services sector is expected to outpace growth in any of the other components of total market services out to the end of the current decade.

The importance of the sector for employment growth in the economy has increased over time, and this trend is expected to continue out to 2010 and into the next decade. In 1990, 177,000 people were employed in the other market services sector, accounting for around 40.0 per cent of total market services employment. In 2000, 333,000 people were employed in the sector,

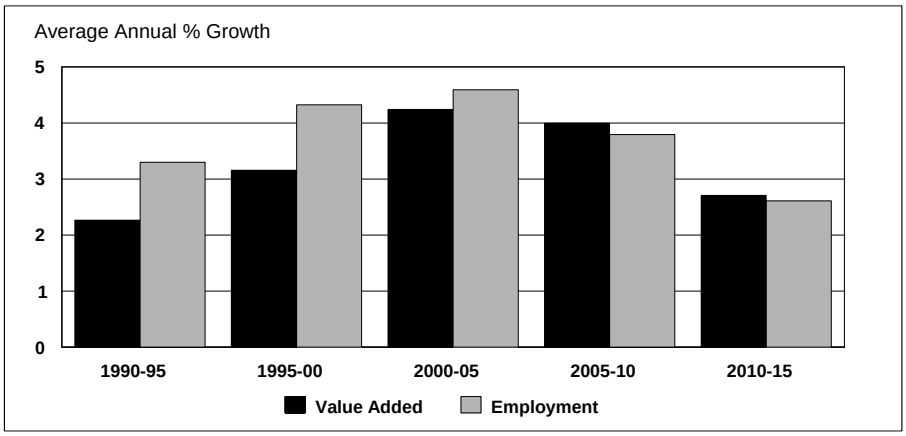
representing over 50.0 per cent of the total. We anticipate that the importance of this sector for employment will remain high throughout the current decade, with average annual growth of 4.4 per cent expected for the period 2000 to 2005 and average growth of 4.2 per cent forecast for 2005 to 2010. Based on these forecasts other market services will account for 55.0 per cent of total market services employment in 2010.

NON-MARKET SERVICES

The non-market services sector is identified under two separate headings in the ESRI *HERMES* macroeconomic model; health and education, and public administration and defence. These services are mainly funded by the government and many of them have "public good" characteristics. While the government will always have to provide a certain level of these services, the actual output of the sector will depend on demographic and budgetary considerations (see Section 5.5 for our assumptions regarding public expenditure).

Growth in real output in the sector averaged approximately 3.0 per cent over the 1990s, and is expected to average around 4.1 per cent over the current decade. The health and education sector is expected to witness higher output growth rates than the public administration sector over the current decade, with around 4.5 per cent expansions in real output forecast on average for each year in the health sector and approximately 3.2 per cent for the public administration sector.

Figure 5.5: Output and Employment in Non-Market Services



Productivity in the non-market services sector has been consistently low over time. However, this is partly due to the fact that it is difficult to measure output in the sector with precision because of the nature of the service involved.

Employment growth is expected to remain close to 4.0 per cent per annum over the current decade, having been just below this in the previous decade. Stronger employment growth took place in the health and education sector between 2000 and 2005 than in the public administration sector. However, we anticipate similar growth rates over the next five years. The share of total employment accounted for by non-market services is expected to remain constant at around 22.0 per cent out to 2010 before increasing slightly to approximately 24.0 per cent in the next decade.

5.3 Income, Expenditure and Prices

Non-agricultural incomes have continued to grow rapidly in the period 2000 to 2005, at an average of 9.2 per cent per annum, following double-digit growth rate of 12.1 per cent in the period 1995 to 2000. We expect this to remain strong to the end of the decade underpinned by strong employment growth. The growth in transfer income is expected to be more modest, while the continued decline in the national debt burden is expected to lead to a fall in national debt interest payments over the forecast period.[34] The pace of growth in personal disposable income and personal consumption are expected to be very similar between 2005 to 2010, which means the savings ratio should remain stable.

Table 5.3: Personal Income, Percentage Change

	2004	2005	2006	2007	2008	2009	2010	2011	2012	1995-2000	2000-2005	2005-2010	2010-2015
					%					Average Annual % Growth			
Agricultural Incomes	3.3	1.2	2.0	3.0	6.2	5.0	4.8	4.7	4.4	-0.7	0.5	4.2	4.2
Non-Ag. Wage Income	9.4	10.0	7.3	6.4	6.8	6.9	8.2	8.3	9.0	12.1	9.2	7.1	9.0
Transfer Income	7.1	16.4	4.0	6.0	5.7	5.8	6.2	7.7	8.6	7.0	12.5	5.5	9.9
Other Personal Income	-5.3	-1.5	7.1	2.0	-0.3	0.3	0.9	5.3	3.5	15.3	2.3	2.0	4.5
Non-Ag. Profits etc.	2.8	6.3	7.1	9.1	7.7	7.4	7.9	8.7	8.3	17.6	6.4	7.8	8.7
National Debt Interest	6.4	2.5	2.1	-8.1	1.4	1.2	1.1	0.2	0.3	-6.2	-2.7	-0.5	-1.1
Net Factor Income	7.2	3.0	7.8	10.6	11.4	10.4	11.3	8.0	8.7	20.2	10.3	10.3	8.6
Other Private Income	-0.4	8.4	5.4	7.1	4.4	4.5	4.4	9.1	7.5	13.8	6.2	5.2	8.4
Personal Income	6.0	8.8	6.5	5.6	5.5	5.7	6.8	7.7	8.1	11.1	8.1	6.0	8.5
Taxes on Personal Income	14.5	7.2	8.2	5.2	5.3	6.1	0.6	5.9	8.5	10.8	6.8	5.1	8.6
Personal Disposable Income	4.2	9.2	6.1	5.7	5.6	5.6	8.2	8.1	8.0	11.1	8.4	6.2	8.5
Personal Consumption	6.5	7.5	7.8	5.6	5.3	5.3	7.4	7.4	7.5	11.1	7.8	6.3	8.0
Personal Savings	-11.1	23.4	-6.1	6.3	8.0	8.5	14.3	13.3	11.7	11.5	13.8	6.0	11.9
					% of Disposable Income								
Tax Ratio (% Pers. Income)	19.0	18.7	19.0	18.9	18.9	19.0	17.9	17.6	17.6				
Savings Ratio (% Disposable Income	10.9	12.3	10.9	11.0	11.2	11.5	12.2	12.8	13.2				

CONSUMPTION

Between 1995 and 2000, growth in the volume of consumption averaged 7.7 per year, and it rose by 4.3 per cent per year between 2000 and 2005. The drivers have included record job creation contributing to a significant increase in real income. Real non-agricultural wage growth averaged 2.3 per cent each year between 2000 and 2005. In the context of a rapidly expanding labour force, the annual increase in personal income was 8.1 per cent over the same period. Positive wealth effects deriving from buoyant property price trends were a further support to consumption. New house prices rose dramatically in the latter half of the 1990s and this trend underpinned consumer confidence. The cost of borrowing also fell dramatically with Ireland's entry to EMU.

[34] The returns on the national pension reserve fund are netted off.

Table 5.4: Expenditure on GNP, Constant Prices, Percentage Change

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2000-05	2005-10	2010-15
					%					Average Annual % Change		
Personal Consumption	5.2	5.2	5.0	3.7	3.5	3.3	4.7	4.1	3.7	4.3	4.0	3.7
Public Consumption	2.3	3.4	3.6	3.9	3.9	3.9	3.8	3.5	3.5	5.5	3.8	2.6
Fixed Investment	6.9	7.3	4.3	2.5	3.1	2.9	4.9	4.3	3.8	3.8	3.5	3.4
Building	8.3	5.2	2.2	1.5	2.0	2.1	4.9	4.5	4.0	6.0	2.6	3.5
Machinery	4.9	10.4	7.2	3.8	4.5	3.8	4.7	4.0	3.6	1.2	4.8	3.3
Total Exports	6.7	4.6	4.3	7.8	6.9	6.9	6.4	5.8	5.2	5.4	6.4	5.0
Total Imports	7.1	5.0	4.1	5.6	5.0	5.3	5.7	5.6	5.1	4.4	5.1	5.0
Gross Domestic Product	4.5	5.7	4.9	6.2	6.0	5.5	5.6	4.7	4.1	5.4	5.7	3.9
Net Factor Income	6.9	6.1	5.4	8.6	9.6	8.7	9.2	5.7	6.2	11.9	8.3	5.7
Gross National Product	4.0	5.6	4.8	5.6	5.0	4.7	4.6	4.4	3.5	4.0	4.9	3.3

The maturing of Special Savings Incentive Accounts (SSIAs) from mid-2006 to mid-2007 will provide some boost to consumer expenditure. Continued strong employment growth averaging 2.4 per cent per year between 2005 and 2010 will accompany personal disposable income growth of 6.2 per cent over the same period. This will be particularly conducive to consumption growth because of the fall in the personal taxation rate anticipated to occur over the forecast period. Interest rates are anticipated to rise by about one and a half percentage points between 2005 and 2012, and this is one factor which will temper consumption trends. Solid house price growth in excess of inflation will continue, and this factor will be supportive of consumption spending increases. Looking to the future, solid consumption growth is expected to continue throughout the forecast period. The volume of personal consumption will rise by an average of 4 per cent per year until 2010, and by 3.7 per cent over the following five years.

The volume of public consumption rose by 5.9 per cent per year from 1995 to 2000, and by 5.5 per cent annually between 2000 and 2005. It is forecast that growth will be 3.8 per cent per annum from 2005 to 2010, and 2.2 per cent annually over the following five year period. The assumptions underlying this level of public service provision are discussed later in the section on the public finances.

INVESTMENT

Between 1995 and 2000, the volume of annual investment growth averaged 14.8 per cent, slowing dramatically to 3.8 per cent between 2000 and 2005. In the last number of years, much of the investment growth in the Irish economy has been driven by house-building with house completions totalling a record 77,000 in 2004. The volume of housing investment grew by 8.0 per cent per year between 2000 and 2005, and activity is forecast to stabilise over the coming five years. The strong performance of the house-building sector thus far has been supported by strong population and employment increases, as well as an accommodative interest rate environment characterised by low or even negative real interest rates. Strong demand for housing has also resulted from disposable income growth. Further robust employment growth until 2010 and more sizeable increases in disposable income will ensure that house-building remains at a high level, although its contribution to investment growth will be lower than in the past.

Other types of investment have grown strongly over the last number of years. This is largely due to a high level of activity in the corporate sector in terms of equipment and machinery acquisitions, as well as plant construction.

Interest rate developments will not impinge on investment growth in a significant way, with the cost of borrowing rising only gradually over the *Review* period. Between 2005 and 2010, investment growth will be strongest in the market services sector, with growth of 5.2 per cent annually. Investment in the agricultural sector is forecast to fall by 2.2 per cent per year over the same timescale, with sturdy investment growth in industry of 4.7 per cent. Public infrastructural projects will ensure that growth in transport investment is significant.

EXPORTS

Between 1995 and 2000, the volume of exports grew by 17.4 per cent annually, slowing to growth of 5.4 per cent per year over the period between 2000 and 2005. Since 2000 this growth was heavily concentrated in services exports, and was a relatively healthy outturn given the weak international environment over this period, as well as a strong euro appreciation relative to the dollar and a sizeable positive inflation differential between Ireland and its trading partners.

Our *High Growth* assumes that no significant adjustment will take place in terms of the US external imbalances. Therefore, the exchange rate *vis-à-vis* the dollar will only change gradually between now and 2012. This, taken together with the fact that Ireland's rate of inflation will remain low out to at least 2009 and close to that of its trading partners, ensures that no significant loss of price competitiveness is likely until the end of the decade. Furthermore, economic growth in the US economy is assumed to average 3.1 per cent annually between 2005 and 2010, providing some stimulus to Irish export demand. Growth in the UK economy and the Euro Area is likely to be more muted. Total export growth of 6.4 per cent per annum is forecast for the 2005 to 2010 period, before slowing to 5.0 per cent annually over the subsequent five year period.

Services exports growth will be somewhat stronger than the corresponding merchandise figure. In particular, growth in the other services category of exports will be sizeable. Its forecast annual growth rate is 8.2 per cent from 2005 to 2010, and 6.9 per cent after 2010. Tourism exports, on the other hand, will show modest growth averaging 3.2 per cent annually between 2005 and 2010, slowing to 1.0 per cent per annum after 2010. This deceleration is due to the tourism sector's particular vulnerability to the accumulation of price competitiveness losses in the past.

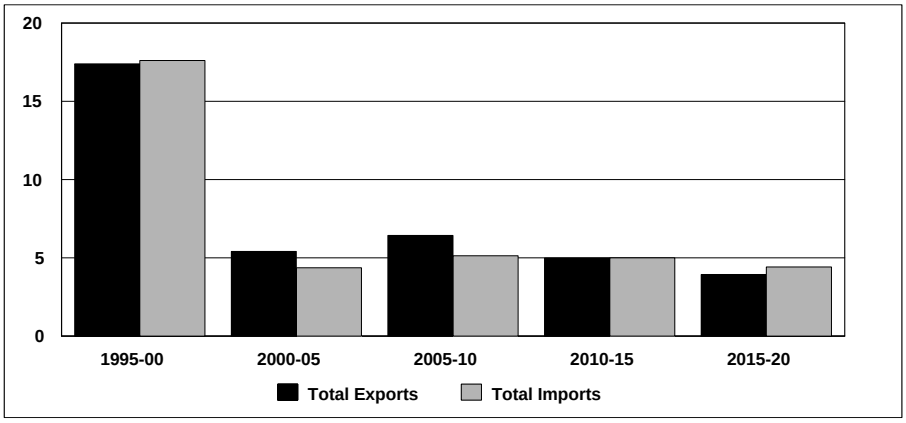
The volume of merchandise exports will rise by 5.8 per cent annually from 2005 to 2010, and slow to a 4.3 per cent annual growth rate from 2010 to 2015. This growth will be driven exclusively by the industrial sector, whose exports will show 6.3 per cent growth from 2005 to 2010, and 4.5 per cent growth from 2010 to 2015. Continued strong external demand for products from the information and communications technology and pharmaceutical sectors is the main driver of this growth. In contrast, the volume of agricultural exports will slump in coming years, falling by 3.9 per cent per year between 2005 and 2010, and contracting at an annual average rate of 4.8 per cent from 2010 to 2015. This outturn reflects the increasing market share of low cost agricultural produce from Eastern European economies.

Growth in the volume of imports is projected at 5.1 per cent annually between 2005 and 2010. This actually represents a slight acceleration on the 4.4 per cent growth rate between 2000 and 2005, but is a sharp slowdown from the 17.6 per cent a year growth achieved in the latter half of the 1990s. Strong domestic demand growth was an important source of import stimulus in the past.

Table 5.5: Exports by Sector, Constant Prices, Percentage Changes

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2000-2005	2005-2010	2010-2015
					%					Annual Average % Growth		
Agriculture	1.7	-3.8	-10.5	1.2	-3.0	-3.3	-3.3	-4.3	-4.5	3.3	-3.9	-4.8
Industry	5.4	4.4	5.2	7.4	6.6	6.5	6.0	5.4	4.7	3.0	6.3	4.5
Merchandise	5.2	3.8	4.2	7.1	6.1	6.1	5.6	5.0	4.4	3.0	5.8	4.3
Tourism	-5.8	4.1	2.9	3.3	3.7	3.5	2.8	2.1	1.5	0.6	3.2	1.0
Other Services	12.4	6.6	4.6	10.0	9.0	9.1	8.5	7.8	7.1	15.0	8.2	6.9
Services	10.7	6.4	4.5	9.5	8.7	8.7	8.1	7.4	6.7	13.4	7.9	6.6
Goods and Services	6.7	4.6	4.3	7.8	6.9	6.9	6.4	5.8	5.2	5.4	6.4	5..0

Figure 5.6: Import and Export Growth



NET FACTOR INCOMES

Net factor incomes is the difference between the earnings of Irish-owned assets located abroad and the return from foreign-owned assets located in Ireland. The predominance of multi-national corporations in Ireland's manufacturing sector ensures that the latter component of this equation is very large and that Ireland's net factor incomes balance is significantly negative. The total output of multi-national corporations, therefore, is included in Ireland's GDP figure but only the relatively small wage component shows up in GNP, the remainder being accounted for by profit repatriations. The net factor incomes deficit rose from €14.9 billion in 2000 to €23.6 billion in 2004. It is forecast to rise to €40 billion in value in 2010.

This large shortfall is arithmetically responsible for the large and growing wedge between the GDP and GNP measures of economic activity, with the former considerably exceeding the latter. In 2000, the ratio of GNP to GDP was 85.5 per cent, this gap widened further to 83.8 per cent in 2004, and will slip to 83 per cent by 2010.

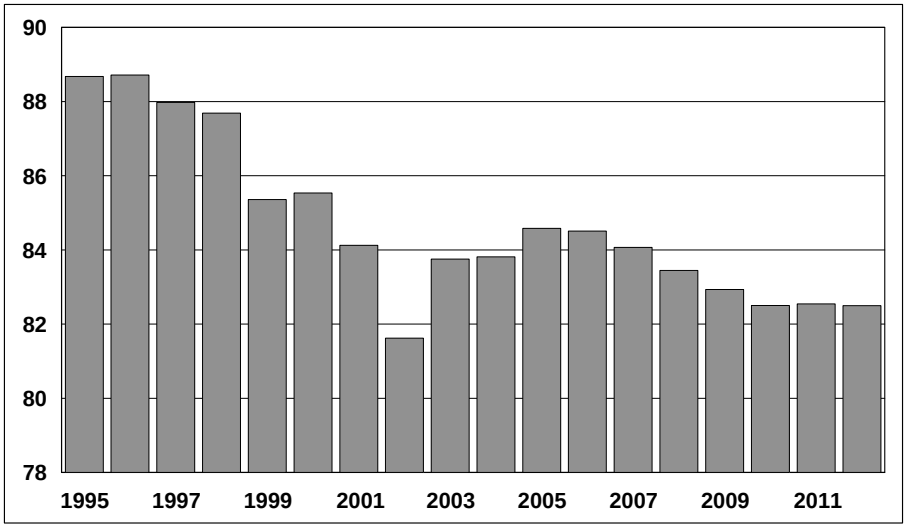
Table 5.6: Contribution of Net Factor Flows to GNP Growth, Percentage Points of GNP

	1980-85	1985-90	1990-95	1995-00	2000-05	2005-10	2010-15
National Debt Interest	-0.4	-0.2	0.0	0.2	-0.1	0.0	0.0
Profits etc. Outflows	-0.8	-1.1	-1.5	-3.4	-2.5	-1.8	-1.0
Other Factor Income	0.0	0.2	0.7	0.8	0.1	-0.5	-0.8
Net Factor Income	-1.2	-1.0	-0.7	-2.4	-2.6	-2.2	-1.8

GROSS NATIONAL PRODUCT

The medium term is likely to witness a continuation of the deceleration of GDP growth from the record 9.8 per cent rate recorded annually during the late 1990s to the more sustainable 5.4 per cent rate between 2000 and 2005. The 2005 to 2010 period will see annual GDP growth picking up slightly, averaging 5.7 per cent, with a slower 3.9 per cent rate likely between 2010 and 2015. The strong growth which we forecast in the net factor incomes deficit will result in weaker GNP growth. Between 2005 and 2010, GNP will increase by 4.9 per cent per year, and rise at a rate of 3.3 per cent annually from 2010 to 2015.

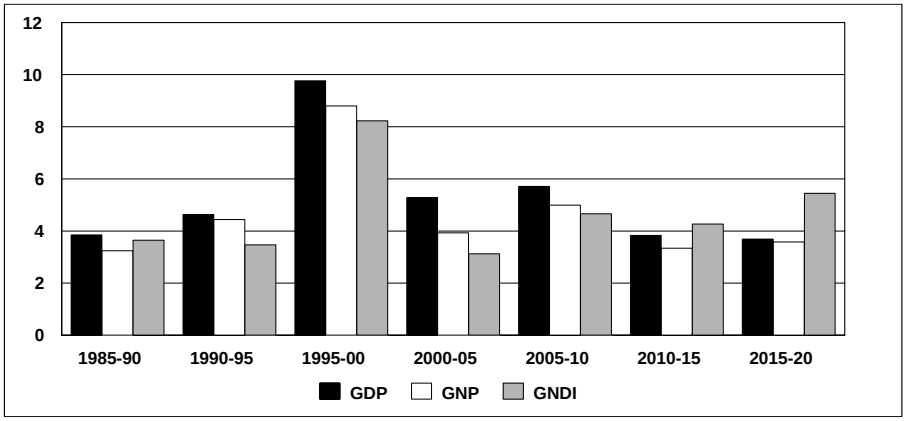
Figure 5.7: GNP as a Proportion of GDP



GROSS NATIONAL DISPOSABLE INCOME

Gross National Disposable Income (GNDI) is a measure which adjusts GNP to take account of net current transfers from abroad and changes in the terms of trade. In the past, the development of GNDI and GNP has been similar in terms of growth. GNDI rose strongly between 1995 and 2000, by 8.2 per cent annually. It slowed to a 3.5 per cent growth rate between 2000 and 2005. Our forecast is for GNDI growth of 4.5 per cent annually between 2005 and 2010. The reduction in net transfers from the EU exerted a small negative effect on growth between 2000 and 2005. However, the move to become a net contributor to the EU between 2005 and 2010 will not have a significant effect on the growth of GNDI. Despite high fuel prices, terms of trade developments are likely to be more positive in the future, as services constitute a larger share of total exports and the unit value of services tends to grow over time relative to that for goods.

Figure 5.8: GDP, GNP and GNDI Growth



PRICES AND WAGES

Developments in Irish prices represent the outcome of an interplay between a host of domestic and external stimuli. It must be stressed that this report does not forecast changes in the Consumer Price Index (CPI), the most conventionally invoked measure of the inflation rate. Instead, forecast changes in the personal consumption deflator are published. For the purpose of analysis, the price level can be divided into two categories, namely goods prices and services prices, based on the fact that different factors drive price changes in each category. Goods prices tend to reflect external factors. In the latter half on the 1990s when the consumption deflator grew by 3.2 per cent yearly, international economic developments served to increase Ireland's rate of inflation. These included the depreciation of the euro, especially relative to the dollar, which increased import prices. Relatively low rates of inflation in countries from which Ireland imports was a factor which partly offset the effects of exchange rate changes.

Services inflation, on the other hand, is primarily domestically generated. Wage and labour productivity trends are key component drivers of services sector inflation because of its labour intensive nature. Wage growth has been quite rapid due to the tightness of the Irish labour market. Productivity growth has decelerated in recent years, with the overall effect being to boost unit labour costs, and heighten services inflation. Developments in goods prices have also served to induce inflationary forces in the services sector by causing wage demands to rise.

The future is likely to witness a continued divergence in goods and services inflation. External forces are likely to ensure that goods inflation is moderate. The euro is forecast to appreciate gradually against both the dollar and sterling over the medium term, and the Euro Area and UK economies will experience low rates of inflation. The increased availability of goods from low-cost, manufacturing based economies like China will further dampen goods price inflation. Though oil prices are unlikely to retreat from the high level touched this year, future price increases will be modest and their effect on inflation rates will be small. The overall context indicates that subdued goods price inflation will be experienced.

Services price inflation is likely to be more significant. The move to a permanently higher oil price will ultimately trigger some second round effects in the form of higher wage demands, something to which the services sector is especially vulnerable. A falling unemployment rate and robust employment growth will place added upward pressure on wage rates. Labour productivity in value added terms increased by 1.9 per cent annually between 2000 and 2005. Between 2005 and 2010 this will accelerate slightly to 2.2 per cent per annum. Productivity increases which accompany wage rises will help in some way towards keeping unit labour costs in check.

The tightness of the labour market which is predicted for the medium term will ensure that wage increases across the economy overall are significant. However, the aggregate figure masks the divergence which will occur in wage developments across the economy. The supply of skilled labour will rise significantly in coming years. This is due to increased numbers of third level graduates, as well as a high proportion of skilled workers amongst the large immigrant cohort. The increasing share of skilled labour in the workforce implies a reduction in the supply of unskilled labour. The implications of this in terms of wages are that growth in unskilled wages will be stronger than skilled wage growth.

Table 5.7: Prices and Wages, Percentage Change

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2000-2005	2005-2010	2010-2015
	Prices, % Change									Annual Average % Change		
Personal Consumption	1.2	2.1	2.7	1.8	1.7	1.9	2.6	3.1	3.6	3.4	2.1	4.1
Public Consumption	6.9	4.7	5.0	2.5	2.5	2.7	3.5	4.2	5.4	5.7	3.2	5.9
Building	8.0	3.7	2.1	1.9	3.4	4.1	5.6	5.7	5.9	6.9	3.4	5.9
Machinery	-0.1	3.4	4.3	2.1	1.4	1.2	1.3	1.5	1.9	0.6	2.1	2.1
Total Exports	-0.8	-0.1	1.7	1.8	1.6	1.6	1.9	2.2	2.4	-0.5	1.7	2.7
Imports - Energy	17.4	42.0	4.8	-0.6	1.5	1.4	1.3	1.3	1.3	7.8	1.7	1.4
Imports - Non-Energy	-0.8	0.2	1.8	1.9	1.9	1.9	1.9	1.9	19	-0.4	1.9	1.9
Agricultural Output - Gross	1.0	0.4	0.1	-0.9	0.3	0.6	0.3	1.0	1.0	0.2	0.1	1.0
Manufacturing Output - Gross	-2.6	0.4	1.2	0.9	0.2	0.3	0.6	0.6	0.8	-4.2	0.6	0.9
	Average Annual Earnings, % Change											
Industry	5.7	4.8	4.7	4.0	3.8	3.8	4.6	5.2	6.0	5.2	4.2	6.8
Non Market - Public Admin.	7.8	4.0	2.9	4.4	4.2	4.2	5.0	5.6	6.5	5.4	4.1	7.0
Non Agricultural	5.7	4.8	4.6	4.1	4.0	4.0	4.7	5.4	6.3	5.5	4.3	6.9

5.4 The Labour Market

Employment grew on average by 5 per cent per annum in the period 1995 to 2000, an unprecedented rate of growth over the last forty years. Over the same period the labour force grew by an average of 3.4 per cent per annum so that the unemployment rate[35] fell continuously by 6 percentage points from 12.2 in 1995 to 4.3 in 2000, a rate which many commentators agree represents a full employment labour market.

Since 2000 the growth in employment has moderated to average what is still a high growth rate of 3.1 per cent over the 2000 to 2005 period. Underlying these growth rates is a significant shift in the composition of employment. In 1995 building accounted for 6.7 per cent of total employment, by 2005 it is estimated that this share has risen to 12.6 per cent. Over the same period the share of manufacturing in total employment has fallen from 20.3 per cent to 15 per cent. This very rapid growth in the importance of construction in the labour market raises concerns about the sustainability of such a level of employment over the medium term.

The details of our forecast for the labour market in the medium term under the *High Growth* scenario are shown in Table 5.8. Around 56 per cent of the increase in employment between now and 2010 will be in the market services sector. A further 36 per cent of this growth is forecast to come from the non-market services sector while the numbers employed in manufacturing are forecast to show only a small increase. Employment in the building sector is forecast to continue to rise further by 25,000 or just over 10 per cent of the total between now and 2010.

[35] Throughout the *Review* we use the PES definition of employment rather than the ILO definition, as only consistent series of the former are available back to the 1970s. When referring to the unemployment rate we use ILO definitions.

Table 5.8: Employment and the Labour Force, Percentage Change, Mid-April

	2004	2005	2006	2007	2008	2009	2010	2011	2012	1995-00	2000-05	2005-10	2010-15
Agriculture	3.5	-3.1	-1.5	-2.9	-2.8	-2.8	-2.8	-2.7	-2.7	-2.7	-2.4	-2.6	-2.7
Industry	2.2	4.3	0.9	-0.2	1.1	1.4	2.7	1.4	0.7	6.0	2.3	1.2	0.3
Manufacturing:													
Traditional	-2.4	0.0	0.0	-0.8	-0.7	-0.9	-1.0	-2.2	-2.7	0.0	-0.9	-0.7	-3.2
Food Processing	-1.8	0.1	-0.1	-1.7	-1.7	-1.4	-2.0	-3.6	-4.3	1.1	0.8	-1.4	-4.5
High-technology	-1.6	-5.9	-2.1	1.5	2.6	3.4	3.8	1.2	0.2	6.1	-1.7	1.8	-0.4
Manufacturing	-1.9	-2.9	-1.1	0.1	0.7	1.1	1.2	-0.7	-1.4	2.9	-1.0	0.4	-1.9
Utilities	6.6	0.1	0.7	1.1	0.1	0.6	1.5	-0.7	-6.9	-2.5	3.2	0.8	-2.4
Building	8.2	14.7	3.3	-0.7	1.6	1.7	4.4	3.9	3.3	14.6	7.4	2.0	2.7
Market Services	4.7	6.3	3.0	2.9	3.0	3.0	3.3	3.1	3.0	6.4	3.8	3.1	2.5
Distribution	4.6	6.5	3.6	1.2	1.2	1.1	1.6	1.1	0.5	4.4	3.6	1.8	0.3
Transport & Comm	1.3	0.1	-0.3	1.7	2.2	2.4	2.4	1.3	-0.1	5.6	2.3	1.7	-0.8
Other Market Services	5.8	8.0	3.5	4.3	4.4	4.5	4.6	4.8	5.1	8.3	4.4	4.2	4.3
Non-Market Services	3.0	3.2	3.4	3.9	3.9	3.9	3.9	3.5	3.5	4.3	4.6	3.8	2.6
Health & Education	4.0	3.4	3.0	4.0	4.0	4.0	4.0	4.0	4.0	5.1	4.8	3.8	2.8
Public Administration	0.0	2.9	4.8	3.5	3.5	3.5	3.5	2.0	2.0	2.1	3.9	3.8	2.0
Total Employment	3.5	4.5	2.3	1.9	2.4	2.5	3.0	2.5	2.3	5.0	3.1	2.4	1.7
Unemployment	-6.6	-3.9	4.9	12.7	1.3	-2.4	-12.7	-5.6	-13.5	-10.6	-0.7	0.4	-2.2
Labour Force	2.9	4.0	2.4	2.5	2.3	2.2	2.1	2.1	1.6	3.4	2.9	2.3	1.5
											For end year		
										2000	2005	2010	2015
Unemployment Rate (ILO)	4.4	4.2	4.2	4.8	4.7	4.4	3.6	3.2	2.6	4.3	4.2	3.6	2.7
Net Immigration, Thousands	32	53	30	27	27	29	31	34	37	26	53	31	44

Within manufacturing there will be some further growth in employment in the high-technology sector. Employment in both the traditional and food sectors is in secular decline as these sectors face strong competitive pressures. Beyond 2010 employment in manufacturing is expected to decline gradually. By contrast employment in the building sector under this scenario continues to grow over the forecast horizon.

The main engine of growth in the labour market is the services sector, in particular in other market services, health and education and public administration. Employment growth in market services has consistently remained above the average for the economy as a whole and this trend is expected to continue over the forecast horizon. Within this sector employment growth in other market services is expected to dominate. Employment growth in non-market services is expected to exceed that of market services in percentage terms out to 2010. Annual average employment growth in non-market services is estimated to be 4.6 per cent between 2000 and 2005 before slowing to a still very high 3.8 per cent rate out to 2010. Beyond 2010 the growth in employment in non-market services is forecast to slow to 2.6 per cent per annum.

Sluggish employment growth is forecast for the remaining sectors of the economy with numbers employed in agriculture, traditional manufacturing, food processing and utilities expected to fall over the forecast horizon. The fall is most marked in the agricultural sector. This is the continuation of a trend that has long been evident in the sector. Numbers employed in agriculture are expected to decline by 17,000, from 109,000 in 2006 to 97,000 in 2010.

The majority of the forecast increase in employment will be in "high skilled" areas such as the other market services sector (which includes professional services such as banking, insurance as well as internationally traded services) and also in the non-market services sector. These activities, being human capital intensive, require a skilled labour force. These two sectors alone will account for 50 per cent of total employment in 2012. The decline in the numbers employed in agriculture, food processing and traditional

manufacturing will have a disproportionate effect on unskilled labour, although some of this will be offset by continued employment growth in the building sector.

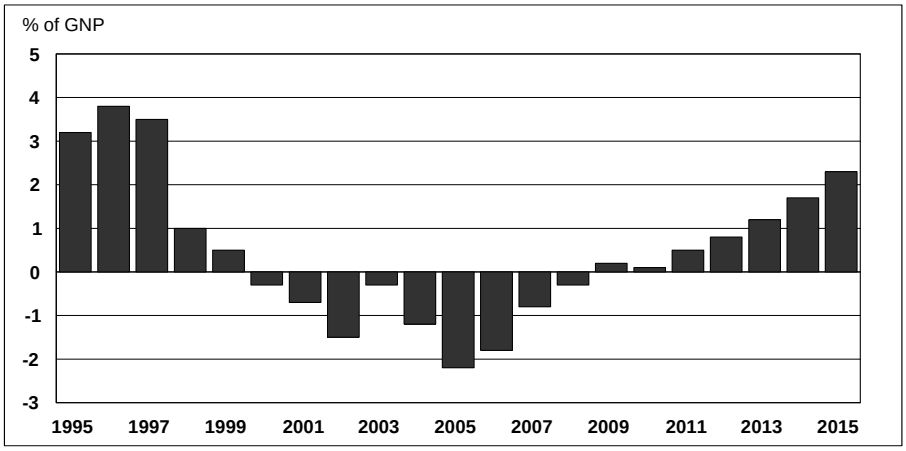
This profile of the labour market is based on a continuation of modest wage increases out to 2009, beyond that point wage inflation begins to rise (see Table 5.3). The continuation of strong employment growth with modest wage demands will be enabled by continued growth in the labour force. Over the period 2005 to 2010 labour force growth can be attributed in almost equal measure to the natural increase in the population, rising female participation rates and immigration. Beyond that date there is limited scope for further contributions from female participation or the natural increase (see Chapter 2) so that net inward migration flows have to provide all the additional workers necessary to clear the market. Beyond 2010 the migration inflows rise steadily from an average of just under 29,000 per annum in the period 2006-2010 to reach 44,000 by 2015. These very high and rising rates of immigration inflows are driven by the strong growth in employment.

5.5 The Balance of Payments, Public Finances

THE BALANCE OF PAYMENTS

The dramatic change in the fortunes of the Irish economy was accompanied by a substantial change in the current account of the balance of payments which moved into surplus at the beginning of the 1990s, averaging 3 per cent of GNP between 1990 and 1999. This positive performance is a reflection of the growth in exports over the period, see Section 5.3. Since 2000 the current account has moved back into deficit, and is expected to remain in deficit until 2008. This deficit is much smaller than those experienced throughout the 1970s and 1980s. Between 2005 and 2010 we forecast an average current account deficit of 0.6 per cent of GNP. This partly reflects the fact that we anticipate a narrower difference between export and import growth. Furthermore, net factor income flows abroad will continue to grow and Ireland is expected to become a net contributor to the EU. The current account is expected to move back into small surplus from 2009 onwards.

Figure 5.9: Balance of Payments Surplus as a Percentage of GNP



PUBLIC FINANCES

Our projections for the public finances over the next decade remain positive. In particular we have assumed that there will be a small surplus on the General Government Balance of between 0.2 and 0.4 per cent a year each year between 2007 and 2012. Corresponding to this surplus there is assumed to be a small deficit each year in the Exchequer Borrowing Requirement. On the basis of this scenario the continuing relatively high growth of the economy will see significant revenue buoyancy.

This scenario will see a continuing improvement in the state's net liability/asset position (here taken to be the difference between the General Government Debt and the market valuation of the assets of the National Pension Reserve Fund). From a net liability of around 22.4 per cent of GNP today this should fall to around 15.2 per cent of GNP in 2012. In turn, this improvement in the state's net liability/asset position will see a further decline in the net payment of interest on the state's liabilities.[36]

The favourable economic circumstances will also tend to reduce pressures on current public expenditure below what they might otherwise be. We assume that the growth in the volume of net current expenditure on goods and services will remain relatively high at around 3.8 per cent per year, compared to around 5.5 per cent a year between 2000 and 2005. With a significant rise in the deflator this would translate into a value increase of around 7.2 per cent a year. Thereafter, we forecast growth in volume of 3.5 per cent per annum in this item out to 2012. It is possible that pressures for improved public services could see a higher volume growth.

Rates of transfer payments are assumed to rise roughly in line with nominal wage rates over the forecast period. In addition, there will be a volume increase of between 1 and 2 per cent each year reflecting the gradual increase in the number of people in the retired age groups and some rise in the number of young children.

In the last *Review* we assumed that the bulk of the infrastructural investment would have been completed by 2015, resulting in a fall in public authorities' capital expenditures after 2015. However, it now seems likely that it will be some time between 2015 and 2020 when this target will be achieved. In the meantime in the period out to 2012 we assume that government capital expenditure remains around its current very high share of GNP.

Some of the cost of the increased provision of public services will be recovered by increased user charges. We assume that from 2007 to 2012 there will be a gradual increase in charges for parking as well as the introduction of charges for the use of urban road space, disposal of waste, and water distribution. We assume that these charges will rise to 1.0 per cent of GNP by 2012. For national accounting reasons this increased revenue is netted off government current expenditure on goods and services. Thus, while the scenario described here would produce a fall in government expenditure as a share of GNP of two percentage points by 2012, the reality would be a fall of around 1 percentage point.

On the revenue side it is assumed that there is no major change in policy, with the SSIA scheme not being renewed in the period to 2012. However, in order to achieve the assumed profile on the GGB (General Government Balance) of a small surplus the model automatically adjusts the average direct tax rate. Given the relatively benign nature of the underlying economic scenario this results in the model generating a small fall in the average personal tax rate by 2012 of around 1 percentage point. Even with a somewhat faster growth in current expenditure and a small increase in the rate, the relatively benign demographic outlook, combined with an assumed favourable external economic climate, would see Ireland continuing to have one of the lowest shares of output accounted for by public expenditure within the EU.

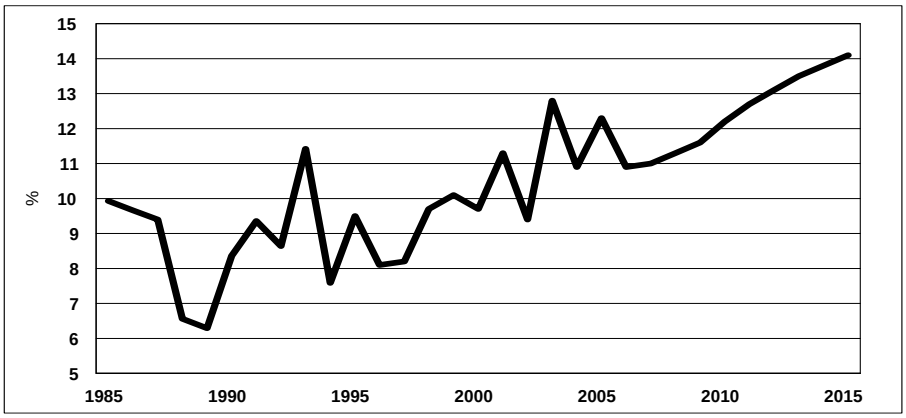
SAVINGS

Since the introduction of the Special Savings Incentive Accounts (SSIAs) in Budget 2001 the topic of savings in the Irish economy has received much attention. As is evident from Figure 5.10 the personal savings ratio has risen in

[36] Where the returns on the state's financial assets is netted off debt interest payments made in respect of liabilities.

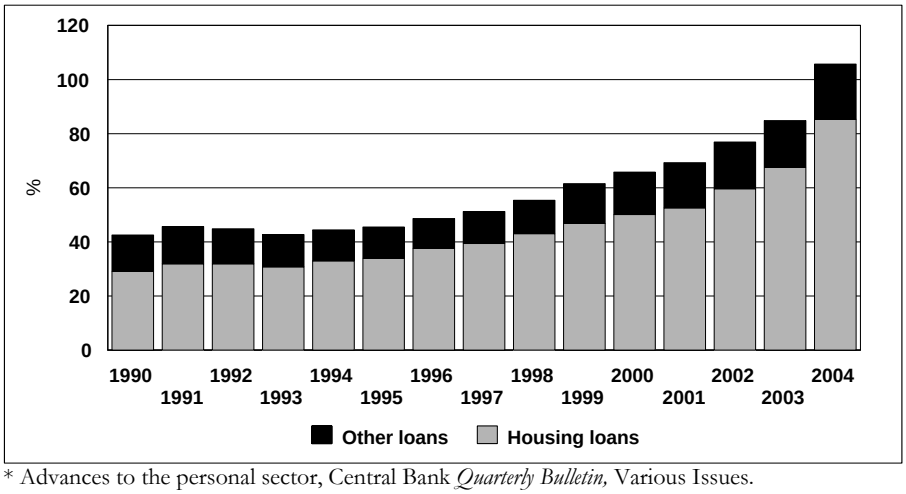
recent years, peaking at 12.8 per cent in 2003, the highest rate since 1993. Having averaged 9.1 per cent between 1995 and 2000 the annual average savings rate is expected to have increased to 10.8 per cent between 2000 and 2005. Continued income growth and rising interest rates are expected to underpin a similar savings rate between 2005 and 2010.

Figure 5.10: Personal Savings Ratio Per Cent of Personal Disposable Income



An increasing concern about the economy is the rapid growth in personal borrowing and the exposure of consumers to high personal debt levels. Figure 5.11 shows the level of gross personal debt as a percentage of personal disposable income. Increases in the indebtedness of the personal sector were relatively marginal between 1990 and 1996. However, since 1996 there has been a dramatic increase, rising from a proportion of personal disposable income equivalent to 48.6 per cent in 1996 to 105.7 per cent in 2004. The extent of the increase indicates that growth in debt has greatly outpaced income growth over the period. It is evident from Figure 5.11 that the growth in personal sector indebtedness has been primarily due to increased borrowing for housing purposes. Household debt for housing purposes rose to the equivalent of 85.3 per cent of personal disposable income in 2004, compared with 37.6 per cent in 1996.

Figure 5.11: Household Debt* as a Per Cent of Personal Disposable Income



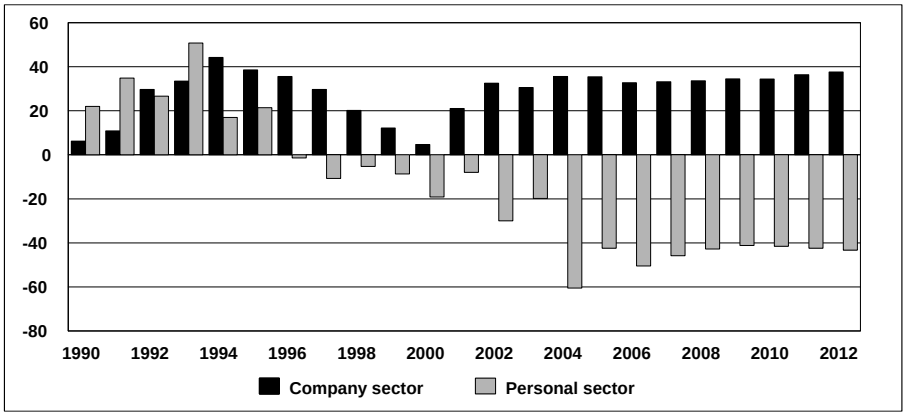
* Advances to the personal sector, Central Bank *Quarterly Bulletin,* Various Issues.

The above figures represent gross debt and so do not adjust for savings by the household sector. Figure 5.12 shows the proportions of gross savings by the personal and the company sectors that have been used to acquire financial assets. Rising investment in housing by the personal sector has resulted in this sector becoming a net borrower, in contrast to the past when the household

sector was a net saver. Forecasts to 2012 suggest that household sector will remain a net borrower over the medium term due to the need to finance investment in housing. Although there will be some decline from the trough reached in 2004, the level of net indebtedness of the household sector is thus expected to increase every year over the rest of the decade. This will increase the household sector's exposure to the housing market.

In contrast the forecasts indicate the company sector continues to benefit from the strength of the Irish economy and will remain a net saver over the medium term, allowing this sectors own resources to play a role in financing investment.

Figure 5.12: Ratio of Net Acquisitions of Financial Assets to Gross Savings by Sector, 1990-2012



5.6 The Housing Market

The importance of the housing market for the Irish economy has increased in recent years as both house prices and housing completions have continued to grow. Between 1995 and 2000 new house prices rose by an annual average of 16.8 per cent before slowing to an estimated annual average increase of 8.8 per cent between 2000 and 2005. At the same time each year between 1994 and 2004 has seen the number of housing completions exceed the peak of the previous year.

This *High Growth* forecast suggests that the factors underpinning the housing market are expected to remain positive in the medium term. Economic growth is expected to continue, along with employment and income growth. Demographic trends will also support the housing market. For example, net immigration is forecast to average around 34,000 per annum between 2002 and 2012. To date a significant proportion of immigrants are aged between 25 and 44 years, the key household formation age groups. Furthermore, a large proportion of the Irish population, nearly 31 per cent, is aged between 25 and 44 years. Although there is evidence from *Census 2002* of a marginal decline in the home-ownership rate, probably due to the recent period of high price growth, Ireland has one of the highest home-ownership rates at around 80 per cent, substantially above the EU average of approximately 60 per cent.

The demand for housing units consists of the growth in the number of households, driven by population change as a result of the natural increase, migration flows and changing headship,[37] the growth in the demand for second dwellings and the building of replacement dwellings.

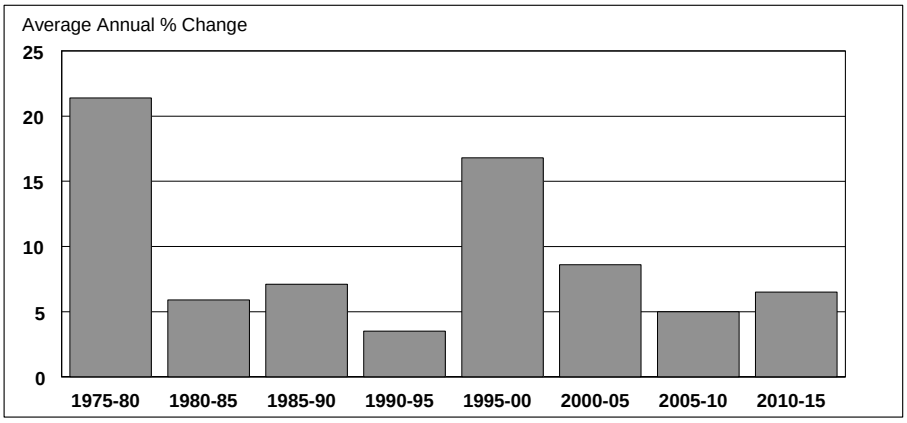
The demographic forecasts underpinning this *Medium-Term Review* have assumed that Irish headship rates rise from current levels to reach UK levels

[37] The headship rate is the proportion of a people in a particular age group who are heads of households.

by 2021. This implies that the average number of adults (persons aged 20 years or over) per household in Ireland will fall from 2.2 in 2000 to 2.0 by 2010 and eventually to 1.8 by 2020.

The housing sector of the economy is modelled as a separate sub-component of the *HERMES* macromodel with equations for house prices and completions. The forecasts for the high growth scenario suggest that price growth in the period 2005 to 2010 will be more moderate than in the late 1990s, with average annual growth in house prices of 4.9 per cent between 2005 and 2010.

Figure 5.13: House Price Inflation, Average Annual Change



Despite the rapid house price inflation of recent years demand has remained strong in the housing market. The user cost approach has developed to reflect the opportunity cost of investing in the housing market. Thus, rising prices provide capital gains, making owner-occupancy attractive and so demand for housing can remain strong even in a period of rapid price growth if people expect it to continue.

The rate of return, or the user cost of housing provides a measure of the cost of owning a house and aims to take account of capital appreciation. This can be crudely calculated as the mortgage interest rate minus the change in new house prices. More elaborate measures take account of tax, loan-to-value ratio and house price expectations. The user cost of new housing has been negative since 1996. This helps explain why demand for new dwellings continued to rise, even at a time of rapid price growth. New houses, although highly priced, were relatively cheap to live in because of low real interest rates and expected capital gains.

Figure 5.14: User Cost of New Houses, 1972-2012

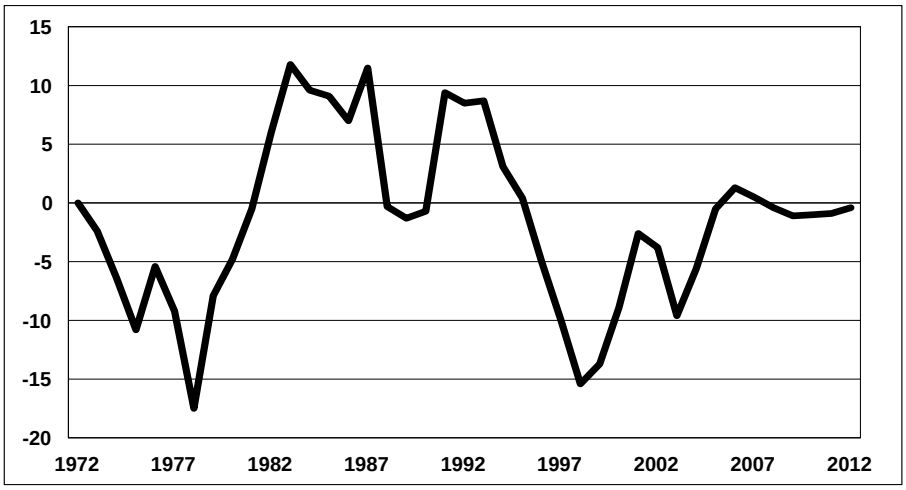


Figure 5.15 shows a breakdown of housing needs into five main categories – the change in demand due to population change, the change due to rising headship (the proportion of people in each age group who are heads of households); dwellings needed to house the inflow of returning emigrants and immigrants into the Irish economy; the change due to the demand for second dwellings; and the change due to the replacement of obsolescent stock. Demographic factors are a key driver of the housing market, accounting for an annual average of 26,800 units to housing demand between 1997 and 2002. The main component of this, the natural increase in population, is estimated to have contributed an average of 20,000 units per annum over the period. This component is expected to continue to make a positive contribution to housing demand over the forecast period, estimated at an annual average of 22,500 between 2003 and 2006, before moderating slightly to an annual average of 17,800 between 2007 and 2011.

Possibly reflecting the rapid rate of house price inflation the change in headship between 1997 and 2002 made a very low contribution to housing demand. Indeed, the continuing low headship rates by international standards, at a time when incomes in the Irish economy increased substantially, suggests that there may be "pent-up" demand for housing from aspiring homeowners. On the basis of our assumption the Irish headship rates will move towards current UK headship rates by 2012. Changing headship is estimated to have accounted for almost 12,000 units per annum between 2003 and 2006. A further increase to an annual average of 13,500 units between 2007 and 2011 is also forecast.

Previous ESRI analysis suggests that one of the key drivers of the demand for housing in recent years has been the demand for second dwellings.[38] Higher wealth, a result of the economic boom, has increased the demand for second dwellings or holiday homes, which now account for a significant proportion of new dwellings. The analysis shows that the share of the total stock of habitable dwellings accounted for by second or vacant dwellings showed a small rise between 1996 and 2002, from 10.8 to 11.7 per cent. However, this is in the context of a very rapid rise in the number of households. Indeed, the Census data suggests that the number of second or vacant dwelling reached over 170,000 by 2002. The period 1997-2002 saw second dwellings contribute an annual average of 6,400 units to the overall demand for dwellings. With incomes and living standards continuing to rise this component is expected to make a major contribution to the demand for housing over the period, estimated at an annual average of 18,800 units between 2003 and 2006, before declining marginally to an annual average of 17,200 between 2007 and 2011. Fitz Gerald (2005) also derives an estimate of the depreciation rate for housing. This estimate is used to forecast the number of dwellings demanded to account for obsolescent stock, averaging 13,400 units per annum between 2003 and 2006, and 11,100 units per annum between 2007 and 2011.

One reflection of the strength of the Irish economy has been the sustained change in direction of migration flows. Having had for many years a net outflow of people from the country the economy now faces a substantial net inflow. A large proportion of immigrants are in the key household formation age groups between 25 and 44 years old. Having made no contribution to housing demand between 1991 and 1996 migration contributed an annual average of 6,000 units between 1997 and 2002. The estimated impact on the housing demand in the current period is slightly higher at an annual average of 8,300 units and the strength of the continued net inflow over the remainder of

[38] Fitz Gerald, J., 2005. "The Irish Housing Stock: Growth in the Number of Vacant Dwellings", ESRI, *Quarterly Economic Commentary*, Spring, Dublin: The Economic and Social Research Institute.

the forecast period is expected to account for an annual average of 12,300 housing units between 2007 and 2011. However, the forecast continued rise in house prices may have negative impacts on migration. Duffy, Fitz Gerald and Kearney (2005)[39] show that one consequence of high house prices has been to increase the slope of the labour supply curve, see Box A.

On the basis of these figures it is estimated that the demand for housing units averaged 44,800 units per annum between 1997 and 2002. The current period has seen much higher demand, averaging 74,800 dwellings on an annual basis. With economic growth expected to continue, as well as income and employment growth and a net inflow of people into the country the demand for housing is forecast at an average of 71,900 units between 2007 and 2011, see Figure 5.15 and Table 5.9.

Figure 5.15: Decomposition of Housing Demand, Thousands, Annual Averages

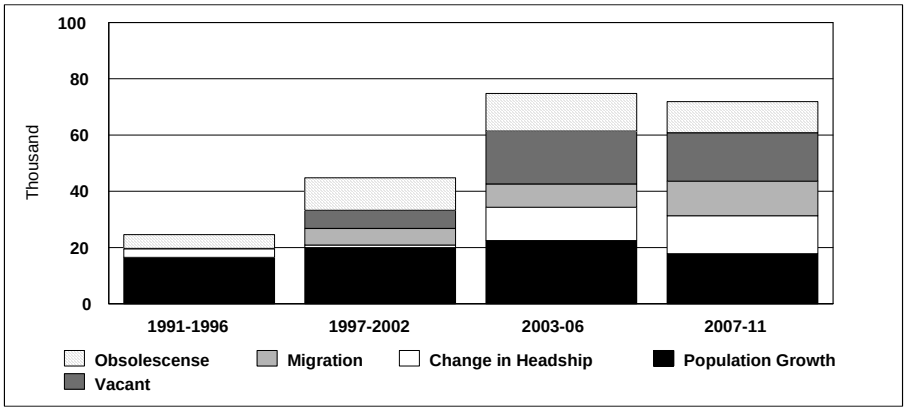


Table 5.9: Decomposition of Housing Demand, Thousands, Annual Averages

	1991-1996	1997-2002	2003-2006	2007-2011
Population Growth	16.5	20.0	22.5	17.8
Change in Headship	3.1	0.9	11.8	13.5
Migration	0.0	5.9	8.3	12.3
Vacant	0.1	6.4	18.8	17.2
Obsolescence	4.9	11.6	13.4	11.1
Total	24.7	44.8	74.8	71.9

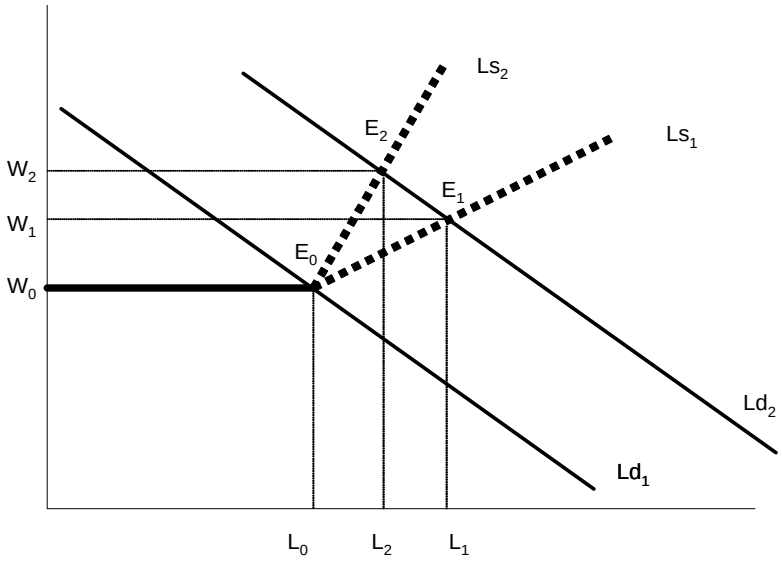
Box B: House Prices and Migration

Traditionally Ireland has had an infinitely elastic labour supply curve due to an extremely open labour market, with migration ensuring an elastic labour supply and a weak Phillips Curve effect (Honohan, 1992 and Curtis and Fitz Gerald, 1994). The limiting case of this, an infinitely elastic labour supply curve, is shown as the flat segment of the labour supply curve, Ls, in Figure below. One of the results of the boom in the late 1990s was that the Irish economy effectively reached full employment and a significant trade-off between wages and unemployment emerged. In the diagram this is shown as an upward sloping labour supply curve, Ls_1 beyond the full employment level L_0. Full employment also saw the emergence of infrastructural constraints as growth in output outpaced capacity. House prices rose sharply, so the decision to migrate to Ireland was now influenced, not only by relative employment opportunities and relative wages, but also by the rapid rise in house prices. This resulted in labour supply becoming even more inelastic, represented in Figure below by the more steeply upward sloping labour supply curve Ls_2. Since many

[39] Duffy, D., J. Fitz Gerald and I.Kearney, (forthcoming 2005). "Rising House Prices in an Open Labour Market", *The Economic and Social Review*, Vol. 36, No. 3, Winter.

immigrants are in the household formation age group, and tend to be highly skilled, the boom in house prices in Ireland could reduce the attractiveness of Ireland for potential immigrants. This would, in turn, reduce potential labour supply in the medium term and act as a brake on medium-term growth in output and employment. Thus, housing emerges as an important infrastructural constraint in the labour market.

Figure: The "Pure" Housing Constraint Effect (E_2-E_1)



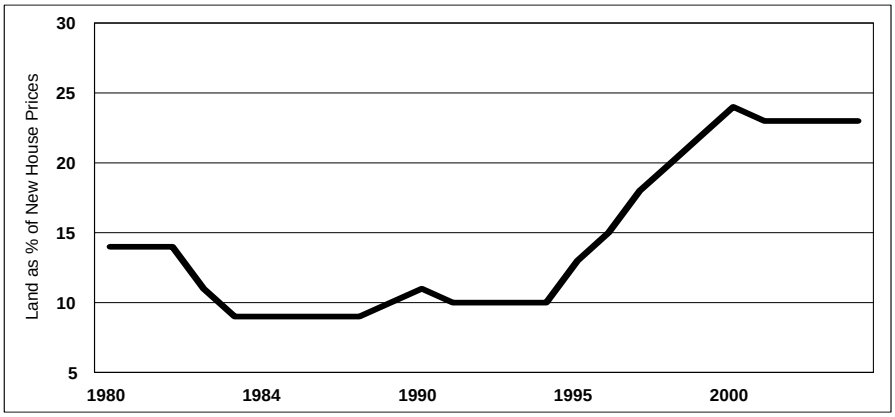
Now if we assume a positive external shock to the demand for Irish output, this would increase the demand for labour, a derived demand, so that the labour demand curve would shift outwards from Ld_1 to Ld_2. If there were no housing constraint labour market equilibrium would move from E_0 to E_1, with higher wages (W_1>W_0) and higher employment (L_1>L_0). With a housing constraint, however, the equilibrium point is E_2 with wages higher (W_2>W_1) and employment lower (L_2<L_1) than at point E_1.

Simulation results indicate that the housing constraint significantly reduces the medium-term growth potential of the economy and shifts the balance of labour market growth from employment to wages, with a consequent deterioration in competitiveness. The welfare effects differ for different groups, with unambiguous gains for current homeowners while immigrants, first time buyers and those with lower labour market skills are the net losers.

The housing component of the ESRI *HERMES* macro model includes an equation, derived from Murphy (1998), to estimate the number of house completions. One of the main drivers of new housing supply is new house prices. In the short run changes in house prices have a significant effect in boosting housing completions. In the long run completions are particularly influenced by real new house prices and the mark-up of house prices over costs. This mark-up or profitability measure indicates that if house prices increase relative to the cost of building then profitability rises and this increases the rate of house completions. However, the equation does not take account of changes in some of the other costs of building, such as the price of land. Figures indicate that this has risen substantially in recent years and now accounts for approximately 23 per cent of new house prices. Given the continued growth in house prices and the strength of demand as outlined above it is expected that the level of house completions will remain high over

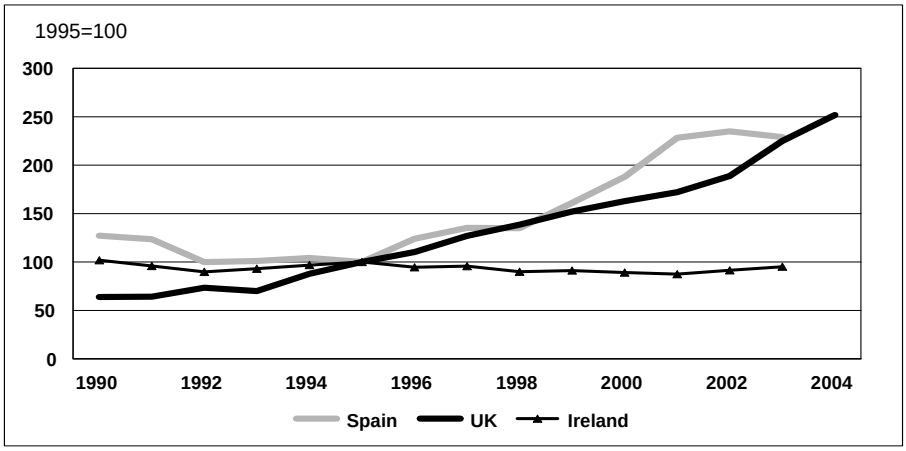
the medium-term, averaging 74,800 units per annum between 2003 and 2006, before moderating to 71,900 per annum out to 2011.

Figure 5.16: Cost of Land as a Proportion of New House Price



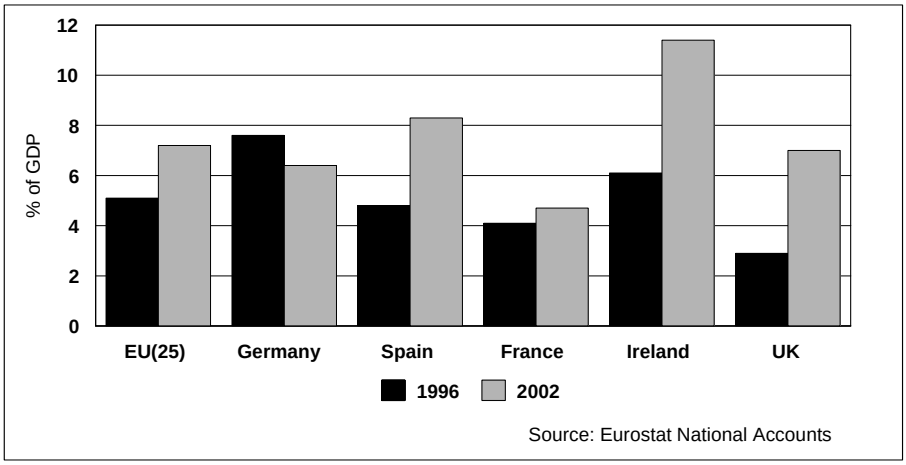
Ireland is not the only economy with a strong housing market. The very different real interest rates facing the household sector across the Euro Area in recent years have provided rather different incentives for housing investment. Not surprisingly in Spain and Ireland the low (and even negative) real interest rates for households that have resulted from EMU membership have provided a very strong stimulus to the housing market. As shown in Figure 5.17, housing completions in Ireland and Spain have more than doubled in number since the mid-1990s. This compares to the situation in the UK where the number of dwellings completed has remained relatively stable

Figure 5.17: Housing Completions, 1995=100



The result of this boom in house building is that the construction of dwellings accounts for a substantially larger share of GDP in Ireland and Spain than is the case for the rest of the EU. As shown in Figure 5.18, while housing activity has increased its share of GDP in the EU between 1996 and 2004, the increase has been particularly large in the Euro Area economies of Spain and Ireland. A marked increase is also evident in the UK. In both Ireland and Spain the housing sector accounts for a significant share of economic activity. In the case of Ireland it is now approaching an eighth of all economic activity.

Figure 5.18: Investment in Dwellings as a Percentage of GDP



With the housing sector accounting for such a large share of overall economic activity in these two economies they are vulnerable to any price or output shock to the sector. Experience in Scandinavia and the United Kingdom in the late 1980s indicates that this sector of the economy can suffer from sudden and dramatic reversals in fortune. Any such reversal in fortune in Spain and Ireland would have a very significant direct impact on economic activity in those countries. While the exposure of Spain and Ireland to shocks to the housing market is of some concern, there is clearly no danger to the wider Euro Area economy. As shown in Figure 5.18, the housing sector in France and Germany, for example, accounts for a significantly smaller share of economic activity than in Ireland and Spain, a share that is not very different from the long-term average for these economies. The impact of a housing shock on the Irish economy is explored in Chapter 6.

5.7 Energy and the Environment

The serious problem of how Ireland is going to reduce its greenhouse gas emissions to meet its target, as agreed under the Kyoto protocol, remains a crucial issue in energy policy. The *HERMES* model incorporates a model of the energy sector that allows the generation of consistent forecasts of energy demand and greenhouse gas (GHG) emissions.[40] A separate electricity sub-model is used that takes account of the economics of different types of types of generators (using different fuels) and of the varying load on the system over the average day.[41] The modelling framework used allows the incorporation of the impact of various policies used to reduce GHG emissions. Under the Kyoto protocol, the EU needs to reduce its GHG emissions by 8 per cent of the level they were at in 1990 by the years 2008-2012. Because of Ireland's relatively low level of development in 1990, it was agreed that for the 2008-2012 period Ireland's emissions could exceed their 1990 level by 13 per cent. In 2004 GHG emissions were around 26 per cent above the Kyoto base year level highlighting the magnitude of the task ahead.

One of the key instruments being used to achieve the required reduction in GHG emissions is a scheme of tradable emissions permits, which apply to a range of energy-intensive sectors such as electricity generation, cement, steel and certain chemical plants. The scheme came into effect this year. The impact of such a regime should be to raise the cost of burning fossil fuels and so encourage more moderate use. However, the decision of the EU governments

[40] A complete description of the energy model is available in ESRI Working Paper 146.

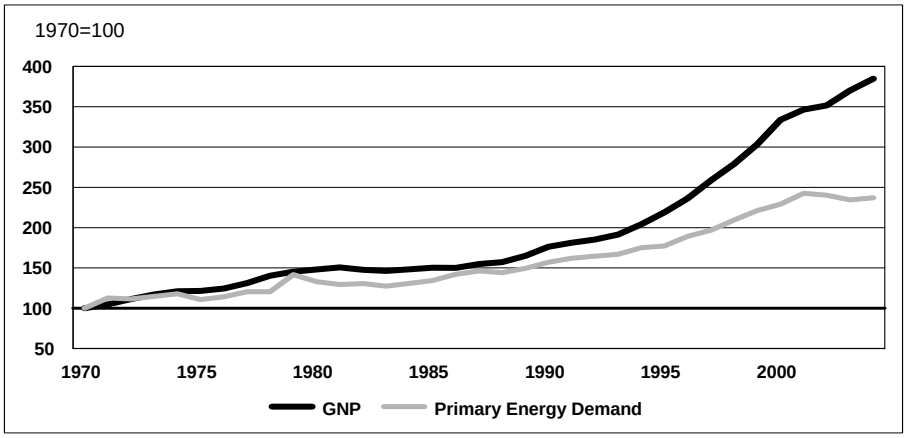
[41] A complete description of the electricity model is available in ESRI Working Paper 168.

to allocate at least 95 per cent of the quotas for free for firms involved in trading is seriously flawed. FitzGerald (2004) argues that giving the permits for free (referred to as "grand parenting" them) rather than auctioning them will mean there is no revenue available to the government to offset the negative competitiveness effects of the rise in energy prices as a result of the trading regime.[42] In addition, when there are multiple rounds where permits are allocated for free, as is the case with the EU scheme, this seriously distorts the market greatly reducing the likelihood of any significant environmental change coming about. This will raise the economic cost of reducing emissions by any given amount.

TRENDS IN ENERGY CONSUMPTION

Energy demand is a derived demand driven by economic growth. It is moderated by changes in relative energy prices and technological progress which cause a substitution away from energy products or result in more efficient use of fuels. Figure 5.19 plots primary energy demand and GNP from 1970 to 2004. Excluding the periods of the oil price shocks of 1973-74 and 1979-80, energy demand rises as GNP rises and there is little or no growth when GNP is stagnant (as in the early 1980s). Since 1990, there has been a decoupling of energy demand from growth, which is more marked in recent years. Several factors help explain this pattern. Economic growth in recent years has taken place in less energy-intensive sectors. There has been a rapid decline in the use of solid fuels (coal and peat) as consumers switch towards fuels with higher end-use efficiencies, such as gas. In the household sector, as consumption reaches saturation, the rate of growth begins to slow. Finally, the oil price hikes in the 1970s triggered the development of more energy-efficient equipment and practices.

Figure 5.19: Total Primary Energy Demand and GNP, 1970 to 2004

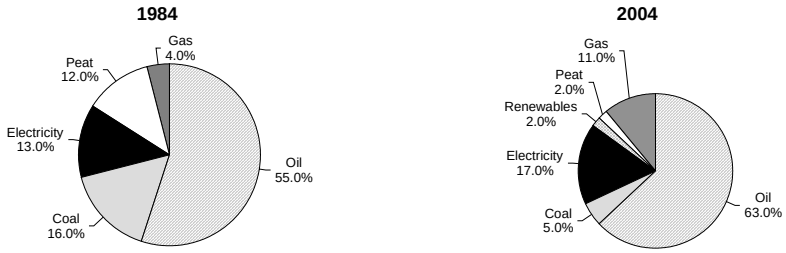


Total final consumption (TFC) of energy is the sum of the consumption of each fuel by sector, excluding the energy transformation sector. Figure 5.20 illustrates the breakdown of TFC by fuel in 1984 and 2004 so the change in the fuel mix over the past twenty years is evident. Oil continues to be the dominant fuel consumed with its share in TFC rising from 55 per cent in 1984 to 63 per cent in 2004. Electricity is the second most important and its share has risen modestly from 13 per cent to 17 per cent over the twenty-year period. The consumption of coal and peat, as a share of the total has fallen

[42] See Fitz Gerald, 2004, for further details and a critique of the emissions trading regime, available in "An Expensive Way to Combat Global Warming: Reform Needed in the EU Emissions Trading Regime", *Quarterly Economic Commentary*, Spring, Dublin: The Economic and Social Research Institute.

over the period, as households and firms switch to more efficient fuels such as gas.

Figure 5.20: Total Final Consumption of Energy by Fuel



ENERGY DEMAND FORECASTS[43]

On the basis of the *High Growth* Forecast for economic growth over the next decade, consumption of energy is expected to rise considerably, albeit at more moderate rates than in the past decade (see Table 5.10).[44] These forecasts are based on the assumption that from 2010 a carbon tax is imposed on those sectors not covered by emissions trading. In the *High Growth* forecast Total Final Consumption (TFC) is expected to increase to 15.7 million Tonnes of Oil Equivalent (TOE) by 2015, representing a 25 per cent increase from 2005. The impact of higher energy prices will partially offset the effects of continuing economic growth. The rising number of households over the coming decade will see a rise in energy demand from that sector. Over the next decade the most significant increase in energy demand will be from the transport sector, where demand is expected to be 33 per cent greater than in 2005, at over 6.7 million TOE. The services and industrial sector will also witness strong growth between 2005 and 2010, and more moderate growth thereafter, in line with the economic forecasts for these sectors, outlined earlier in this chapter.

Table 5.10: Final Energy Consumption by Sector, Thousand TOE

								Average Annual Growth Rates				
	1990	1995	2000	2005	2010	2015	2020	1995-2000	2000-2005	2005-2010	2010-2015	2015-2020
						High Growth						
Household	2,190	2,177	2,571	2,999	3,095	3,325		3.4	3.1	0.6	1.4	
Industry	1,722	1,749	2,253	2,111	2,492	2,766		5.2	-1.3	3.4	2.1	
Services	1,007	1,228	1,569	2,034	2,382	2,597		5.0	5.3	3.2	1.7	
Agriculture	252	288	334	310	296	283		3.0	-1.5	-1.0	-0.9	
Transport	2,026	2,461	3,902	5,117	6,227	6,746		9.7	5.6	4.0	1.6	
Total	7,197	7,903	10,629	12,571	14,491	15,717		6.1	3.4	2.9	1.6	
						Low Growth						
Household					3,027	3,028	3,185				0.0	1.0
Industry					2,439	2,682	2,980				1.9	2.1
Services					2,343	2,460	2,620				1.0	1.3
Agriculture					296	289	289				-0.5	0.0
Transport					6,184	6,570	7,013				1.2	1.3
Total					14,289	15,029	16,087				1.0	1.4

[43] Our forecast is based on the following assumptions about energy prices: there will be a real increase in the price of oil and gas of 5.4 per cent per year between 2004 and 2010; the real price of coal and peat will remain unchanged to 2010; the real price of carbon dioxide for the energy transformation sector is €20/tonne in 2010.

[44] Underlying our forecast is the assumption that the government introduces a carbon tax in 2010 affecting sectors not covered by emissions trading. It is assumed that it would be levied at a rate of €20 a tonne of carbon dioxide and that it would be indexed to consumer price growth thereafter. This would encourage energy saving and fuel switching to less polluting fuels.

Table 5.10 also presents the energy demand forecasts under the *Low Growth* scenario which is discussed in more detail in the next chapter. If and when the economy switches to a lower growth path at some point in the future, as in the *Low Growth* scenario, this will have a substantial impact on our forecasts for energy demand. As outlined in the previous chapter, we feel that at some point in the next decade the economy will shift to a lower growth path. Total Final Consumption (TFC) of energy would rise by an annual average 1.0 per cent between 2010 and 2015, compared to 1.6 per cent under the *High Growth* Forecast. Under the *Low Growth* scenario, TFC of energy is forecast to be 16 million TOE by 2020 or 12 per cent higher than 2010 levels.

The demand for different kinds of energy is shown in Table 5.11. Under the *High Growth* scenario oil is expected to remain the dominant fuel, with demand estimated to increase by 28 per cent over the ten year period 2005 to 2015. The decline in the consumption of solid fuel is expected to continue, and by 2015 coal and peat will account for 1.7 per cent and 0.7 per cent respectively of TFC. The demand for electricity is expected to remain constant as a share of the total at 17 per cent over the period 2005 to 2015. The share of gas is expected to increase from 12 per cent in 2005 to 15 per cent in 2015, enhanced by the expansion of its availability in urban areas. Our forecasts for the *Low Growth* scenario indicate a faster decline in coal and peat and more moderate growth for the remaining fuels.

Table 5.11: Final Energy Consumption by Fuel, Thousand TOE

								Average Annual Growth Rates				
	1990	1995	2000	2005	2010	2015	2020	1995-2000	2000-2005	2005-2010	2010-2015	2015-2020
						High Growth						
Coal	848	380	528	563	344	269		6.8	1.3	-9.4	-4.8	
Oil	3,875	4,756	6,713	7,978	9,340	10,210		7.1	3.5	3.2	1.8	
Gas	576	738	1,203	1,466	1,916	2,283		10.3	4.0	5.5	3.6	
Peat	757	615	303	260	168	112		-13.2	-3.0	-8.3	-7.9	
Renewables	109	130	140	190	187	184		1.5	6.3	-0.3	-0.3	
Electricity	1,032	1,284	1,742	2,114	2,536	2,658		6.3	3.9	3.7	0.9	
Total	7,197	7,903	10,629	12,571	14,491	15,717		6.1	3.4	2.9	1.6	
						Low Growth						
Coal					338	253	200				-5.6	-4.6
Oil					9222	9827	10552				1.3	1.4
Gas					1870	2122	2280				2.6	1.4
Peat					164	101	65				-9.2	-8.4
Renewables					187	184	181				-0.3	-0.3
Electricity					2507	2542	2808				0.3	2.0
Total					14,289	15,029	16,087				1.0	1.4

Electricity demand will see significant growth out to the end of this decade. Although growth will be more moderate than in the period up to 2000, it will still require major investment to ensure that demand is satisfied. We have assumed that electricity generation plant commissioning and decommissioning has been implemented according to the announced timetables. In order to meet the growing demand, we have assumed that there will be adequate additional generating capacity. More specifically, we assume that: Total wind capacity grows to 1100MW in 2010. The electricity model suggests that 1,100MW of new Combined Cycle Gas-fired Turbines (CCGT) are needed. This will result in an increase in the share of gas in electricity generation.

By 2020, we expect that the Irish economy will have shifted to a lower growth path as described in the *Low Growth* scenario and the direct effect of the slowdown on the electricity market would be lower growth in electricity demand. The forecast depreciation of the dollar against the euro under this

scenario would dampen the expected increase of worldwide oil and gas prices in euro terms.

The following assumptions are instrumental in deriving the 2020 forecast for electricity generation:

We expect the real price of CO_2 emissions to grow to €30/tonne by 2020. All other things being equal, this will lower the proportion of electricity generation fuelled by coal and peat, which produce high levels of CO_2 emissions during generation. The capacity of wind generation is assumed to grow from 1100MW in 2010 to 1800MW in 2020. There is assumed to be an increase in gas CCGT capacity. This is necessary in order for electricity generation to be able to meet demand. In particular, the model suggests that there will be an additional 500MW of new Combined Cycle Gas-fired Turbines (CCGT) and an additional 800MW of Open Cycle Gas-fired Turbines (OCGT) with respect to 2010. About 30 per cent of the energy produced by peat plants will come from burning biomass. This is based on research by SEI and Coford (National Council for Forest Research and Development) which suggests that at current prices it would be economic to substitute some biomass for peat.

The emissions trading scheme will push up the cost of plants that use solid fuel in 2020. Moneypoint is likely to be still generating in 2020, but coal powered plants produce a gradually smaller amount of electricity after 2010. The decrease in the use of coal is compensated in part by an increase in the use of renewable energy, which accounts for more than 20.0 per cent of total generation by 2020. Renewables include hydro-electric (excluding pumped storage), wind, landfill gas, and biomass powered plants.

Due to the new CCGT and OCGT plants needed to meet demand, gas powered plants gradually increase in importance and by 2020 they are responsible for 68 per cent of total electricity generation. The decision about which plants generate electricity each period is based solely on the goal of optimally dispatching plants. However, it should be noted that policy considerations might recommend against relying so heavily on a single fuel type.

The forecast final demand for energy and the forecast development of the electricity sector are combined to give a forecast for primary energy demand in Table 5.12. The combination of slower growth in the economy and the fact that the economy is maturing in terms of energy use will result in slower growth in primary energy demand over time.[45]

FORECAST GREENHOUSE GAS EMISSIONS

The forecasts described here for energy demand have significant implications for the environment. The burning of fossil fuels releases carbon dioxide (CO_2), which is the largest contributor to GHG emissions in to the environment. To estimate CO_2 emissions, total final consumption by fuel type is multiplied by an appropriate 'emissions factor', since each fuel will release a different amount of CO_2 when burned.[46] Despite the decline in consumption of the dirtier fuels, such as coal and peat, over the forecast period, CO_2 emissions are set to increase significantly in the next five years. Total emissions of CO_2 were over 31 million tonnes in 1990 and by 2010 this is likely to have increased to over

[45] Note that the losses in conversion of biomass into electricity have not been taken into account in these numbers. To this extent the demand for primary energy in 2020 would be very slightly higher than shown in Table 5.12.

[46] An adjustment has to be made for emissions from electricity as they depend on the fuel mix and the efficiency of generation. By breaking down the final consumption of electricity into a primary energy requirement for each fuel, the CO_2 emissions for electricity. Emissions from electricity generation tend to be disproportionately high, as much of the energy of the individual fuels is lost in generation.

53 million tonnes under the high growth scenario, representing a 72 per cent increase on 1990. Post-2010, we anticipate some fall in CO_2 emissions on the back of slower growth in the economy.

Table 5.12: Demand for Primary Energy by Fuel, Thousand TOE

								Average Annual Growth Rates				
	1990	1995	2000	2005	2010	2015	2020	1995-2000	2000-2005	2005-2010	2010-2015	2015-2020
						High Growth						
Coal	2,163	1,917	1,989	1,995	2,168	1,488		0.7	0.1	1.7	-7.2	
Oil	4,285	5,454	7,868	8,784	9,471	10,341		7.6	2.2	1.5	1.8	
Gas	1,447	1,916	3,059	3,918	5,320	6,123		9.8	5.1	6.3	2.9	
Peat	1,358	1,214	804	925	834	687		-7.9	2.9	-2.1	-3.8	
Renewables	110	132	187	294	411	489		7.2	9.4	7.0	3.5	
Electricity	59	60	73	71	153	209		4.0	-0.7	16.8	6.4	
Feedstock	430	423	384	0	0	0		-1.9	-100.0			
Total	9,852	11,116	14,364	15,987	18,358	19,338		5.3	2.2	2.8	1.0	
						Low Growth						
Coal					2,163	1,472	814				-7.4	-11.2
Oil					9,354	9,958	10,683				1.3	1.4
Gas					5,211	5,709	6,605				1.8	3.0
Peat					829	677	551				-4.0	-4.0
Renewables					411	489	568				3.5	3.0
Electricity					153	209	264				6.4	4.8
Feedstock					0	0	0					
Total					18,121	18,514	19,485				0.4	1.0

Table 5.13 shows the forecast for CO_2 emissions by sector. The major contributor to the increase in CO_2 emissions is the transport sector, which will account for approximately 38 per cent of CO_2 emissions by 2010 in the *High Growth* forecast.

The Kyoto Protocol allows a 13 per cent increase in total emissions from the 1990 base year. To forecast future greenhouse gas emissions information on the country's emissions of other GHGs, namely methane and nitrous oxide as well as the extent of sequestration as a result of carbon sinks is needed (Table 5.13). Ireland currently stands about 30 per cent above the Kyoto limit of 13 per cent above 1990 levels. Given our forecasts for energy demand, GHG emissions are expected to continue rising out to 2015. It is more realistic to use the low growth scenario for emissions in 2020. Under this scenario emissions of GHGs would stand at around 32 per cent above the 1990 level, not much different from today. Significant policy changes over and above the assumed carbon tax will be required in order to restrict GHG emissions; otherwise Ireland will fail to meet its Kyoto target. Whether these policies use fiscal instruments or other approaches there is significant scope to improve the energy efficiency of the economy without significantly impacting on the prospects for growth.

Table 5.13: Forecast CO_2 Emissions from Energy, by Sector ('000 Tonnes)

								Average Annual Growth Rates				
	1990	1995	2000	2005	2010	2015	2020	1995-2000	2000-2005	2005-2010	2010-2015	2015-2020
						High Growth						
Household	10,429	10,262	11,198	12,120	12,172	12,037		1.8	1.6	0.1	-0.2	
Industry	7,956	8,611	10,353	8,692	9,593	9,615		3.8	-3.4	2.0	0.0	
Services	4,816	5,839	7,359	9,560	10,810	10,636		4.7	5.4	2.5	-0.3	
Agriculture	1,048	1,193	1,300	1,174	1,107	999		1.7	-2.0	-1.2	-2.0	
Transport	6,200	7,534	11,941	15,697	19,087	20,660		9.7	5.6	4.0	1.6	
Feedstock	989	973	883	0	0	0		-1.9	-100.0			
Transmission Losses etc.	304	442	369	566	600	616		-3.5	8.9	1.2	0.5	
Total	31,742	34,853	43,403	47,809	53,368	54,561		4.5	2.0	2.2	0.4	
% Change on 1990	0	10.1	36.3	48.2	65.4	68.5						
						Low Growth						
Household					11,970	11,047	10,751				-1.6	-0.5
Industry					9,424	9,382	9,775				-0.1	0.8
Services					10,660	10,151	9,852				-1.0	-0.6
Agriculture					1,109	1,010	996				-1.8	-0.3
Transport					18,954	20,124	21,466				1.2	1.3
Feedstock					0	0	0					
Transmission Losses etc.					599	615	626				0.5	0.4
Total					52,716	52,330	53,465				-0.1	0.4
% Change on 1990					63.2	61.6	64.7					

6. The Outlook To 2020

6.1 Background

In this *Review* we have chosen to present our view on the future growth prospects for the Irish economy using two different scenarios. The first *High Growth* scenario discussed in Chapter 5 assumes that there is no adjustment in the US economy over the medium term; we argue that this scenario is only realistic at most over the next five to seven years. As discussed in Chapter 3, over the longer term, we feel that adjustment in the US economy is inevitable, albeit that the timing and scale of any such adjustment is uncertain. To capture the likely effects of such an adjustment on the longer-term prospects for the Irish economy we have developed an alternative *Low Growth* scenario which assumes that the US economy begins a gradual adjustment to a more sustainable growth path from 2007 onwards. In this chapter we present the results of this scenario over the period out to 2020.

In this *Low Growth* scenario we assume that the adjustment process is gradually spread over a number of years. In practice, if it is to occur, the adjustment may be more of a short sharp shock. This could portend a much more unpleasant environment for the Irish economy in the year it happened, but provided that the sharper adjustment did not provoke a collapse in the domestic housing market the more rapid restoration of the world to a sustainable growth path could prove beneficial. Furthermore, the timing of such an adjustment is uncertain; it may begin in 2007 or may not occur until well into the next decade. However, if the assumption that such a correction must happen within the forecast horizon out to 2020 is correct, then the results of this *Low Growth* scenario presents a picture of the likely path the Irish economy will follow out to 2020.

There are several domestic factors which could also see the economy growing below potential over the medium term, which if compounded with a sharp US adjustment could lead to significantly lower employment and living standards. In previous *Reviews* we have presented such a "wasted opportunity" scenario where excessive domestic cost increases combined with a failure to fully implement the necessary infrastructural investment over the coming decade could create a wage-price spiral. In turn, this could lead to much lower growth in GNP and income and possibly even a resumption of emigration.

We do not to present such a scenario in this *Review,* the results are well rehearsed in previous *Reviews*; instead we have chosen to focus on one domestic shock originating in the housing market. The boom in housing demand and house prices over the past number of years has led to an unprecedented rate of house building, with the building sector's share of total employment swelling from 6.5 per cent in 1995 to over 12 per cent by 2005. The importance of this sector for employment, coupled with the wealth effects of the sharp rise in house prices on the household sector, mean that any adverse movements in house prices could have strongly negative effects on employment and consumption over the medium term. In Section 6.4 we present this shock to the housing sector as a "consequence" of the adverse external environment portrayed in the *Low Growth* scenario. However, such a housing shock could be caused by other independent factors. This scenario gives an indication of what would be the impact of any such sudden change in the conditions facing the building and construction sector.

6.2 *Low Growth* - Summary

Table 6.1[47] summarises the major aggregates under this *Low Growth* scenario out to 2020. The cost of an immediate US adjustment beginning in 2007 is reflected in a fall in the average growth rate of Irish GNP to 3.5 per cent per annum between 2005-10, well below the estimated potential growth rate of 4.4 (Table 4.1 in Chapter 4). This underperformance would continue in the opening years of the following decade with GNP growing at 3.1 per cent per annum out to 2015 against a potential growth rate of 3.5. Beyond 2015, as the US economy returned to a sustainable growth path and began to grow again at near its long-term potential, the Irish economy would also start to pick up. By the end of the next decade the Irish growth rate would exceed its potential, catching up on some of the lost potential output of the years of adjustment.

Table 6.1: *Low Growth* Forecast, Growth in Major Aggregates

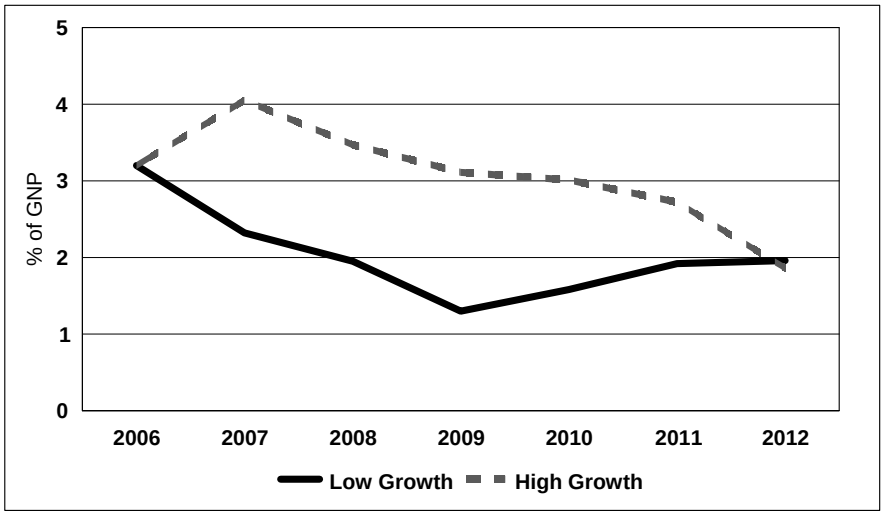
	1995-2000	2000-2005	2005-2010	2010-2015	2015-2020
Average Annual % Growth					
GDP	9.8	5.4	4.2	3.1	3.2
GNP	8.8	4.0	3.5	3.1	3.3
GNDI	8.2	3.5	3.1	2.9	3.4
GNP per head	7.7	2.2	2.1	1.8	2.2
Investment/ GNP ratio	25.6	28.6	28.6	27.4	26.5
Personal Consumption	7.7	4.3	2.6	1.7	2.6
Employment(PES) - % change	5.0	3.1	1.5	1.2	1.4
Real after tax non-ag wage rates, %	2.8	2.3	1.5	0.5	1.3
Non ag wage rates %	6.0	5.5	4.1	2.8	3.2
Per Cent of GNP	**2000**	**2005**	**2010**	**2015**	**2020**
Balance of payments surplus	-0.3	-1.8	-0.4	3.0	6.0
Debt/GNP ratio	34.3	22.4	18.6	15.5	12.5
General Government Balance as % of GNP	5.1	-0.6	0.4	0.4	0.3
Per Cent of Labour Force (ILO Basis)					
Unemployment rate - ILO	4.3	4.2	7.1	6.4	4.1
In Thousands					
Net Immigration, Thousands	26	53	23	18	13

The sluggish growth performance in the period after 2007 would lead to a rise in unemployment while the adjustment process was under way, and a gradual easing of wage inflation. The deterioration in employment prospects and the reduced rate of growth in incomes would together feed into a low rate of personal consumption growth. Such a dampening of employment prospects relative to the past ten years would lead to an easing of net inward migration flows relative to those recorded in recent years. While some net immigration would be expected to continue, the inflow in 2010 would be less than half that recorded in 2005 and by 2020 net immigration flows could fall to around 13,000.

This scenario presents a more sombre picture of the prospects for the Irish economy over the medium term than in the case of the *High Growth* scenario of Chapter 5. As shown in Figure 6.1 during the adjustment process, for five years the growth in GNP per would be significantly lower than in the *High Growth* case. However, after 2012 growth would be somewhat higher than in the scenario presented in Chapter 5, although the lost ground of the 2007-2012 period would never be fully made up. Under this *Low Growth* scenario by 2010 the level of GNP would be almost 7 per cent lower than in the *High*

[47] We have chosen to present all tabulated results in this chapter using five year averages since our focus is on the longer term.

Figure 6.1: *Low Growth* - Comparison of Growth Rates of GNP



Growth scenario with 90,000 fewer jobs. This sluggishness would be entirely attributable to external factors throwing the Irish economy off its current growth path. Nonetheless, the results of the *High Growth* simulation presented in Chapter 5 point to emerging pressures in the labour market by the end of the current decade and suggest that even with a continued benign external environment internal pressures could lead to a gradual unwinding of Ireland's competitive position over the longer term.

6.3 *Low Growth* - Details

Here we outline the alternative *Low Growth* scenario out to 2020. Detailed tables for this scenario are shown in Appendix 3 to this *Review*. This scenario is based on a return of the US to a sustainable growth path with that process beginning in 2007. The consequence of this alternative set of external assumptions is a much slower growth rate of the economy in the period to 2012 than that portrayed in the previous chapter. When looking out to 2020 we feel that this more conservative forecast is likely to prove closer to reality.

Following exceptional growth in the manufacturing sector over the course of the past decade, growth was much lower in the period 2000-2005, with zero growth recorded in 2003. Since then the growth rate has begun to pick up to a more respectable 5.4 per cent estimated for 2005. However, the consequence of an adjustment of the US economy beginning in 2007 would be to further hasten the decline of the manufacturing sector, with average growth rates falling further out to 2010. The consequences of lower US demand would be to reduce the growth performance of the key high-tech manufacturing sector. The traditional and food processing sectors are currently facing competitive difficulties internationally but it would be the reduced performance of the high-tech sector that would drive the lower output performance in this scenario. The reduction in employment possibilities and lower immigration flows would mean that the current very high levels of investment in housing would unwind more rapidly over the coming five years and output in the building sector would begin to fall in the next decade.

Table 6.2: Percentage Change in Output, GDP at Factor Cost at Constant 1995 Prices

	1995-2000	2000-2005	2005-2010	2010-2015	2015-2020
Average Annual % Growth					
Agriculture	1.1	0.6	1.3	0.8	0.3
Industry	13.5	5.4	4.7	3.3	3.3
Manufacturing	14.4	5.4	4.6	3.9	3.9
Utilities	5.3	5.8	5.3	3.1	4.7
Building	10.8	5.4	4.8	-0.8	-3.2
Market Services	8.4	5.8	4.3	3.5	3.5
Distribution	10.4	4.9	3.4	3.2	3.8
Transport & Communications	12.8	4.8	4.0	3.8	4.0
Other Market Services	6.7	6.5	4.7	3.5	3.3
Non-Market Services	3.2	4.2	2.9	1.6	1.6
Health & Education	3.8	5.2	2.6	1.5	1.5
Public Administration	1.7	1.9	3.7	2.0	1.8
GDP at Market Prices	9.8	5.4	4.2	3.1	3.2
Net Factor Income	16.4	11.9	6.6	3.1	2.9
GNP at Market Prices	8.8	4.0	3.5	3.1	3.3

Over the next decade the manufacturing sector would continue to grow somewhat more rapidly than GNP. Because market services are still strongly dependent on domestic demand its performance would also suffer as a result of lower growth in manufacturing output and the slump in the building sector. Even by the end of the next decade the performance of the market services sector would be significantly below the heady days of 1995-2000. In Table 6.3 it is clear why this occurs. The growth in personal income in 2000-2005 was 8.1 per cent per annum, and under this *Low Growth* scenario the growth rate would fall to 4.8 per cent in the period 2005-2010, and 4.1 per cent in 2010-2015, before gradually recovering by the end of the decade.

Table 6.3: Personal Income, Percentage Change

	1995-2000	2000-2005	2005-2010	2010-2015	2015-2020
Average Annual % Growth					
Agricultural Incomes	-0.7	0.5	4.3	4.4	3.7
Non-Ag. Wage Income	12.1	9.2	5.9	4.3	4.8
Transfer Income	7.0	12.5	5.8	5.3	6.2
Personal Income	11.1	8.1	4.8	4.1	4.8
Personal Disposable Income	11.1	8.4	4.4	3.9	4.7
Personal Consumption	11.1	7.8	4.8	3.8	4.6
% of disposable income	**2000**	**2005**	**2010**	**2015**	**2020**
Tax Rate	19.9	18.7	20.4	21.3	21.4
Savings Ratio (% Disposable Income	9.7	12.3	10.5	10.8	11.6

The component of expenditure that would take the most severe hit from a US adjustment would be the growth rate in personal consumption, which would record an average growth of just 2.6 per cent per annum in the period 2005-2010 (Table 6.4), falling even further to 1.7 per cent in 2010-2015. This would reflect the rise in unemployment and the slower growth in wages under this scenario. The rate of investment would also be lower, due to the much slower growth in the housing sector. This slower growth would be the consequence of a number of factors. Lower growth in the economy as a whole and a lower growth in employment would result in much lower net immigration than in the *High Growth* scenario. In turn this would result in slower growth in the number of households. Also, the much slower growth in

real personal disposable income than in the *High Growth* scenario would reduce demand for houses below that shown in Chapter 5. In turn, house prices would rise much more slowly, roughly keeping pace with the underlying rate of inflation.

Table: 6.4 Expenditure on GNP, Constant Prices, Percentage Change

	1995-2000	2000-2005	2005-2010	2010-2015	2015-2020
Average Annual % Growth					
Personal Consumption	7.7	4.3	2.6	1.7	2.6
Public Consumption	5.9	5.5	3.0	1.9	1.7
Fixed Investment	14.8	3.8	2.3	2.4	2.5
Building	13.0	6.0	1.1	1.8	1.9
Machinery	17.0	1.2	4.0	3.0	3.1
Total Exports	17.4	5.4	4.7	4.3	3.8
Total Imports	17.6	4.4	3.4	3.8	3.4
Gross Domestic Product	9.8	5.4	4.2	3.1	3.2
Net Factor Income	16.4	11.9	6.6	3.1	2.9
Gross National Product	8.8	4.0	3.5	3.1	3.3

With rising unemployment and growth rates below potential, the rate of increase of prices and wages in the economy in the years up to 2010 would slow from current levels. The growth in non-agricultural wage rates (Table 6.5) in particular slows from 5.5 per cent per annum in 2000-2005 to 4.1 in the five-year period out to 2010, before slowing further to 2.8 per cent in 2010-2015. This slowdown would be brought about by the higher level of unemployment under this scenario. If we contrast this rate of growth in wage rates number with the equivalent 6.9 per cent under the *High Growth* scenario we can begin to uncover the reasons for the recovery in output under the *Low Growth* scenario (improved competitiveness) and the dangers that have built up in the *High Growth* scenario. The gradual improvement in competitiveness in this scenario after 2010 would begin to price the Irish economy back into markets it had lost. Thus the growth rate in the latter part of the period would be higher than in the scenario in Chapter 5.

Table 6.5: Prices and Wages, Percentage Change

	1995-2000	2000-2005	2005-2010	2010-2015	2015-2020
Average Annual % Growth					
Personal Consumption	3.2	3.4	2.1	2.0	1.9
Average Annual Earnings, % change					
Non Agricultural	6.0	5.5	4.1	2.8	3.2

This lower rate of wage growth is directly attributable to sluggish labour demand. Table 6.6 shows the five year average sectoral employment growth rates. This represents a dramatic slowdown compared to the 2000-2005 period. As a consequence, there would be a substantial rise in the unemployment rate from 2007 to 2010. Thereafter, as the economy would begin to adjust through a reduction in wage rates and an improvement in competitiveness, the unemployment rate would begin to fall. By the end of the next decade it could be expected that in spite of the lower growth rate in output, full employment would have been restored, albeit at a lower level of GNP and with a lower population.

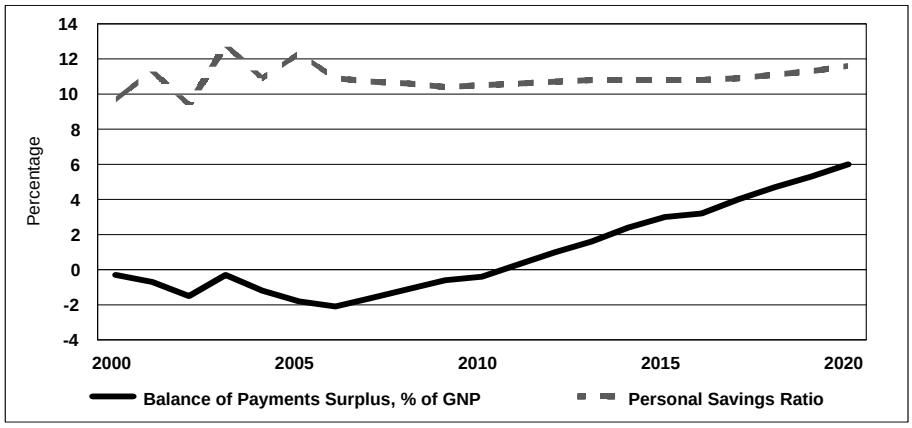
Table 6.6: Employment and the Labour Force, Percentage Change, Mid-April

	1995-2000	2000-2005	2005-2010	2010-2015	2015-2020
Average Annual % Growth					
Agriculture	-2.7	-2.4	-2.6	-2.7	-2.7
Industry	6.0	2.3	0.2	0.0	-0.1
Manufacturing	2.9	-1.0	-0.2	-1.6	-1.7
Utilities	-2.5	3.2	0.6	-1.8	-8.0
Building	14.6	7.4	0.7	1.7	1.8
Distribution	4.4	3.6	0.8	0.6	0.7
Transport & Communications	5.6	2.3	0.7	2.1	1.8
Other	8.3	4.4	3.5	3.1	3.3
Non-Market Services	4.3	4.6	2.7	1.5	1.5
Health & Education	5.1	4.8	2.6	1.5	1.5
Public Administration	2.1	3.9	3.0	1.5	1.5
Total Employment	5.0	3.1	1.5	1.2	1.4
Labour Force	3.4	2.9	2.1	1.1	0.7
	2000	**2005**	**2010**	**2015**	**2020**
Unemployment Rate (ILO)	4.3	4.2	7.1	6.4	4.0
Net Immigration, Thousands	26	53	23	18	13

This scenario is prepared on the basis that the government runs a small general government surplus over the full fifteen-year period to 2020. This is achieved by adjusting the rate of growth in current public expenditure downwards and using the personal tax rate to balance the budget from year to year. In addition, it is assumed that the government would react to the much slower growth in the economy by slowing the growth of current expenditure; the result would be that the ratio of current expenditure to GNP would remain fairly stable over the forecast period. Figure 6.2 plots the balance of payments surplus and the personal savings ratio. The personal savings ratio remains stable throughout the period. It is the balance of payments surplus that, following an initial negative balance, begins to rise strongly in the second half of the next decade. The low growth in consumption, which affects the demand for imports, means that the balance of trade rises strongly over the longer term with exports of other services driving the growth in total exports.

The rise in the surplus after 2015 in this scenario is not realistic. If such a scenario were to be played out in real life what would be likely to happen is either the company sector would raise investment or the private sector would react to the increasing net external asset position through increasing consumption. In either case the rate of growth would be slightly stronger after 2015 resulting in more of the "lost ground" being made up.

Figure 6.2: Personal Savings Ratio and Balance of Payments Surplus



6.4 A Shock to the Housing Sector

The long-term scenario discussed above considers how the Irish economy would be affected by a gradual process of adjustment by the US economy which returned it to a sustainable growth path in the next decade. In that stylised scenario it is assumed that the adjustment begins in 2007, although it is quite possible that it could be postponed well into the next decade. The adjustment process portrayed above is a smooth one: the US does not suddenly jump to a position of external and internal balance. In turn, there is a gradual adjustment in the rest of the world including Ireland. However, reality is often different from this stylised pattern of gradual adjustment. Smooth transitions are not that common when asset markets are involved. There is a tendency for assets prices to suddenly jump from one state to another. For example, when expectations change the value of the exchange rate may show a very substantial change over a short period of time reflecting the new information available to the market.

In the case of the Irish economy, as discussed earlier in this *Review*, there is a considerable exposure to any disturbance affecting the building sector. In the US Adjustment or *Low Growth* scenario described in Section 6.2 there would in any event be a rise in unemployment consequent on the economic slowdown in 2007. While in the case of a smooth adjustment the unemployment rate would peak at under 8 per cent of the labour force, such a rise could unsettle the confidence of the household sector. The demand for housing is particularly sensitive to changes in personal disposable income and the rise in unemployment could give rise to significant fears among many of those still employed about their job security. Given the high level of indebtedness of the household sector many households are not in a good position to sustain a prolonged loss of employment. Such a loss of confidence could precipitate a much more dramatic internal adjustment process affecting the building and construction sector. Some of those who lost their jobs could be forced to sell on a market where many potential buyers were holding off buying until their own personal position was clarified. Even if the number of forced sales were limited, the consequence could be a major fall in house prices over a short period of time.

Table 6.7: International Experience of Real House Price Falls

	Maximum Fall in Price
Denmark	-37
Finland	-50
France	-18
Germany	-15
Ireland [48]	-27
Netherlands	-50
Sweden	-38
United Kingdom	-34
United States	-14

Source: OECD, 2005 Economic Outlook, No. 78, November.

It is not possible to model the possible magnitude of the fall in house prices that might occur in the face of a sudden deterioration in the expectations of the household sector. To gauge what might occur under very unfavourable circumstances it is useful to look at the magnitude of the falls in house prices that have occurred in other countries in the face of shocks affecting expectations. Table 6.7 shows the maximum fall in house prices that has occurred in any cyclical downturn in the relevant economies. Larger economies tend to experience smaller falls because of the regional diversity in their housing markets. Also, home ownership is lower in countries such as Germany and France, which reduces their exposure to changes in sentiment by the

[48] In Ireland the fall in real house prices was experienced between the third quarter of 1981 and the second quarter of 1987.

household sector. For the smaller countries shown in the table and for the United Kingdom the biggest falls in house prices experienced in the past range from -27 for Ireland up to -50 for the Netherlands and Finland.

Here we examine what would happen if just such a sudden loss of confidence did occur in Ireland. We have calibrated a housing price shock with an illustrative fall in house prices of approximately a third in 2007 – within the range shown above. Obviously, this does not represent a forecast as to whether a fall in house prices will actually occur or if it should occur as to what its magnitude and timing would be. However, it allows us to examine what would be the consequences of what would in any terms be a fairly severe recession. This illustrative fall in house prices would contrast with the steady small rise in prices of 2 per cent a year envisaged in the *Low Growth* scenario. In this case we assume that house prices do not begin to recover till after 2010 and we analyse the potential impact of these major changes on the economy as a whole over the period 2007 to 2010.

Figure 6.3: Housing Shock – Housing Completions

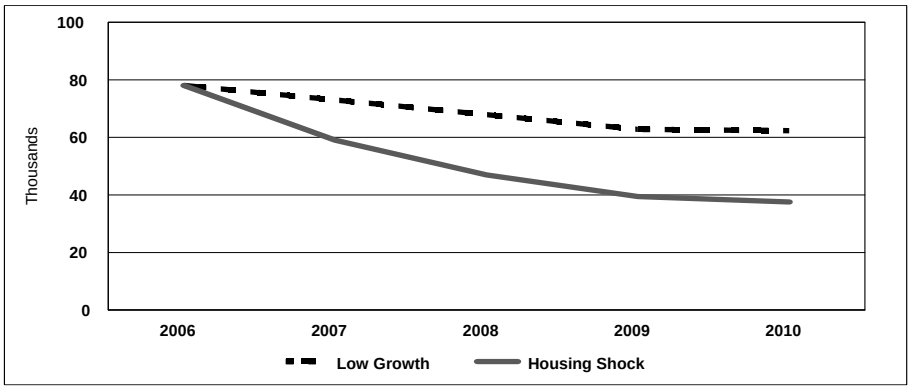


Figure 6.4: Housing Shock – GNP, % Change

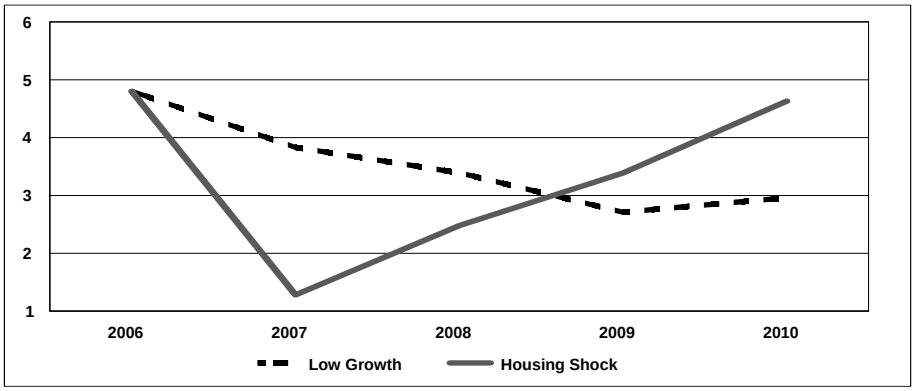
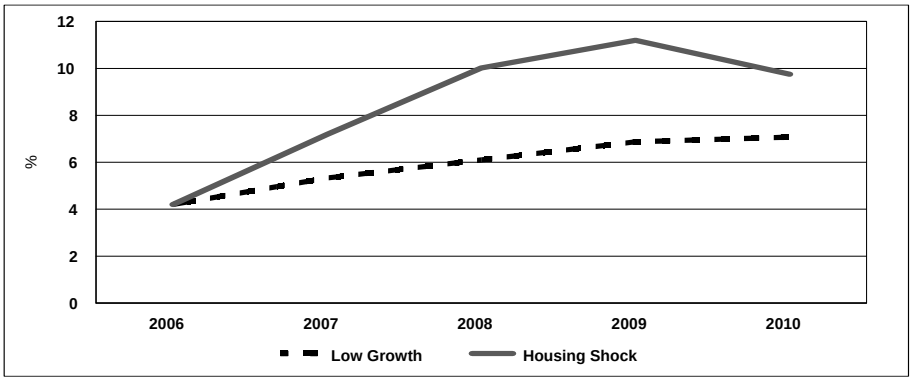


Figure 6.5: Housing Shock – Unemployment Rate

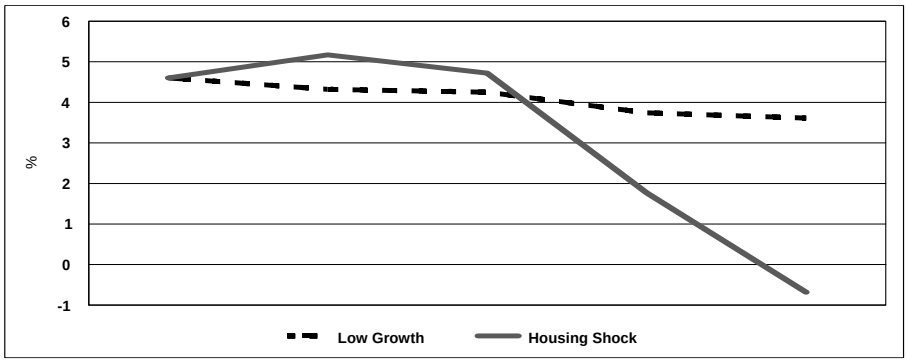


Such a sudden large decline in house prices would precipitate a rapid adjustment in the output of the building industry. Builders would see their profits turning to losses and they would rapidly adjust their activity rate. Instead of housing completions falling from their peak of between 70,000 and 80,000 next year to around 62,000 in 2010 as in the US Adjustment *Low Growth* scenario, they would fall to under 40,000 in 2009 in the housing shock scenario (Figure 6.3). This would represent a near halving of output over a three year period. Such a fall in output would, in turn, trigger a very large cumulative fall in employment in the building and construction sector of 15 per cent spread over 2007-09.

As discussed in Chapter 2, the building sector represents a very large share of the economy today so such a large shock to that sector would have major consequences for the economy as a whole. As shown in Figure 6.4 GNP would grow by only just over 1 per cent in 2007 as a result of the collapse of the housing market and it would still grow at less than 3 per cent in the second year of the shock, 2008. It is only from 2009 onwards that the economy would begin to recover with the growth in GNP per head rising more rapidly than in the *Low Growth* case. The consequence of this would be that unemployment would rise very rapidly to 10 per cent or more from 2008 to 2010 (Figure 6.5). Such a large rise in the unemployment rate would further aggravate uncertainty about the future.

Many of those who would lose their jobs as a result of such a downturn would seek employment elsewhere provided that the rest of Europe did not suffer as serious a decline in output. The consequence would be that by 2010 net immigration would almost cease, further reducing the potential demand for dwellings. This reduction in immigration would see a reduction in the population below the *Low Growth* case.

Figure 6.6: Housing Shock – Wage Rates



These simulations suggest that the worst effects of the downturn in the housing market would be felt in 2007 and 2008. By 2010 the economy would be beginning to recover. An important part of the recovery would be a very much lower growth in wage rates than is assumed in the *Low Growth* scenario (see Figure 6.6). The reduction in the rate of increase in nominal wage rates, with a small fall in nominal wages in 2010, would be a consequence of the very high rate of unemployment. By contrast with the 1970s and the 1980s, today we see a significant Philips curve effect, with wage rates responding to unemployment and growing at a slower rate. This would help improve the competitiveness of the economy in the period after 2010. However, even with an improvement in competitiveness it would be some considerable time before employment growth in other sectors of the economy would come to replace the jobs lost in the building sector. It would probably take about five to seven years for the economy to recover fully from this very substantial shock, returning employment to near the level it would have attained without the collapse in housing prices.

In this scenario we have assumed that the government would react to the severe loss of revenue and the growth in expenditure on transfers to the unemployed by raising taxes or cutting other forms of expenditure. The result would be that the government's borrowing would not rise, in spite of the fall in revenue from taxes such as stamp duty. If all the adjustment were concentrated on income tax the share of such tax in personal income might have to rise dramatically out to 2009, falling back thereafter as the economy recovered. This would be a very procyclical response to the shock.

If, instead, the government allowed the deficit to rise without responding, the impact on the public finances would be quite large. By 2009 the deficit would be almost 3.5 percentage points of GNP higher than in the *Low Growth* scenario. Such a neutral fiscal policy would provide some insulation to the economy from the shock, and GNP might recover to the level it would otherwise have been at by 2010 rather than 2011. Given the low levels of debt, such a neutral fiscal policy stance might well be appropriate. However, the feasibility of adopting such a course of action would depend on the public finances being in a strong position prior to the shock occurring. This highlights the importance of governments maintaining a significant surplus while the economy is growing rapidly and while there remains this major exposure to a shock to the building industry.

This scenario, where the economy would recover from the housing price shock by 2010 or 2011 (though it would take longer for full employment to be achieved), would represent a satisfactory outcome to a very serious shock. If the labour market were to prove less flexible than we expect, the consequence could be a much more prolonged period of adjustment, with higher costs for all those who would be unemployed. In addition, this scenario assumes that the financial sector would prove to be robust in the face of the major shock to the housing sector and the very rapid doubling in the unemployment rate. Should significant problems arise due to the high level of household indebtedness this could greatly complicate the recovery process.

6.5 Conclusions

Given the uncertainty that surrounds any forecasting exercise it is always unwise to rely on a single projection for the future. In this *Review* we view the *High Growth* forecast shown in Chapter 5 as being unsustainable in the long term. While it represents the more likely outturn for the next few years, the *Low Growth* scenario presented in this chapter seems more likely to describe the progress of the economy over the longer term to 2020.

However, even this *Low Growth* scenario could prove too optimistic in the medium term. If, for example, the rise in unemployment in the *Low Growth* scenario were to trigger a loss of confidence in the housing market, the consequences could be a severe downturn resulting in unemployment rising above 10 per cent of the labour force. The simulation described in this chapter point to the importance of adopting policy measures which would minimise the risk of such a serious shock occurring in the foreseeable future.

There are a range of other possible shocks or surprises which could occur over the coming decade, some of which were considered in the last *Review*. There we examined the likely consequences of a deterioration in Ireland's competitiveness through a combination of wage demands above productivity and a failure to address the current infrastructural deficit. The additional wage inflation under such a scenario would translate into significantly higher price increases in the non-traded goods and services sectors of the economy. The results suggested that there are significant downside risks over the medium term if policy does not focus on promoting competitiveness on world markets; growth and employment could fall significantly and living standards could be 10 per cent lower in the medium term than would otherwise be the case.

Successive *Medium-Term Reviews* have been too pessimistic about Ireland's future growth prospects. In the last *Review* a second scenario was considered

where it was assumed that Ireland became more competitive over the medium term than was assumed in the standard *Benchmark*. This simulation suggested that GNP could grow at 0.7 per cent per year above the *Benchmark* growth rate under these circumstances. However, because of the current congestion problems facing the economy this was felt to represent a likely upward bound on the possible growth rate of the economy over the medium term. Everything that has happened over the last two and a half years would tend to reinforce this view that the future growth of the economy is limited by the pressures accumulating as a result of past successes.

7. CONCLUSIONS

7.1 Introduction

Before looking to the future it is important to acknowledge the huge economic achievements of the last decade. While even five years ago there were still some observers outside Ireland who believed that the rapid growth of the Irish economy was a mirage, it is now clear to all that remarkable growth in living standards has taken place. It is also true that the new Irish economy is reasonably robust in the face of economic shocks. The downturn in 2001-2002 did no lasting damage and the flexibility of the labour market ensured that there was no major rise in unemployment. By any standards this must be classified as a very robust performance.

Since the last *Medium-Term Review* was published two and a half years ago, the Irish economy has seen a period of sustained growth in output, accompanied by a very rapid increase in the labour force and in the numbers employed. As a result, unemployment remains low, especially by comparison with our EU neighbours. A better measure of welfare is the rate of growth in GNP per head. This takes account of the fact that a significant part of the additional output was only made possible by the high rate of net immigration and that the fruits of this output, i.e., higher incomes, is shared with all those living in Ireland. On this basis the improvement in living standards over the last five years has also been significant though, much slower than in the late 1990s: a growth rate of 2.2 per cent a year between 2000 and 2005 rather than the 7.7 per cent a year between 1995 and 2000.

The analysis in this *Review* suggests that the economy has the potential to continue growing at between 4 and 5 per cent a year out to the end of the decade. While this is a significantly slower rate of growth in potential output than was experienced in the late 1990s, it is still substantially greater than for the EU as a whole.

The potential for the Irish economy to grow is declining over this decade as the unutilised resources available in the economy, not least the skilled labour, are used up. Also, while there has been a major improvement in the quality of the infrastructure of the economy over the last decade, this development has been partially matched by growth in pressures on that same infrastructure. As a result, the economy remains constrained by the limited stock of dwellings, and consequent high price, and the problems of congestion. For the next five years our analysis suggests that income per head could grow at something under 3.5 per cent a year, before slowing to a rate of increase of around 1.5 to 2 per cent a year over the following decade.

While the growth in GNP per head is a very important measure of welfare, it does not take account of a number of other important features of our society. The increased congestion costs and the growing pressures on the environment as a result of the rapid economic growth must both be taken into account when assessing the welfare implications of economic development over the current decade.

This chapter considers some of the risks that the economy faces over the coming five or ten years. It then considers the medium-term policy implications of the demographic and economic changes under way. Finally, consideration is given to a number of longer term issues which merit attention by policy-makers today.

7.2 Managing Risk

The major purpose in undertaking the analysis in this *Review* is not just to provide forecasts, forecasts that will inevitably be overtaken by events, but instead to help understand the processes driving the Irish economy. For it is only with such an understanding that it is possible for policy to effectively influence future events. One important feature of this *Review*, as with previous *Reviews*, is that we pay special attention to what might go wrong. It is not that we are natural pessimists, but rather that pleasant surprises can be easily handled by a flexible economy, whereas unpleasant surprises may pose lasting problems. Thus we focus in particular on how policy can be made robust in the face of major uncertainty about the future, to help avoid future problems or to prepare the economy to face them from a position of strength.

In particular we are concerned about the exposure of this economy to the necessary international adjustment process that will take place at some time in the future to reverse the current growing international imbalances. Because of its openness the Irish economy is probably more exposed to international shocks emanating from the US than are our EU partners.[49] However, our concerns are greatly heightened by Ireland's current exceptional dependence on the building and construction industry to fuel economic growth. No other economy in the EU is anywhere near as exposed as is Ireland in this regard.

While there is always the possibility that the building and construction industry will achieve a soft landing over the next decade and a half, such a desirable scenario is looking increasingly unlikely as the building and construction sector continues to increase its share of national output. With the potential output of the economy constrained by a limited capital stock and a labour supply that is adversely affected by domestic congestion costs, the building and construction industry has to bid scarce resources from other sectors of the economy to maintain its momentum. This process happens indirectly as the cost of the output of the building industry rises in relative terms. While the Irish labour market is very flexible, with Irish and foreign workers coming from abroad, they can only come at the cost of higher wage rates and further pressure on the market for accommodation. In turn the rising cost of accommodation and increasing pressures on infrastructure are adversely affecting the competitiveness of the tradable sector of the economy.[50]

The result of the higher labour costs and higher cost for the output of the building industry is that the rest of the economy is being squeezed. This is particularly true for the tradable sector, especially manufacturing. The rapid rise in labour costs has forced many firms in the manufacturing sector to close, thus releasing the resources that the building industry needs. While in a successful economy such a process of change goes on all the time, it has dangers if the need for the shift in resources is unlikely to be permanent. For example, if there is a rapid slowdown in the building and construction industry in the future releasing resources, both capital and labour, for use elsewhere in the economy, it seems very unlikely that the manufacturing firms that have closed will rapidly reappear to use these resources. The consequence is that the sectoral shift in favour of building cannot be rapidly reversed without considerable pain.

As discussed in Chapter 6, in the long run the building and construction industry is likely to account for a much smaller share of the economy. In particular, the extent of the resources being devoted to building new dwellings is truly exceptional. This sector is very vulnerable to a shock, in particular any

[49] Duffy, D. and J. Fitzgerald, 2000, "Has Ireland's Exposure to a Sterling Shock Changed?", *Irish Banking Review* Winter 2000.

[50] The importance of housing costs in determining Irish competitiveness is modelled directly in Duffy, Fitz Gerald and Kearney, 2005., "Rising House Prices in an Open Labour Market", *Economic and Social Review*, forthcoming.

change in external circumstances which would cause unemployment to rise and expectations about future incomes to fall. Such a change could bring about a collapse in the housing market, including in housing prices. As illustrated in the scenario examined in Chapter 6, this could have very serious consequences for the domestic economy. It could take a number of years to recover from such a downturn and the intervening years could be extremely unpleasant no matter how wise the policies pursued.

Under these circumstances what would be a prudent policy to follow? Because of the very considerable risks inherent in reallocating so much of our national resources to the building sector it would seem desirable to stop using public policy to boost the growth of the building and construction sector. It would also be prudent to manage the public finances to leave scope for government action to offset, albeit to a limited extent, the consequences of a sudden and unexpected collapse in the building and construction sector.

The policy levers needed to slow the building industry are well understood. They involve taking money out of the sector, thereby reducing demand. This can be done both through raising taxes that directly affect demand for the output of the building and construction sector and also through changing the pattern and timing of government capital expenditure.

There are a range of tax changes that would differentially affect investment in building and construction, including housing. In particular, the ending of all tax write-offs for such investment would be a key first step. If that proved insufficient, consideration could be given to a range of additional measures As suggested in Fitz Gerald (2001),[51] the ending of tax relief on mortgages, would help reduce demand for dwellings. Further measures, such as a property tax,[52] as suggested recently by the *Competitiveness Council* could also be considered.

Obviously, it would not be appropriate to implement all such changes. Much will depend on the political economy of such policies. In practice the most feasible instrument would probably be the ending of tax reliefs that encourage investment.

At present Irish public investment is absorbing an exceptionally high share of national output relative to our neighbours. While the rising cost and slow delivery of public investment has been a major problem in recent years, very significant progress has been made in developing the physical infrastructure of the economy. Nonetheless, a large infrastructural deficit still remains to be made up. The ability of the state to close the deficit in physical infrastructure is not constrained by lack of financial resources. Rather it is the ability of the economy to produce the necessary infrastructure at a reasonable price that is the key constraint.

At this stage it is not clear when this deficit will be made good. However, in the short term, the other possible prong for government action designed to reduce the economy's exposure to shocks would be to limit government demand for the output of the building and construction sector. The disadvantage of such a course of action would be that some major infrastructure projects which could relieve constraints in the economy could be delayed. To avoid such a danger it would be important to reprioritise within the Public Capital Programme.The issue of the appropriate strategy for public investment in infrastructure and the appropriate prioritisation of different types of public investment will be further addressed in future research being undertaken by the ESRI for the Department of Finance.

Finally, it is appropriate for fiscal policy to run significant surpluses so long as the economy is continuing to grow rapidly. Any accumulated surpluses

[51] Fitz Gerald, J., 2001. "Fiscal Policy in a Monetary Union: The Case of Ireland" in McCoy *et al., Quarterly Economic Commentary*, March, Dublin: The Economic and Social Research Institute.

[52] Callan, T., 1991. "Property Tax: Principles and Policy Options". Policy Research Series, No.12, July, Dublin: The Economic and Social Research Institute.

could then be used to fund continuing public investment in the event of a sudden downturn in the economy.

The cost of prudent policy is likely to be only a temporary slowdown in the growth in incomes. If it also reduced inflationary pressures the cost could be further minimised. Any lost growth would be recovered when the economy eventually slows. Thus caution only delays the gratification of our national needs. The benefit of such a policy would be a reduction in the risk of a future very disruptive recession and an enhancement of the ability of the public sector to tackle such a recession should it occur.

7.3 Implications of Change

The scenarios for the next decade painted in earlier chapters suggest a major change in the economic and social structure of the country over the coming decade. Among the different forms that these changes will take will be:

- The growth in the importance of the cohort of those in their 30s and the effects of this on the market for childcare.
- The growth of a multicultural economy.

THE RISING IMPORTANCE OF THE COHORT IN THEIR THIRTIES

While today the biggest cohort in the population is those in their twenties, this cohort will be a decade older by 2015. This will have a noticeable effect on the pattern of expenditure. While today the bulk of the very large number of those in their twenties have no dependants, the bulk of them are likely to be parents of small children by 2015. This will change their life-style and consumption patterns. Because of the very large size of this cohort, the traditional process of family formation will have a wider significance for the economy and society.

For example, while today a significant share of their disposable income may go on entertainment and travel, the advent of children will change their pattern of consumption. It may well be that investment in night clubs serving the needs of this cohort may today be a profitable occupation, but by 2015 it will be services for families, such as childcare facilities, which will be in greater demand!

Even with unchanging fertility, the rise in the numbers in their thirties will see a rise in births of around a sixth over the coming decade. As parents increasingly choose to remain on in the labour market the demand for childcare outside the home will tend to rise. At the same time the analysis in earlier chapters points to a reduction in the supply of women with education of less than a Leaving Certificate – the traditional suppliers of such childcare. The result is likely to be a relative rise in the cost of childcare outside the home. This will pose difficult choices for parents, for employers and for government.

In the United States, where there is a very wide dispersion in earnings, there is a very wide use of paid childcare. With many parents on high incomes they can afford to pay the low wages that those at the bottom of the income distribution can earn looking after their children. This arrangement is profitable for both parties. However, in Europe, with typically a much narrower dispersion of earnings, the margin between what those on high incomes earn after tax and what potential carers need to earn to make it worth their while looking after children is much narrower. Thus, European families tend to spend a greater amount of time caring for their own children through time out of the work force than is the case in the US (Freeman *et al.*, 2004). They may also prefer this arrangement, even if the costs were identical.

Whether any increase in childcare provision is paid for by the state or by individual parents it is likely to be increasingly costly for all those involved. The effect of the rising cost will be to reduce the incentive for those who would otherwise wish to remain in the labour force to do so. In turn, faced with the loss of an important supply of potentially skilled labour, wise employers will

react through the adaptation of the work place to better meet the needs of young parents.

A possible objection to increased support for families through flexible working arrangements, or increased provision of childcare facilities, is that they will place further burdens on business. Whether businesses directly fund the changes or whether they are funded through taxation may ultimately make little difference to who pays. Whichever route is chosen, in an open economy such as Ireland's, it is likely that the result of the wage bargaining process will see the bulk of the financial cost ultimately falling on employees who will, in turn, be the beneficiaries. This is not a reason for forgoing a change in policy, which improves the welfare of many citizens, but the fact that it is not costless must be recognised.

Research has shown that while there was significant discrimination in earnings against women in the late 1980s, the discrimination against women *qua* women had largely disappeared by the end of the 1990s (Russell, H., in Fitz Gerald, McCarthy, Morgenroth and O'Connell, 2003). However, the research also shows that there was a very heavy penalty paid in lost earnings for anyone who spent significant time out of the labour force. As it is nearly always women who are in this position it means that women, on average, still earn significantly less than men if they take time off to look after children. The cost of having children is now very high when this opportunity cost of parents' time is taken into account.

The outcome of these different pressures will be some increase in childcare provision by the state, probably some increase in private provision, and a move to a more flexible workplace. However, if flexible working arrangements are to play a significant role in helping families and employers to find a mutually satisfactory outcome, the existing penalty for women availing of such flexibility will have to change. If this is to happen, it is more likely to be driven by market forces than by legislation: employers will discover that with more women than men having the qualifications that they require, to hold this key source of skilled labour they will have to adjust the wages paid. Also it is likely that where both parents share the childcare burden the labour market penalty for adopting such an approach will fall.

DEVELOPING A MULTICULTURAL ECONOMY

For a century and a half, many in the Irish population sought, and were granted, access to the best labour markets in the world. Over the 1990s this process was reversed and Ireland was transformed into a sought-after location for foreign migrants. The bulk of the immigration into Ireland over the 1990s was skilled labour, with about half being returning Irish emigrants. The majority of the rest were EU citizens with a high level of education. Many of those coming to Ireland were spouses or partners of Irish citizens.

This influx of skilled labour played an important role in expanding the productive capacity of the economy, allowing the economy to grow more rapidly and helping to solve the problem of long-term unemployment (Barrett, Fitz Gerald and Nolan, 2002; Barrett, Bergin and Duffy, 2005). In addition, it has been shown that returned emigrants have higher productivity and higher earnings because of their experience abroad. (Barrett and O'Connell, 2001.) With almost a third of the younger cohorts being returned emigrants, this effect on individual productivity is affecting the economy as a whole. This improved the welfare of the least skilled in the labour force at the expense of lower wages for skilled labour. The immigration had wider benefits, making the economy more cosmopolitan and increasing productivity.

The substantial influx of immigrants over the last four years into less skilled employment potentially has rather different effects. While also enhancing the cosmopolitan nature of the economy and relieving unskilled wage pressures, if continued indefinitely it could push unskilled wage rates down and raise the

rate of unemployment. However, the fact that the individuals have a high level of education means that either they get jobs more commensurate with their skills as their command of English improves or else they are likely to return home. This situation is rather different from that in many other countries where most immigrants have limited education and are destined to remain in low paid employment.

Any discussion of policy on immigration must take place in the context of the fact that citizens of the ten EU accession states have had full access to the Irish labour market since May 2004. As a result, Ireland has one of the most open labour markets in the world and so discussions about policy on admission are not relevant for a large proportion of potential immigrants into Ireland. For this group policy in respect of integration is the main component of "immigration policy". Nonetheless, policy on admission for non-EEA nationals is still important so we will set out here our views on the desirable features of an immigration system. A framework to allow for some of the elements we propose are contained in the Employment Permits Bill 2005[53] so our hope would be to see this bill enacted and built upon.

What is required is an explicit policy on immigration that is seen to be both transparent and fair. There is a choice between two different approaches: allowing limited immigration of unskilled labour through a transparent programme or, alternatively, an open door policy that allows fairly free inward movement. A policy of limited immigration of unskilled labour would be consistent with the maintenance of a substantial domestic social safety net. Evidence from the US suggests that an open door policy on unskilled immigration would probably enhance the growth potential of the economy and would be good for skilled Irish citizens, but it would have an adverse impact on unskilled labour and place the welfare system under very serious pressure. On the basis of past experience, skilled immigration is likely to enhance both the output potential of the economy and the labour market prospects of unskilled labour. As such, it should be left to be determined by market forces.

From an economic point of view any immigration system should have a number of characteristics. First, it should be transparent: a points based system, such as that operated by Canada, could allow necessary free immigration of skilled labour, while also allowing whatever inflow of unskilled labour that was deemed appropriate. Second, such a scheme should be administered by the state in a transparent fashion, along the lines of the Canadian or US systems. Where it is not done on a points system it should involve a lottery. Applications for entry should be made directly to the state, not through intermediate private agencies. Third, the visa (work-permit) should not be tied to a particular employer or sector; conditions of employment should be the same as for existing residents.

Such a policy would be an improvement on the current economically inefficient approach to unskilled immigration where individuals are sponsored by companies. The economy has grown and prospered through Irish employees seeking out the most profitable places of employment. In so doing they increase production in the firms that are making the maximum contribution to growth. By tying immigrants to particular firms, whatever the firms' level of efficiency, national productivity is impaired.

The current practice carries the danger that the rights of immigrants may be abused. It leaves a wide opportunity for sponsoring agencies abroad to charge substantial fees. This can give rise to abuse, with potential immigrants borrowing heavily to buy entry, leaving them in the position of "bonded labourers". It introduces the danger that such debts would be enforced through illegal means.

[53] Department of Enterprise, Trade and Employment (2005), "Minister Martin Outlines Details of New Employment Permits Policy for Migrant Workers", Press Release 12 October.

If Ireland fails to embrace and build on the benefits of becoming a multicultural economy, through allowing appropriate migration, it will rapidly fall behind its competitors. Those cities and surrounding regions that have gone this route are among the most successful in the world. By accident rather than design we have turned what was the curse of emigration in the past into a major asset. The experience gained abroad by up to a third of our labour force has helped transform the economy. This expertise has been supplemented by the influx of skilled non-Irish workers, especially in the late 1990s.

The attraction of such skilled individuals depends on making it attractive to live and work in a city or country. Ireland, especially Dublin, has become somewhat less attractive in recent years because of the high cost of accommodation and the very poor urban public transport infrastructure compared to that available elsewhere in competing locations in the EU. If we are to grow as a centre for successful business activity we will have to address these factors that make us unattractive both to outsiders and to our own children who are still residing abroad.

7.4 Planning for 2020 and Beyond

In the longer term Ireland must deal with the following:

- The growing importance of China and India.
- The shift to a service based economy.
- Weaning itself of dependence on the low corporation tax regime.
- Preparing for the greying of Ireland.

HARNESSING THE BENEFITS OF GLOBAL TRADE

Ireland has been exceptionally successful in exploiting the benefits of the rapid growth in international trade over the last half century. However, today fears are frequently expressed about the dangers emanating from competition from emerging economies such as China and India. However, such fears are based on a misunderstanding of the process of trade.

It is true that both India and China have far more skilled people working in their economies than in Ireland or possibly in the EU. However, such skilled labour represents a very small share of the total population in those economies. We have learned how important the supply of skilled labour is in building a prosperous economy. For China and India they have an ever increasing demand for skilled labour to work in administration, in providing essential business services, and to provide key supervisory staff for the newly developing manufacturing sector. The more rapidly these economies develop the more rapidly will the demand for skilled labour rise and with it the greater the pressure on skilled wage rates.

China and India have a very large supply of unskilled labour which is underemployed in agriculture. It will be a long time before they face pressures on unskilled wage rates. Thus they have the potential to continue growing very rapidly. The effect of this growth will be to raise skilled wage rates. Thus these economies have a limited scope to deploy skilled labour to provide services for developed economies, such as Ireland. By contrast they have very considerable scope to increase the supply of goods that are produced by unskilled or semi-skilled labour.

As a result, while the far East will provide increasing competition to supply goods produced using unskilled labour they will continue for the foreseeable future to be a buyer of goods and services that require a high skilled input. Thus, their growth should be seen as an opportunity to develop profitable markets rather than as a serious threat to the services and goods in which the Irish economy is gradually specialising.

[54] PPPs are likely to be an expensive way to fund infrastructural investment. Their value lies in their ability to incentivise the private sector to produce the infrastructure at minimum cost.

Over the past fifty years Irish trade policy has been transformed. Until the early 1980s the safeguarding and development of Irish agricultural exports was still a key priority for policy-makers. However, since joining the EU in 1973 agricultural exports have fallen continuously in importance. Today they represent a very small fraction of total trade. While it remains important for Irish farmers to safeguard transfers under the Common Agricultural Policy, the fostering of agricultural exports is no longer a priority.

The importance of free trade was long ago identified as crucial in the development of industrial exports and Ireland's manufacturing sector. Membership of the EU in 1973 cemented this policy in place and the Single European Market of 1992 brought substantial additional benefits to Ireland. As discussed below, increasingly the focus of attention will switch to services exports. In this regard it is important to Ireland to pursue policies that will open up and keep open markets for Ireland's tradable services throughout the world. While this will also see increasing imports of services, past experience has shown that such a policy will provide more of an opportunity than a threat.

PLANNING FOR A SERVICES BASED ECONOMY

The policies that have served Ireland well in the past in promoting industrial development may need adaptation to a world where success will increasingly come from the services sector.

The most obvious factor that differentiates Ireland from many competitors is the supply of skilled labour. As outlined in Chapter 2, the average educational attainment of the work force will continue to rise quite rapidly for the next fifteen years. This should contribute significantly to the growth in the productivity of the economy. In addition, the continued growth in skilled labour supply will help maintain the competitiveness of the economy. The *Enterprise Strategy Report* made recommendations on how this asset can be further developed.

A second focus of policy in recent years has been the promotion of investment in research and development. Public policy has moved to foster R&D in the third level sector. In addition, incentives have been provided to persuade the private sector to raise the level of its investment in R&D. However, while considerable funds are available to foster this investment in the private sector, there remains the danger that such investment could prove ineffective and funds could be wasted. It is important that this key area of expenditure is subject to continued monitoring to ensure that policy-making evolves to produce significant economic benefits. In the case of the funding of basic research, mechanisms have been put in place to ensure a competitive environment, which should ensure quality output.

What is not clear is whether the current exclusive science, technology and engineering based focus of the research should be maintained. In so far as this research can be expected to have commercial spin-offs it is most likely to occur in the manufacturing sector. With the change in emphasis to developing the services sector some broadening in the focus of such research might be appropriate. While the establishment of a reputation for excellence in biomedical research might help in developing a pharmaceutical industry it may not be as valuable in promoting the growth of businesses providing accountancy services or selling television programming abroad. It is possible that excellence as a centre for research in international law or even, say, history could also contribute to the long-term growth of the economy.

An important reason for the success of the Irish economy over the last decade has been its ability to attract back as homing pigeons the Irish emigrants of the past and, increasingly, skilled individuals from all over the world. For firms that plan to export tradable services it will be essential to be able to attract the relevant skilled labour from all over the world. However,

such skilled labour will only come and work in Ireland if it is attractive for them to do so.

We have seen that even states that are very unattractive to live in can attract skilled labour by paying extremely high wage rates. However, in the kind of business that is likely to develop in Ireland competitiveness will depend on attracting skilled labour at a reasonable price. By making Ireland an appealing place to live in the cost of attracting and holding skilled labour will be reduced, making the economy more attractive as a destination for investment.

There is no simple prescription for making and keeping Ireland attractive to live in. For different individuals different features will be important. However, it is clear that the high cost of accommodation and the ever-rising commuting times are a negative feature of Ireland today. To the extent that they are offset by wider cultural and environmental attractions, the economy can continue to prosper. Generally, in seeking to build a successful economy based on tradable services policy must focus on a wider range of issues than in the past. However, success in making Ireland an attractive place to do business is likely to have the additional benefit that it will enhance the quality of life for all those resident in the country.

When Ireland first introduced the policy of low corporation tax in the late 1950s it was unique. Within the EU, and even within the wider context of the OECD, the Irish rate of corporation tax was and remains far below that of most other countries. However, the external environment is gradually changing. While it was a key factor in growing the manufacturing sector over the last half century, it is becoming less effective as an instrument due to enhanced competition from countries such as Estonia. In addition, the shifting focus of the economy towards the services sector will require a rather different range of instruments for promoting development.

There are potential strategic dangers for the Irish economy in becoming too dependent on the low tax rate. The changing external environment leaves Ireland exposed to an asymmetric shock of an unusual kind, where changes in legislation in other jurisdictions (or in the EU) could have a sudden and large impact on the Irish economy. In addition, the continuing preservation of the current *status quo* may involve increasing costs in terms of Irish political capital within the EU, and falling returns in terms of economic benefits for a rapidly changing domestic economy.

The implication of these arguments is not that Ireland should do away with its current system of low corporation tax but rather that it needs to wean the economy away from excessive dependence on it. This means that the focus of public policy should be on attracting and developing firms that are not crucially dependent on low corporation tax for their success. Such a policy fits in with the need to develop the services sector of the economy, especially tradable services. The objective should be to have a very much smaller proportion of the economy dependent on the low corporation tax for its survival by 2020.

THE GREYING OF IRELAND

The gradual increase in the average age of the population and of the proportion of the population which is retired will put increasing pressures on the economy in the years after 2020. These potential pressures have been considered in detail in Barrett and Bergin (2005).

When looking at the greying of Ireland there are a number of strategies that can be adopted to postpone, reduce, or to manage the increased dependency burden that this may entail in the distant future. First, the state can promote a

[55] Gunnligle, P. and D. McGuire, 2001. "Why Ireland? A Qualitative Review of the Factors Influencing the Location of U.S. Multinationals in Ireland with Particular Reference to the Impact of Labour Issues", *The Economic and Social Review,* Vol. 32, January 2001, pp 43-68.

higher birth rate to produce a more balanced population structure. Second, it is possible to increase the average retirement age and change the proportion of the population actually working. Third, migration can help restore a more balanced population structure. Finally, the state and individuals can save to provide for their financial needs in retirement. The outcome is likely to be (and should be) a mixture of all of these strategies.

While the birth rate has fallen dramatically compared to the 1970s, fertility is still high by EU standards. The population is currently almost replacing itself, with a total fertility rate of around 2. If maintained, in the long run this would lead to a stable population. However, even with stability, there will inevitably be a major deterioration from the current unsustainably favourable demographic structure.

The option of postponing retirement has already been adopted in Germany and Italy (where retirement was at a very young age). With life expectancy rising rapidly, there is also a rise in the ability of individuals to continue working to a later age than was the case before. This is especially true where the nature of work itself has changed away from manual labour. Any sudden changes in policy in this area could cause major problems as people plan for retirement well in advance. However, with life expectancy rising rapidly, there is a strong case for looking at the pattern of retirement in Ireland and what retirement actually means. The first priority should be to develop policies that encourage people to at least remain in the labour force up to retirement age.

It is also possible to replace a policy of encouraging people to have more children by a policy where a society imports its "children" fully-grown as immigrants. On paper this may sound like a good idea. Immigration is an important factor in why the US is keeping itself "young". It avoids the costs of bringing up children, including the necessary investment by the state in education. However, this does not look to be sustainable in the long run. Unless a high proportion of the immigrants are skilled it may not add sufficiently to the productive potential of the economy to offset the rising dependency rates. A country that is greying rapidly may also not be very attractive to skilled immigrants; selling a "retirement home" as a good place to live to skilled foreigners in their twenties could be a difficult task!

However, migration has in the past played a very important role in stabilising economies and in promoting economic adjustment. In the 1990s it played a significant role in enhancing the growth potential of the Irish economy and it will continue to play a role, albeit a subsidiary one, in developing the Irish economy in coming decades.

As part of the preparation for the rising burden in the second quarter of this century, the government has established the National Pensions Reserve Fund. Current policy is to save 1 per cent a year of GNP out of the public finances and put it into the fund. The fund also includes privatisation receipts. The fund is being invested so that the proceeds will part-fund the state's pension liabilities after 2030. At a time when the economy is enjoying what amounts to a "demographic dividend" it is certainly appropriate that prudent provision be made for adverse changes in demographic structure in future decades. However, there is a wider issue of intergenerational equity that is only beginning to be considered.

While a range of potential approaches exist to deal with the economic challenges posed by population ageing, there appears to be no simple answer that is both without cost and easy to implement. In the case of longer working lives, the government has only a limited influence on the actual time of retirement. Even if it alters the age at which the state pension is granted, people with private pensions can retire earlier. As societies get wealthier, there appears to be an increasing move towards earlier retirement and so it may become more difficult to generate later retirement. In the case of immigration, and as noted above, the level of inflows needed to make a significant contribution to

slowing the process of population ageing would be so large as to create an alternative set of policy challenges.

Given these difficulties, it is important that the long-run cost implications of new policy initiatives are considered before they are implemented. It is also important that the public finances continue to be managed with a view to their long-run sustainability. By incorporating long-run thinking into the management of the public finances in advance of the onset of population ageing, Ireland can avoid the problems currently experienced by other EU countries.

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APPENDIX 1: FORECASTING RECORD OF THE *MEDIUM-TERM REVIEW*

Introduction

The exercise of preparing medium-term forecasts is in many ways more important than the numbers themselves. The exercise of producing a *Review* firstly involves detailed ground work in developing a set of assumptions about crucial external variables, especially about the external environment and the likely stance of domestic policy, including fiscal policy. Secondly, a model or models are developed which translate the assumptions concerning the external drivers of the economy into a profile for key variables in the domestic economy. Finally, these scenarios can serve to highlight future constraints or problems in the domestic economy.

This exercise develops an understanding of the underlying behaviour of the Irish economy. Without such a framework for analysis it is not possible to think about the complex web of economic relationships that underpin the workings of the economy in a coherent manner.

The *Medium-Term Review (MTR)* was first published in 1986 and this *Review* represents the tenth in a series of publications that have appeared every two or three years since 1986.While the forecasting accuracy of the *Review* may not be the only or even the primary reason for undertaking such a research, it is a relevant criterion for assessing the value of such work. In this Appendix we examine the track record of successive *Reviews* in forecasting key aggregates – GNP, the unemployment rate and the rate of inflation in consumer prices. The growth rate of Gross National Product (GNP) volume is first examined. Unemployment, as measured by the Present Employment Status (PES) measure in April of the year under review is also looked at. Inflation forecasts are evaluated by comparing the forecast growth in the Personal Consumption Deflator (PCD) against its outturn as measured in National Accounts data.

In each case the forecasts contained in the relevant *Medium-Term Review* are compared to the latest published CSO figures for that year. In the case of the *MTR's* published up to 1999 historical CSO data are available for the bulk of the forecast period. For the more recent *MTRs* the CSO data up to 2004 are used for comparison purposes and the forecasts after that year are not included in this comparison. It should be noted that the CSO final figures for a year only appear quite a number of years after the first publication. Thus the latest CSO release has included significant changes in the growth rate back to 2002. It will be some time before the final figures for 2004 are available to provide a definitive benchmark against which the forecasting record can be measured.

In successive *MTR's* emphasis has been put on the forecast for the average growth rate in GNP or inflation over the forecast period rather than on the forecasts for individual years. The experience in Ireland and elsewhere is that economic forecasters are generally poor at predicting turning points in the economy. The same is true of the Medium-Term Review. However, the performance in forecasting the average growth rate over a medium-term horizon, which tends to smooth out turning points, is somewhat better.

Growth in GNP

Table A1.1 shows a number of measures of the error in successive *MTR* forecasts for GNP. Full details of the forecasts and the historical figures are given in Table A1.4.

Table A1.1: Medium-Term Forecasts of GNP Growth Rates, Percentage Points

	Average Over Forecast Period				Annual Forecast
	Average Annual Growth		Average Error	Average Absolute Error	Average Absolute Error
	MTR	CSO			
MTR 1986	2.8	3.2	0.4	0.4	1.9
MTR 1987	2.6	3.7	1.0	1.0	1.9
MTR 1989	4.9	4.4	-0.4	0.4	2.1
MTR 1991	3.4	5.0	1.6	1.6	2.7
MTR 1994	5.1	8.1	3.1	3.1	3.2
MTR 1997	5.0	6.7	1.7	1.7	2.1
MTR 1999	5.4	5.6	0.2	0.2	1.8
MTR 2001	4.9	3.9	-1.0	1.0	0.4
MTR 2003	2.7	4.5	1.8	1.8	1.0
Average for 9 MTRs			0.9	1.2	1.9

Over the nine previous *Medium-Term Reviews* the average error in the growth rate over the forecast period was 0.9 percentage points. This error is calculated by taking the average annual growth rate forecast in each review over the relevant time horizon, including the growth rate in the year the forecast was published. This growth rate is then compared to the average growth rate shown for the same period by the latest CSO national accounts figures.

On this measure, with regard to the average error, the *MTRs* have generally proved to be pessimistic in their forecasts, underestimating growth over the forecast time horizon. The forecast error was particularly large in the 1994 *Medium-Term Review*, with a very serious underestimate of the capacity of the economy to grow over the rest of the 1990s. Only two of the *MTRs* have overestimated future growth – the 1989 *MTR* which failed to predict the slowdown in the EU economy (and the resulting effects on Ireland) in the early 1990s and the 2001 *MTR* benchmark forecast prepared before September the 11th (though published after it) which overestimated the growth rate over the early years of this decade.[1]

While on average pessimistic, up to the late 1990s the *MTR's* forecasts were generally felt to be unduly optimistic at the time they were published – the general mood was even more pessimistic about future growth prospects than was the *Review*. Since the first *MTR* was published the research embodied in successive publications pointed to the Irish economy having the capacity to outperform its neighbours. The use of the standard methodology for estimating potential output, used by the EU Commission and others, which gives a high weight to past performance, tended to underestimate the growth potential of the economy over the 1990s to an even greater extent than the *MTRs*.

Probably the best measure of the forecasting accuracy is the average absolute error of the medium-term forecast in each *MTR*. For the last nine *Reviews* it averaged 1.2 percentage points. For economies such as our EU partners where the growth rate has ranged between 0 and 3 percentage points over the last ten or fifteen years such an average absolute error would seem

[1] In the case of the 2001 *MTR* it was published just after September the 11th and an alternative low growth scenario was included which, by the time of publication, looked a more likely outcome than the benchmark forecast included in Table A1.1. As it happens, that Low Growth scenario underestimated growth by almost as much as the high growth scenario overestimated growth in the period 2001-4.

high. However, over the last twenty years the Irish growth rate has ranged between -0.2 and +9.5 per cent. The standard deviation of the annual growth rate over that period was 2.8 percentage points.

The final column in Table A1.1 shows the average absolute error in the year by year forecasts in each *Review*. At 1.9 percentage points it is much higher than the error in the forecast of the average growth rate over the forecast time horizon. This highlights the fact that successive *Reviews* have been much better at forecasting the future trend of growth than in forecasting the pattern of growth over the relevant time horizon. This reflects the experience of short-term forecasting where forecasters are poor at foreseeing turning points. The advantage in medium-term forecasting is that it is less important to foresee the precise timing of the business cycle with success owing more to a proper understanding of the factors driving potential output in the economy.

Inflation

Table A1.2 examines the forecasting record for the deflator of personal consumers' expenditure over successive *Reviews*. This is probably the most appropriate measure of inflation. The standard deviation in the historical inflation rate over the period 1986 to 2004 was 1.0 per cent. This is much lower than the standard deviation of the growth rate for GNP. Over the nine *Reviews* the average error in the forecast for the chosen time horizon of each publication was 0.2 percentage points. The average absolute error over the same period was 0.7 percentage points.

Table A1.2: Medium-Term Forecasts of Inflation, Percentage Points

	Average Over Forecast Period				Annual Forecast
	Average Annual Growth		Average Error	Average Absolute Error	Average Absolute Error
	MTR	CSO			
MTR 1986	3.8	3.3	-0.5	0.5	1.1
MTR 1987	3.4	3.1	-0.3	0.3	0.4
MTR 1989	3.6	2.8	-0.8	0.8	1.0
MTR 1991	2.8	2.7	-0.1	0.1	2.2
MTR 1994	2.5	3.3	0.8	0.8	1.8
MTR 1997	2.1	4.0	1.9	1.9	1.3
MTR 1999	2.6	3.8	1.2	1.2	0.8
MTR 2001	4.0	3.6	-0.4	0.4	0.0
MTR 2003	2.7	2.6	-0.2	0.2	0.0
Average for 9 MTRs			0.2	0.7	0.9

The earlier *Reviews* tended to overestimate future inflation over a period when the inflation rate was generally falling. By contrast, the publications which covered the late 1990s and the early years of the current decade tended to underestimate the inflationary pressures. This failure was partly due to the apparent change in the underlying process for determining of inflation in Ireland, with a slower pass through of the effects of exchange rate changes than was the case in the pre-EMU period. The average absolute error in the year by year forecast was 0.9 percentage points, not much worse than the absolute error in the forecast average growth rate.

This result is not terribly satisfactory. While in the case of the growth of GNP the standard deviation of the actual growth rate was quite high over the last twenty years, it was much lower for the inflation rate. Thus the target of the inflation forecasts was inherently easier than was the case in forecasting the growth of real GNP.

Unemployment

In the case of the unemployment rate we have evaluated forecasting performance by comparing the forecast unemployed rate for the last year shown in each *Review* with the actual rate for that year.[2] As can be seen from Table A1.3, with the exception of the 1989 publication, successive *Reviews* greatly overestimated the future unemployment rate. The errors were particularly large in the period up to 1997 with a general expectation that the intractable problem of unemployment would not be solved within the forecast time horizon. This pessimism about the unemployment rate suggests a continuing failure to understand the working of the labour market up to the late 1990s.

Table A1.3: Medium-Term Forecasts of Unemployment Rate (PES), Percentage Points of the Labour Force

	Forecast for End Year of Forecast Period			
	Forecast	Actual	Average Error	Average Absolute Error
MTR 1986	18.5	13.4	-5.1	5.1
MTR 1987	18.3	15.9	-2.4	2.4
MTR 1989	12.7	15.6	2.9	2.9
MTR 1991	16	12.9	-3.1	3.1
MTR 1994	13.4	6.4	-7.0	7.0
MTR 1997	8.4	6.2	-2.2	2.2
MTR 1999	5.3	5.4	0.1	0.1
MTR 2001	5.8	5.4	-0.4	0.4
MTR 2003	5.4	5.4	0.0	0.0
Average for 9 MTRs			-1.9	2.6

Since 1997, there has been very little variation in the unemployment rate so that the much improved forecasting performance is unsurprising. Also the experience of the late 1990s, spawning significant research, has enhanced our understanding of the factors driving the behaviour of the Irish labour market.

Conclusions

In this Appendix we have assessed the forecasting performance of the last nine *Reviews*. In many cases the forecasts reflected the perception of policy-makers around the time that each forecast was made. To the extent policy makers believed the forecasts and took action to avoid potential future dangers the outturn could have been better than anticipated. However, it is not possible to assess whether such "endogeneity" in the forecasting process affected outcomes.

Looking back over nine *Reviews* the 1999 publication stands out as having had the most accurate predictions. That is in spite of the fact that its forecast horizon spanned the September 2001 terrorist attacks on the US and the collapse of the 'Dot Com' bubble. With the benefit of hindsight, in covering a full cycle of growth from peak to trough its forecast average growth rates probably had a better chance of being right.

The analysis in this Appendix indicates that the forecasts for individual years published in this *Review* should be treated with considerable caution. The authors put much more emphasis on the forecast average rate of change over the full forecast period. Past performance suggests that these average growth rates can provide some useful indications of future performance. However, even here there remains considerable uncertainty as is indicated in Chapter 6,

[2] In each case it is the PES unemployment rate for the second quarter (April) of the relevant year.

which discusses two very different scenarios for growth over the next seven years.

Table A1.4: Forecast of Annual Growth in Real GNP, %

	MTR 1986	MTR 1987	MTR 1989	MTR 1991	MTR 1994	MTR 1997	MTR 1999	MTR 2001	MTR 2003	Actual
1986	2.5									-0.2
1987	2.75									3.2
1988	3	-0.4								1.5
1989	3	3	4							5.0
1990	3	3.3	7.1							6.8
1991		3.7	5.6	2						2.8
1992		3.6	4.6	3.7						2.3
1993			4.8	4.3						3.3
1994			3.2	3.3	4.3					6.7
1995				3.6	6.9					7.3
1996				3.7	5.7					7.8
1997					4.6	5.7				9.4
1998					4.8	5.9				7.7
1999					4.7	5.3	6.3			8.5
2000					4.5	4.4	5.8			9.5
2001						3.7	5.5	6		3.9
2002						4.5	5	1.8		2.7
2003						5.3	4.9	4.2	2.4	5.1
2004							5	5.1	3	4.0

Table A1.5: Forecast of Annual Inflation Rate for Consumers' Expenditure, %

	MTR 1986	MTR 1987	MTR 1989	MTR 1991	MTR 1994	MTR 1997	MTR 1999	MTR 2001	MTR 2003	Actual
1986	4.5									3.7
1987	4									2.7
1988	4	3								4.0
1989	3.5	3	3.3							4.0
1990	3	3.7	4.2							2.0
1991		3.7	4.2	2.7						2.7
1992		3.7	3.5	2.4						3.0
1993			3	2.6						2.2
1994			3.5	3	3					2.8
1995				3.1	2.6					2.8
1996				3.1	2.3					2.7
1997					2.3	2.1				2.6
1998					2.4	1.9				4.0
1999					2.4	2.1	1.8			3.2
2000					2.4	2.2	2.2			4.8
2001						2.1	2.9	4.8		4.3
2002						2.1	2.9	3.9		5.2
2003						2.1	2.9	3.8	3.5	4.0
2004							3	3.5	2	1.2

Table A1.6: Forecast of Unemployment Rate (PES), % of Labour Force

	MTR 1986	MTR 1987	MTR 1989	MTR 1991	MTR 1994	MTR 1997	MTR 1999	MTR 2001	MTR 2003	Actual
1986	17									17.4
1987	17.5									17.6
1988	18	19.5								16.7
1989	18.25	19.1	16							15.6
1990	18.5	18.5	14.6							13.4
1991		18.2	13.4	15.8						15.5
1992		18.3	13	15.9						15.9
1993			12.8	15.7						16.6
1994			12.7	16	16.9					15.6
1995				16	16.1					13.3
1996				16	15.3					12.9
1997					14.6	10.9				11.8
1998					14.2	9.1				9.8
1999					13.7	8.3	6.5			7.6
2000					13.4	8.6	5.6			6.4
2001						8.8	5.4	3.8		5.7
2002						8.9	5.3	3.6		6.3
2003						8.4	5.4	4.3	4.9	6.4
2004							5.3	5.3	5.7	5.8

APPENDIX 2: DETAILED TABLES

HIGH GROWTH FORECAST

Table A2.1: Expenditure on GNP

	2004 €m	Volume %	Price %	2005 €m	Cont. to Growth %	Volume %	Price %	2006 €m	Cont. to Growth %
Personal Consumption	67,079	5.2	2.1	72,080	3.2	5.0	2.7	77,714	3.0
Public Consumption	20,761	3.4	4.7	22,477	0.6	3.6	5.0	24,452	0.6
Fixed Investment	36,156	7.3	2.9	39,903	1.8	4.3	1.9	42,412	1.1
Building	27,090	5.2	3.7	29,562	0.8	2.2	2.1	30,849	0.3
Machinery	9,068	10.4	3.4	10,348	1.1	7.2	4.3	11,574	0.8
Final Domestic Demand	123,997	5.4	2.8	134,460	5.5	4.6	2.8	144,578	4.7
Stock Building	793			294	0.1			286	0.1
Total Domestic Demand	124,790	5.6	2.3	134,755	5.7	4.7	2.7	144,864	4.8
Total Exports	122,301	4.6	-0.1	127,758	6.2	4.3	1.7	135,570	5.8
Merchandise	81,058	3.8	-0.9	83,378	3.7	4.2	1.3	88,020	4.1
Services	41,243	6.4	1.2	44,381	2.5	4.5	2.5	47,550	1.7
Total Demand	247,091	5.0	1.2	262,513	11.9	4.5	2.3	280,434	10.6
Total Imports	100,446	5.0	0.6	106,101	5.6	4.1	1.9	112,486	4.5
Gross Domestic Product	145,939	5.7	2.3	157,746	7.1	4.9	2.2	169,177	6.2
Net Factor Income	-23,624	6.1	-2.9	-24,323	-1.6	5.4	2.3	-26,209	-1.4
Gross National Product	122,315	5.6	3.3	133,423	5.6	4.8	2.2	142,968	4.8

	2006 €m	Volume %	Price %	2007 €m	Cont. to Growth %	Volume %	Price %	2008 €m	Cont. to Growth %
Personal Consumption	77,714	3.7	1.8	82,046	2.3	3.5	1.7	86,362	2.1
Public Consumption	24,452	3.9	2.5	26,047	0.6	3.9	2.5	27,743	0.6
Fixed Investment	42,412	2.5	1.6	44,187	0.6	3.1	2.5	46,716	0.8
Building	30,849	1.5	1.9	31,911	0.2	2.0	3.4	33,660	0.3
Machinery	11,574	3.8	2.1	12,269	0.4	4.5	1.4	13,003	0.5
Final Domestic Demand	144,578	3.5	1.8	152,280	3.5	3.5	2.1	160,822	3.5
Stock Building	286			630	-0.1			839	0.1
Total Domestic Demand	144,864	3.4	2.1	152,910	3.5	3.6	2.0	161,661	3.6
Total Exports	135,570	7.8	1.8	148,716	10.4	6.9	1.6	161,517	9.4
Merchandise	88,020	7.1	1.6	95,746	6.8	6.1	1.4	102,997	5.9
Services	47,550	9.5	1.8	52,970	3.7	8.7	1.7	58,520	3.5
Total Demand	280,434	5.9	1.6	301,626	13.9	5.5	1.6	323,178	13.0
Total Imports	112,486	5.6	1.9	120,967	6.1	5.0	1.9	129,432	5.5
Gross Domestic Product	169,177	6.2	1.2	181,887	7.8	6.0	1.2	194,975	7.5
Net Factor Income	-26,209	8.6	1.8	-28,975	-2.2	9.6	1.6	-32,270	-2.6
Gross National Product	142,968	5.6	1.3	152,912	5.6	5.0	1.4	16,2704	5.0

Table A2.1 (continued): Expenditure on GNP

	2008 €m	Volume %	Price %	2009 €m	Cont. to Growth %	Volume %	Price %	2010 €m	Cont. to Growth %
Personal Consumption	86,362	3.3	1.9	90,897	1.9	4.7	2.6	97,622	2.7
Public Consumption	27,743	3.9	2.7	29,579	0.6	3.8	3.5	31,787	0.6
Fixed Investment	46,716	2.9	3.1	49,522	0.7	4.9	4.5	54,248	1.2
Building	33,660	2.1	4.1	35,771	0.3	4.9	5.6	39,643	0.7
Machinery	13,003	3.8	1.2	13,667	0.4	4.7	1.3	14,508	0.5
Final Domestic Demand	160,822	3.3	2.4	169,998	3.2	4.6	3.3	183,657	4.4
Stock Building	839			1,013	0.1			1,163	0.1
Total Domestic Demand	161,661	3.4	2.4	171,011	3.3	4.6	3.3	184,820	4.5
Total Exports	161,517	6.9	1.6	175,361	9.6	6.4	1.9	190,136	9.1
Merchandise	102,997	6.1	1.1	110,526	6.0	5.6	1.3	118,204	5.5
Services	58,520	8.7	1.9	64,836	3.6	8.1	2.6	71,932	3.5
Total Demand	323,178	5.4	1.7	346,372	12.9	5.7	2.5	374,956	13.6
Total Imports	129,432	5.3	1.9	138,882	5.8	5.7	1.9	149,568	6.3
Gross Domestic Product	194,975	5.5	1.4	208,718	7.1	5.6	2.8	226,617	7.3
Net Factor Income	-32,270	8.7	1.6	-35,624	-2.4	9.2	1.9	-39,656	-2.7
Gross National Product	162,704	4.7	1.6	173,095	4.7	4.6	3.3	186,961	4.6

	2010 €m	Volume %	Price %	2011 €m	Cont. to Growth %	Volume %	Price %	2012 €m	Cont. to Growth %
Personal Consumption	97,622	4.1	3.1	104,809	2.4	3.7	3.6	112,650	2.1
Public Consumption	31,787	3.5	4.2	34,274	0.5	3.5	5.4	37,388	0.5
Fixed Investment	54,248	4.3	4.6	59,189	1.0	3.8	4.9	64,480	0.9
Building	39,643	4.5	5.7	43,784	0.6	4.0	5.9	48,200	0.5
Machinery	14,508	4.0	1.5	15,316	0.4	3.6	1.9	16,178	0.4
Final Domestic Demand	183,657	4.0	3.8	198,272	3.9	3.7	4.3	214,518	3.6
Stock Building	1,163			1,240	0.0			1,301	0.0
Total Domestic Demand	184,820	4.1	3.7	199,512	3.9	3.7	4.3	215,819	3.6
Total Exports	190,136	5.8	2.2	205,508	8.3	5.2	2.4	221,299	7.6
Merchandise	118,204	5.0	1.3	125,790	5.0	4.4	1.3	133,111	4.5
Services	71,932	7.4	3.1	79,718	3.3	6.7	3.6	88,189	3.1
Total Demand	374,956	5.1	2.8	405,020	12.3	4.6	3.2	437,118	11.2
Total Imports	149,568	5.6	1.9	160,875	6.2	5.1	1.9	172,306	5.8
Gross Domestic Product	226,617	4.7	3.4	245,373	6.1	4.1	4.1	266,040	5.4
Net Factor Income	-39,656	5.7	2.2	-42,833	-1.7	6.2	2.4	-46,561	-1.9
Gross National Product	186,961	4.4	3.8	202,540	4.4	3.5	4.7	219,480	3.5

Table A2.2: Output

	2004 €m	Volume %	Price %	2005 €m	Cont. to Growth %	Volume %	Price %	2006 €m	Cont. to Growth %
Agriculture	3,687	-0.5	0.5	3,685	0.0	-0.6	1.2	3,707	0.0
Industry	48,382	5.6	1.4	51,788	2.8	4.0	2.7	55,287	2.0
Manufacturing	34,673	5.4	1.1	36,951	2.3	3.9	3.1	39,606	1.7
Utilities	1,517	8.0	-1.3	1,618	0.1	6.8	-1.6	1,700	0.1
Building	12,192	6.1	2.2	13,220	0.4	3.5	2.2	13,981	0.2
Market Services	59,007	7.5	4.0	66,005	3.5	5.2	1.6	70,592	2.5
Distribution	13,842	6.4	2.4	15,090	0.7	4.8	2.0	16,133	0.6
Transport & Communications	7,545	6.5	2.5	8,232	0.4	4.8	2.0	8,800	0.3
Other Market Services	37,620	8.3	4.8	42,684	2.3	5.5	1.4	45,659	1.6
Non-Market Services	17,172	3.3	4.3	18,495	0.4	3.6	3.2	19,765	0.4
Health & Education	12,415	3.4	4.5	13,407	0.3	3.0	3.4	14,279	0.3
Public Administration	4,757	3.0	3.8	5,088	0.1	5.0	2.7	5,486	0.2
GDP at Factor Cost	128,953	5.3	2.1	138,640	5.9	4.4	2.4	148,123	4.9
Taxes on Expenditure	19,639	8.7	3.0	21,993	1.4	7.9	1.1	23,980	1.3
Subsidies	2,652	7.2	1.5	2,887	0.2	-0.6	2.0	2,927	0.0
GDP at Market Prices	145,939	5.7	2.3	157,746	7.1	4.9	2.2	169,177	6.2
Net Factor Income	-23,624	6.1	-2.9	-24,323	-1.6	5.4	2.3	-26,209	-1.4
GNP at Market Prices	122,315	5.6	3.3	133,423	5.6	4.8	2.2	142,968	4.8

	2006 €m	Volume %	Price %	2007 €m	Cont. to Growth %	Volume %	Price %	2008 €m	Cont. to Growth %
Agriculture	3,707	1.8	1.1	3,815	0.1	2.3	3.0	4,020	0.1
Industry	55,287	8.4	0.7	60,305	4.2	7.8	0.4	65,257	4.0
Manufacturing	39,606	8.5	1.1	43,446	3.5	8.0	-0.2	46,848	3.5
Utilities	1,700	5.9	6.9	1,924	0.1	7.3	-4.5	1,971	0.1
Building	13,981	8.3	-1.4	14,935	0.5	6.1	3.7	16,438	0.4
Market Services	70,592	5.3	0.7	74,890	2.5	5.2	0.8	79,439	2.4
Distribution	16,133	4.2	0.2	16,853	0.5	4.4	0.0	17,593	0.5
Transport & Communications	8,800	5.0	0.6	9,296	0.3	5.2	0.8	9,853	0.4
Other Market Services	45,659	5.8	0.9	48,741	1.7	5.5	1.1	51,993	1.6
Non-Market Services	19,765	4.2	4.1	21,430	0.5	4.1	4.0	23,199	0.5
Health & Education	14,279	4.0	4.4	15,502	0.3	4.0	4.2	16,805	0.3
Public Administration	5,486	4.6	3.3	5,927	0.1	4.4	3.3	6,395	0.1
GDP at Factor Cost	148,123	6.5	0.9	159,211	7.2	6.2	0.9	170,687	7.0
Taxes on Expenditure	23,980	3.8	3.0	25,636	0.6	3.6	2.8	27,285	0.6
Subsidies	2,927	1.9	-0.7	2,960	0.1	2.1	-0.9	2,997	0.1
GDP at Market Prices	169,177	6.2	1.2	181,887	7.8	6.0	1.2	194,975	7.5
Net Factor Income	-26,209	8.6	1.8	-2,8975	-2.2	9.6	1.6	-32,270	-2.6
GNP at Market Prices	142,968	5.6	1.3	152,912	5.6	5.0	1.4	162,704	5.0

Table A2.2 (continued): Output

	2008 €m	Volume %	Price %	2009 €m	Cont. to Growth %	Volume %	Price %	2010 €m	Cont. to Growth %
Agriculture	4,020	1.3	3.1	4,197	0.1	1.8	2.4	4,377	0.1
Industry	65,257	6.9	1.1	70,484	3.6	6.3	1.9	76,368	3.4
Manufacturing	46,848	7.6	-0.5	50,118	3.3	7.3	-0.3	53,578	3.3
Utilities	1,971	5.2	6.5	2,210	0.1	1.8	-21.1	1,777	0.0
Building	16,438	2.7	7.5	18,156	0.2	0.8	14.8	21,013	0.1
Market Services	79,439	5.1	0.8	84,191	2.4	5.6	1.6	90,312	2.6
Distribution	17,593	4.3	0.1	18,365	0.5	5.6	0.4	19,480	0.6
Transport & Communications	9,853	5.3	0.8	10,464	0.4	6.0	0.9	11,191	0.4
Other Market Services	51,993	5.4	1.0	55,362	1.6	5.5	2.1	59,640	1.6
Non-Market Services	23,199	4.1	4.0	25,107	0.5	4.1	4.8	27,370	0.5
Health & Education	16,805	4.0	4.2	18,211	0.3	4.0	5.0	19,878	0.3
Public Administration	6,395	4.3	3.4	6,896	0.1	4.2	4.3	7,492	0.1
GDP at Factor Cost	170,687	5.8	1.2	182,751	6.6	5.7	2.1	197,198	6.6
Taxes on Expenditure	27,285	3.4	2.9	29,006	0.6	4.6	7.2	32,520	0.8
Subsidies	2,997	1.5	-0.1	3,039	0.0	2.2	-0.1	3,101	0.1
GDP at Market Prices	194,975	5.5	1.4	208,718	7.1	5.6	2.8	226,617	7.3
Net Factor Income	-32,270	8.7	1.6	-35,624	-2.4	9.2	1.9	-39,656	-2.7
GNP at Market Prices	162,704	4.7	1.6	173,095	4.7	4.6	3.3	186,961	4.6

	2010 €m	Volume %	Price %	2011 €m	Cont. to Growth	Volume %	Price %	2012 €m	Cont. to Growth %
Agriculture	4,377	1.1	3.2	4,566	0.0	1.1	3.0	4,753	0.0
Industry	76,368	4.7	3.6	82,796	2.5	4.3	1.1	87,314	2.3
Manufacturing	53,578	5.5	-1.0	55,984	2.6	4.7	-1.1	57,980	2.2
Utilities	1,777	0.8	52.9	2,737	0.0	9.6	-33.8	1,985	0.2
Building	21,013	-0.5	15.1	24,076	0.0	-1.4	15.2	27,349	-0.1
Market Services	90,312	5.1	2.4	97,258	2.5	4.3	5.8	107,293	2.1
Distribution	19,480	5.0	0.9	20,645	0.6	4.6	1.5	21,916	0.5
Transport & Communications	11,191	5.5	0.9	11,919	0.4	5.0	1.0	12,632	0.3
Other Market Services	59,640	5.1	3.2	64,695	1.5	4.0	8.1	72,745	1.2
Non-Market Services	27,370	3.6	5.5	29,907	0.4	3.6	6.4	32,968	0.4
Health & Education	19,878	4.0	5.6	21,836	0.3	4.0	6.5	24,197	0.3
Public Administration	7,492	2.6	5.0	8,071	0.1	2.5	6.0	8,772	0.1
GDP at Factor Cost	197,198	4.7	3.3	213,300	5.5	4.2	4.0	231,100	4.8
Taxes on Expenditure	32,520	4.0	4.3	35,285	0.7	3.7	4.7	38,279	0.6
Subsidies	3,101	1.4	2.1	3,211	0.0	1.3	2.7	3,339	0.0
GDP at Market Prices	226,617	4.7	3.4	245,373	6.1	4.1	4.1	266,040	5.4
Net Factor Income	-39,656	5.7	2.2	-42,833	-1.7	6.2	2.4	-46,561	-1.9
GNP at Market Prices	186,961	4.4	3.8	202,540	4.4	3.5	4.7	219,480	3.5

Table A2.3: National Income and National Product, Current Prices, € million

	2004	2005	2006	2007	2008	2009	2010	2011	2012
Agricultural Incomes	2,998	3,035	3,097	3,190	3,387	3,556	3,726	3,900	4,070
Non-Agric. Wage Income	58,701	64,562	69,248	73,700	78,690	84,097	90,973	98,508	107,327
Non-Agric. Profits Net	51,505	53,897	57,806	63,057	67,981	73,018	78,823	85,706	92,806
Non-Agric. Profits Gross	51,196	54,406	58,256	63,563	68,484	73,547	79,383	86,298	93,429
Adjustment for Stock Appreciation	-309	509	450	507	503	529	560	592	623
Domestic Income	113,204	121,494	130,151	139,947	150,057	160,670	173,522	188,114	204,203
Depreciation	15,749	17,146	17,972	19,265	20,629	22,081	2,3675	25,186	26,897
GDP (Factor Cost)	128,953	138,640	148,123	159,211	170,687	182,751	197,198	213,300	231,100
Taxes on Expenditure	19,639	21,993	23,980	25,636	27,285	29,006	32,520	35,285	38,279
Domestic	19,23	21,263	23,160	24,743	26,313	27,946	31,360	34,039	36,935
EC	316	730	820	893	972	1,060	1,160	1,246	1,343
Subsidies (-)	2,652	2,887	2,27	2,960	2,997	3,039	3,01	3,211	3,339
Domestic	864	905	920	957	1,001	1,047	1,103	1,161	1,224
EC	1,788	1,982	2,007	2,04	1,996	1,992	1,999	2,050	2,115
GDP (Market Prices)	145,939	157,746	169,177	181,887	194,975	208,718	226,617	245,373	266,040
Net Factor Income	-23,624	-24,323	-26,209	-28,975	-32,270	-35,624	-39,656	-42,833	-46,561
Gross National Product	122,315	133,423	142,968	152,912	162,704	173,095	186,961	202,540	219,480

Table A2.4: Personal Income and Personal Expenditure, Current Prices, € million

	2004	2005	2006	2007	2008	2009	2010	2011	2012
Agricultural Incomes	2,998	3,035	3,097	3,190	3,387	3,556	3,726	3,900	4,070
Non-Agric. Wage Income	58,701	64,562	69,248	73,700	78,690	84,097	90,973	98,508	107,327
Transfer Income	15,498	18,038	18,757	19,886	21,026	22,238	23,624	25,438	2,7621
Domestic	15,457	17,534	18,024	19,120	2,0231	21,413	22,753	24,515	26,633
Foreign	41	504	733	766	795	826	871	924	988
Other Personal Income	15,703	15,460	16,564	16,890	16,842	16,888	17,032	17,926	18,556
Non-Agricultural Profits	51,196	54,406	58,256	63,563	68,484	73,547	79,383	86,298	93,429
National Debt Interest	1,747	1,790	1,828	1,680	1,703	1,724	1,743	1,746	1,751
Net Factor Income	-23,624	-24,323	-26,209	-28,975	-32,270	-35,624	-39,656	-42,833	-46,561
Government Trading & Investment Income (-)	1,246	1,450	1,800	1,925	2,048	2,179	2,354	2,550	2,763
Other Private Income	28,073	30,423	32,075	34,343	35,868	37,469	39,116	42,661	45,856
Undistributed Profits (-)	12,370	14,962	15,510	17,453	19,026	20,581	22,085	24,735	27,301
Personal Income	92,900	101,096	107,666	113,666	119,944	126,779	135,355	145,772	157,573
Taxes on Personal Income	17,616	18,887	20,441	21,506	22,656	24,032	24,185	25,614	27,780
Personal Disposable Income	75,284	82,209	87,225	92,160	97,288	102,747	111,170	120,158	129,793
Personal Consumption	67,079	72,080	77,714	82,046	86,362	90,897	97,622	104,809	112,650
Personal Savings	8,205	10,129	9,511	10,114	10,926	11,850	13,549	15,349	17,143
Tax Ratio (% Personal Income)	19.0	18.7	19.0	18.9	18.9	19.0	17.9	17.6	17.6
Savings Ratio (% of Disposable Income)	10.9	12.3	10.9	11.0	11.2	11.5	12.2	12.8	13.2

Table A2.5: Balance of Payments, Current Prices, € million

	2004	2005	2006	2007	2008	2009	2010	2011	2012
Exports – Total	122,301	127,758	135,570	148,716	161,517	175,361	190,136	205,508	221,299
Merchandise	81,058	83,378	88,020	95,746	102,997	110,526	118,204	125,790	133,111
Services	41,243	44,381	47,550	52,970	58,520	64,836	71,932	79,718	88,189
Imports – Total	100,446	106,101	112,486	120,967	129,432	138,882	149,568	160,875	172,306
Balance of Trade	21,855	21,658	23,084	27,750	32,086	36,479	40,568	44,633	48,993
as % of GNP	17.9	16.2	16.1	18.1	19.7	21.1	21.7	22.0	22.3
International Transfers									
EC Subsidies	1,788	1,982	2,007	2,004	1,996	1,992	1,999	2,050	2,115
EC Taxes (-)	316	730	820	893	972	1,060	1,160	1,246	1,343
Government Payments (-)	1,484	1,721	1,900	2,043	2,191	2,355	2,558	2,769	3,008
Government Receipts	277	174	130	139	148	157	170	184	200
Private Transfers	41	504	733	766	795	826	871	924	988
Net International Transfers	306	209	150	-28	-225	-440	-679	-857	-1,049
Factor Income Flows	-23,624	-24,323	-26,209	-28,975	-32,270	-35,624	-39,656	-42,833	-46,561
National Debt Interest (-)	1,554	1,664	1,770	1,660	1,666	1,672	1,677	1,675	1,674
Profits etc. Outflows (-)	26,348	28,156	30,564	32,835	35,198	37,679	40,910	43,315	45,899
Other Factor income	4,279	5,497	6,125	5,520	4,594	3,727	2,932	2,156	1,012
Current Account Balance	-1,463	-2,456	-2,974	-1,254	-410	416	234	943	1,384
as % of GNP	-1.2	-1.8	-2.1	-0.8	-0.3	0.2	0.1	0.5	0.6
Capital Transfers	401	360	340	355	369	383	404	428	458
Effective Current Balance	-1,062	-2,096	-2,634	-898	-41	799	638	1371	1,842
as % of GNP	-0.9	-1.6	-1.8	-0.6	0.0	0.5	0.3	0.7	0.8

Table A2.6: National Debt, Current prices, € million

	2004	2005	2006	2007	2008	2009	2010	2011	2012
Total Government Securities	19,568	19,578	19,544	19,614	19,636	19,653	19,720	19,796	19,876
Other Borrowing from Central Bank	5,781	5,781	5,781	6,183	6,579	6,999	7,560	8,190	8,875
Small Savings	4,518	4,518	4,517	4,478	4,431	4,374	4,318	4,253	4,181
Total Debt Held Domestically	16,799	16,809	16,774	17,207	17,577	17,958	18,530	19,171	19,863
Total € Debt	29,867	29,877	29,842	30,275	30,645	31,026	31,598	32,239	32,931
Foreign Debt:									
Foreign Currency	-5	-46	97	217	389	540	473	404	329
Government Securities	13,068	13,068	13,068	13,068	13,068	13,068	13,068	13,068	13,068
Total Foreign Debt	13,063	13,022	13,165	13,285	13,457	13,608	13,541	13,472	13,397
Total National Debt	29,862	29,831	29,939	30,492	31,034	31,565	32,071	32,643	33,261
General Government Debt	47,261	48,072	47,596	48,150	48,692	49,223	49,728	50,300	50,918
Other Bank Borrowing	-1,300	-1,300	-1,300	-1,390	-1,479	-1,574	-1,700	-1,842	-1,996
Debt Ratios (% of GNP)									
Total National Debt	24.4	22.4	20.9	19.9	19.1	18.2	17.2	16.1	15.2
General Government Debt	38.6	36.0	33.3	31.5	29.9	28.4	26.6	24.8	23.2
Total Domestic Debt	13.7	12.6	11.7	11.3	10.8	10.4	9.9	9.5	9.1
Total Foreign Debt	10.7	9.8	9.2	8.7	8.3	7.9	7.2	6.7	6.1
Total € Debt	24.4	22.4	20.9	19.8	18.8	17.9	16.9	15.9	15.0
Total Foreign Currency Debt	0.0	0.0	0.1	0.1	0.2	0.3	0.3	0.2	0.2
Debt Ratios (% of GDP)									
Total National Debt	20.5	18.9	17.7	16.8	15.9	15.1	14.2	13.3	12.5
General Government Debt	32.4	30.5	28.1	26.5	25.0	23.6	21.9	20.5	19.1
Total Foreign Debt	9.0	8.3	7.8	7.3	6.9	6.5	6.0	5.5	5.0

Table A2.7: Public Authorities Accounts, Current Prices, € million

	2004	2005	2006	2007	2008	2009	2010	2011	2012
Taxes on Income and Wealth	22,972	24,336	26,384	27,873	29,606	31,522	32,231	34,301	37,227
Company	5,365	5,458	5,953	6,376	6,960	7,501	8,058	8,700	9,461
Personal	17,607	18,878	20,431	21,496	22,646	24,021	24,173	25,601	27,766
Taxes on Expenditure	19,323	21,263	23,160	24,743	26,313	27,946	31,360	34,039	36,935
Gross	19,332	21,687	23,674	25,324	26,966	28,680	32,187	34,945	37,935
EC Budget Contribution (-)	9	423	513	581	653	734	827	907	1,000
Net Trading & Investment Income	1,246	1,450	1,800	1,925	2,048	2,179	2,354	2,550	2,763
Transfers From Abroad	277	174	130	139	148	157	170	184	200
Total Current Receipts	43,827	47,232	51,484	54,690	58,126	61,816	66,127	71,087	77,139
Subsidies	864	905	920	957	1,001	1,047	1,103	1,161	1,224
National Debt Interest	1,747	1,790	1,828	1,680	1,703	1,724	1,743	1,746	1,751
Other Transfer Payments	16,941	19,255	19,924	21,163	22,422	23,768	25,312	27,283	29,641
Foreign	1,484	1,721	1,900	2,043	2,191	2,355	2,558	2,769	3,008
Residents	15,457	17,534	18,024	19,120	20,231	21,413	22,753	24,515	26,633
Public Consumption	20,761	22,477	24,452	26,047	27,743	29,579	31,787	34,274	37,388
Total Current Expenditure	40,313	44,427	47,123	49,847	52,870	56,118	59,944	64,465	70,004
Public Authorities Savings (net)	3,514	2,805	4,361	4,843	5,256	5,699	6,183	6,623	7,135
as % of GNP	2.9	2.1	3.1	3.2	3.2	3.3	3.3	3.3	3.3
Total Capital Receipts	2,895	2,964	3,045	3,083	3,119	3,164	3,252	3,364	3,502
Grants – Housing	98	100	102	104	110	117	134	151	169
Grants – Industry	57	59	62	65	69	73	77	81	86
Investment	6,133	6,572	7,044	7,410	7,792	8,207	8,673	9,196	9,784
Other Capital Expenditure	746	943	857	900	946	997	1,058	1,131	1,216
Total Capital Expenditure	7,033	7,675	8,065	8,480	8,917	9,395	9,943	10,559	11,256
Borrowing for Capital Purposes	-4,139	-4,711	-5,019	-5,397	-5,798	-6,231	-6,691	-7,195	-7,754
Total Borrowing	-625	-1,906	-659	-554	-543	-532	-507	-573	-619
as % of GNP	-0.5	-1.4	-0.5	-0.4	-0.3	-0.3	-0.3	-0.3	-0.3
Budgetary Definitions									
Exchequer Surplus	112	-2,008	-1,942	-1,838	-1827	-1816	-1,791	-1,857	-1,903
as % of GNP	0.1	-1.5	-1.4	-1.2	-1.1	-1.0	-1.0	-0.9	-0.9
Current Budget Surplus	5,699	5,141	5,157	5,639	6,052	6,495	6,979	7,419	7,931
as % of GNP	4.7	3.9	3.6	3.7	3.7	3.8	3.7	3.7	3.6
EU Definitions									
General Government Balance	-2,117	811	-476	-581	-592	-602	-627	-562	-516
as % of GDP	-1.5	0.5	-0.3	-0.3	-0.3	-0.3	-0.3	-0.2	-0.2
as % of GNP	-1.7	0.6	-0.3	-0.4	-0.4	-0.3	-0.3	-0.3	-0.2

Table A2.8: Employment and the Labour Force, Thousands, Mid-April

	2004	2005	2006	2007	2008	2009	2010	2011	2012
Agriculture	114	110	109	105	102	100	97	94	92
Industry	504	526	531	530	536	543	557	565	569
Manufacturing:									
Traditional	98	98	98	97	96	96	95	93	90
Food Processing	47	48	47	47	46	45	44	43	41
High Technology	141	133	130	132	135	140	145	147	147
Manufacturing	286	278	275	276	278	281	284	282	278
Utilities	13	13	14	14	14	14	14	14	13
Building	204	234	242	241	244	248	259	269	278
Market Services	754	802	826	850	875	902	932	961	990
Distribution	260	277	287	291	294	297	302	306	307
Transport & Communications	112	112	112	113	116	119	121	123	123
Other Market Services	382	413	427	446	465	486	508	533	560
Non-Market Services	402	415	429	446	463	481	500	518	536
Health & Education	307	317	327	340	353	367	382	397	413
Public Administration	95	98	103	106	110	114	118	120	123
Total Employment	1,774	1,853	1,895	1,931	1,977	2,026	2,086	2,138	2,187
Unemployment	109	105	110	124	126	123	107	101	88
Labour Force	1,883	1,958	2,005	2,055	2,103	2,149	2,193	2,240	2,274

APPENDIX 3: DETAILED TABLES

LOW GROWTH FORECAST

Table A3.1: Expenditure on GNP

	2004 €m	Volume %	Price %	2005 €m	Cont. to Growth %	Volume %	Price %	2006 €m	Cont. to Growth %
Personal Consumption	67,079	5.2	2.1	72,080	3.2	5.0	2.7	77,714	3.0
Public Consumption	20,761	3.4	4.7	22,477	0.6	3.6	5.0	24,452	0.6
Fixed Investment	36,156	7.3	2.9	39,903	1.8	4.3	1.9	42,412	1.1
Building	27,090	5.2	3.7	29,562	0.8	2.2	2.1	30,849	0.3
Machinery	9,068	10.4	3.4	10,348	1.1	7.2	4.3	11,574	0.8
Final Domestic Demand	123,997	5.4	2.8	134,460	5.5	4.6	2.8	144,578	4.7
Stock Building	793			294	0.1			286	0.1
Total Domestic Demand	124,790	5.6	2.3	134,755	5.7	4.7	2.7	144,864	4.8
Total Exports	122,301	4.6	-0.1	127,758	6.2	4.3	1.7	135,570	5.8
Merchandise	81,058	3.8	-0.9	83,378	3.7	4.2	1.3	88,020	4.1
Services	41,243	6.4	1.2	44,381	2.5	4.5	2.5	47,550	1.7
Total Demand	247,091	5.0	1.2	262,513	11.9	4.5	2.3	280,434	10.6
Total Imports	100,446	5.0	0.6	106,101	5.6	4.1	1.9	112,486	4.5
Gross Domestic Product	145,939	5.7	2.3	157,746	7.1	4.9	2.2	169,177	6.2
Net Factor Income	-23,624	6.1	-2.9	-24,323	-1.6	5.4	2.3	-26,209	-1.4
Gross National Product	122,316	5.6	3.3	133,423	5.6	4.8	2.2	142,968	4.8

	2006 €m	Volume %	Price %	2007 €m	Cont. to Growth %	Volume %	Price %	2008 €m	Cont. to Growth %
Personal Consumption	77,714	2.8	1.9	81,435	1.7	2.1	1.9	84,742	1.3
Public Consumption	24,452	2.9	2.6	25,832	0.5	2.9	2.7	27,297	0.4
Fixed Investment	42,412	1.8	1.1	43,661	0.5	1.8	0.9	44,882	0.5
Building	30,849	0.7	1.2	31,446	0.1	0.5	1.2	31,974	0.1
Machinery	11,574	3.2	2.1	12,195	0.3	3.6	1.5	12,820	0.4
Final Domestic Demand	144,578	2.6	1.8	150,928	2.6	2.2	1.8	156,921	2.2
Stock Building	286			529	-0.1			653	0.1
Total Domestic Demand	144,864	2.4	2.1	151,456	2.5	2.2	1.8	157,574	2.3
Total Exports	135,570	5.4	1.4	144,807	7.2	4.6	1.7	154,040	6.2
Merchandise	88,020	4.9	0.9	93,183	4.7	4.0	1.4	98,342	3.9
Services	47,550	6.5	1.9	51,624	2.5	5.9	1.9	55,697	2.3
Total Demand	280,434	4.1	1.5	296,264	9.7	3.6	1.5	311,614	8.5
Total Imports	112,486	3.7	1.9	118,871	4.1	2.9	1.9	124,639	3.2
Gross Domestic Product	169,177	4.4	1.1	178,620	5.6	4.2	1.1	188,203	5.3
Net Factor Income	-26,209	6.8	1.4	-28,385	-1.8	7.3	1.7	-30,975	-1.9
Gross National Product	142,968	3.8	1.2	150,235	3.8	3.4	1.2	157,228	3.4

Table A3.1 (continued): Expenditure on GNP

	2008 €m	Volume %	Price %	2009 €m	Cont. to Growth %	Volume %	Price %	2010 €m	Cont. to Growth %
Personal Consumption	84,742	1.1	1.9	87,322	0.7	2.2	2.2	91,170	1.3
Public Consumption	27,297	2.9	2.4	28,751	0.4	2.9	2.5	30,299	0.4
Fixed Investment	44,882	1.0	0.9	45,726	0.2	2.8	1.6	47,741	0.7
Building	31,974	-0.2	1.1	32,268	0.0	2.2	1.9	33,602	0.3
Machinery	12,820	2.5	1.3	13,309	0.3	3.4	1.3	13,946	0.4
Final Domestic Demand	156,921	1.3	1.7	161,800	1.3	2.4	2.1	169,210	2.4
Stock Building	653			741	0.1			823	0.0
Total Domestic Demand	157,574	1.4	1.7	162,540	1.4	2.5	2.1	170,033	2.4
Total Exports	154,040	4.7	1.6	163,855	6.4	4.5	1.8	174,393	6.3
Merchandise	98,342	4.1	1.3	103,656	3.9	3.9	1.4	109,236	3.8
Services	55,697	6.0	1.9	60,199	2.5	5.9	2.2	65,158	2.5
Total Demand	311,614	3.3	1.4	326,395	7.8	3.7	1.8	344,426	8.7
Total Imports	124,639	3.0	1.9	130,747	3.2	3.5	1.9	137,815	3.8
Gross Domestic Product	188,203	3.6	1.0	196,876	4.6	3.8	1.7	207,839	4.9
Net Factor Income	-30,975	6.8	1.6	-33,621	-1.9	6.9	1.8	-36,613	-2.0
Gross National Product	157,228	2.7	1.1	163,255	2.7	3.0	1.9	171,226	3.0

	2010 €m	Volume %	Price %	2011 €m	Cont. to Growth %	Volume %	Price %	2012 €m	Cont. to Growth %
Personal Consumption	91,170	1.8	2.1	94,767	1.0	1.9	2.0	98,418	1.1
Public Consumption	30,299	2.1	2.1	31,581	0.3	2.1	2.3	32,980	0.3
Fixed Investment	47,741	2.6	1.5	49,726	0.6	2.6	1.6	51,865	0.6
Building	33,602	2.1	1.8	34,937	0.3	2.1	1.9	36,342	0.3
Machinery	13,946	3.2	1.3	14,579	0.3	3.3	1.5	15,285	0.4
Final Domestic Demand	169,210	2.1	2.0	176,074	2.0	2.1	2.0	183,263	2.0
Stock Building	823			863	0.0			923	0.0
Total Domestic Demand	170,033	2.1	2.0	176,937	2.0	2.1	1.9	184,186	2.0
Total Exports	174,393	4.4	1.9	185,488	6.3	4.4	1.8	197,161	6.3
Merchandise	109,236	3.8	1.5	115,050	3.7	3.7	1.5	121,102	3.7
Services	65,158	5.9	2.1	70,438	2.5	5.9	2.0	76,059	2.6
Total Demand	344,426	3.5	1.7	362,425	8.3	3.5	1.7	381,347	8.3
Total Imports	137,815	3.7	1.9	145,667	4.1	3.8	1.9	154,030	4.2
Gross Domestic Product	207,839	3.2	1.6	217,986	4.2	3.2	1.6	228,546	4.2
Net Factor Income	-36,613	3.1	1.9	-38,449	-0.9	3.0	1.8	-40,321	-0.9
Gross National Product	171,226	3.3	1.5	17,-9537	3.3	3.3	1.5	188,225	3.3

Table A3.2: Output

	2004 €m	Volume %	Price %	2005 €m	Cont. to Growth %	Volume %	Price %	2006 €m	Cont. to Growth %
Agriculture	3,687	-0.5	0.5	3,685	0.0	-0.6	1.2	3,707	0.0
Industry	48,382	5.6	1.4	51,788	2.8	4.0	2.7	55,287	2.0
Manufacturing	34,673	5.4	1.1	36,951	2.3	3.9	3.1	39,606	1.7
Utilities	1,517	8.0	-1.3	1,618	0.1	6.8	-1.6	1,700	0.1
Building	12,192	6.1	2.2	13,220	0.4	3.5	2.2	13,981	0.2
Market Services	59,007	7.5	4.0	66,005	3.5	5.2	1.6	70,592	2.5
Distribution	13,842	6.4	2.4	15,090	0.7	4.8	2.0	16,133	0.6
Transport & Communications	7,545	6.5	2.5	8,232	0.4	4.8	2.0	8,800	0.3
Other Market Services	37,620	8.3	4.8	42,684	2.3	5.5	1.4	45,659	1.6
Non-Market Services	17,172	3.3	4.3	18,495	0.4	3.6	3.2	19,765	0.4
Health & Education	12,415	3.4	4.5	13,407	0.3	3.0	3.4	14,279	0.3
Public Administration	4,757	3.0	3.8	5,088	0.1	5.0	2.7	5,486	0.2
GDP at Factor Cost	128,953	5.3	2.1	138,640	5.9	4.4	2.4	148,123	4.9
Taxes on Expenditure	19,639	8.7	3.0	21,993	1.4	7.9	1.1	23,980	1.3
Subsidies	2,652	7.2	1.5	2,887	0.2	-0.6	2.0	2,927	0.0
GDP at Market Prices	145,939	5.7	2.3	157,746	7.1	4.9	2.2	169,177	6.2
Net Factor Income	-23,624	6.1	-2.9	-24,323	-1.6	5.4	2.3	-26,209	-1.4
GNP at Market Prices	122,316	5.6	3.3	133,423	5.6	4.8	2.2	142,968	4.8

	2006 €m	Volume %	Price %	2007 €m	Cont. to Growth %	Volume %	Price %	2008 €m	Cont. to Growth %
Agriculture	3,707	1.8	1.4	3,829	0.1	2.3	3.0	4,032	0.1
Industry	55,287	5.4	-1.1	57,632	2.7	5.3	-1.3	59,866	2.7
Manufacturing	39,606	4.9	-1.1	41,094	2.0	4.9	-0.9	42,719	2.0
Utilities	1,700	5.8	7.1	1,927	0.1	7.2	-4.1	1,981	0.1
Building	13,981	8.7	-3.9	14,611	0.5	7.3	-3.3	15,166	0.5
Market Services	70,592	4.4	1.4	74,709	2.1	4.1	1.7	79,093	1.9
Distribution	16,133	3.3	0.3	16,719	0.4	3.1	0.1	17,249	0.4
Transport & Communications	8,800	4.0	0.6	9,210	0.3	3.8	0.8	9,635	0.3
Other Market Services	45,659	4.9	1.9	48,780	1.4	4.5	2.4	52,210	1.3
Non-Market Services	19,765	2.8	4.2	21,183	0.3	2.8	4.2	22,684	0.3
Health & Education	14,279	2.5	4.6	15,303	0.2	2.5	4.5	16,388	0.2
Public Administration	5,486	3.6	3.5	5,880	0.1	3.4	3.5	6,296	0.1
GDP at Factor Cost	148,123	4.6	0.8	156,125	5.1	4.4	0.8	164,448	5.0
Taxes on Expenditure	23,980	2.8	3.1	25,420	0.5	2.2	2.7	26,684	0.4
Subsidies	2,927	1.3	-1.4	2,925	0.0	1.5	-1.3	2,928	0.0
GDP at Market Prices	169,177	4.4	1.1	178,620	5.6	4.2	1.1	188,203	5.3
Net Factor Income	-26,209	6.8	1.4	-28,385	-1.8	7.3	1.7	-30,975	-1.9
GNP at Market Prices	142,968	3.8	1.2	150,235	3.8	3.4	1.2	157,228	3.4

Table A3.2 (continued): Output

	2008 €m	Volume %	Price %	2009 €m	Cont. to Growth	Volume %	Price %	2010 €m	Cont. to Growth %
Agriculture	4,032	1.3	3.0	4,210	0.1	1.8	2.5	4,392	0.1
Industry	59,866	4.4	-1.0	61,873	2.3	4.3	-0.7	64,078	2.2
Manufacturing	42,719	4.6	-1.1	44,189	2.0	4.8	-0.8	45,979	2.1
Utilities	1,981	5.2	6.5	2,220	0.1	1.7	-21.3	1,777	0.0
Building	15,166	3.1	-1.1	15,464	0.2	1.5	4.0	16,321	0.1
Market Services	79,093	3.7	1.3	83,083	1.8	4.1	1.3	87,657	2.0
Distribution	17,249	2.4	0.1	17,672	0.3	3.5	0.1	18,307	0.4
Transport & Communications	9,635	3.5	0.8	10,056	0.2	4.1	0.9	10,560	0.3
Other Market Services	52,210	4.2	1.7	55,355	1.2	4.4	1.8	58,790	1.3
Non-Market Services	22,684	2.7	3.7	24,168	0.3	2.7	3.6	25,725	0.3
Health & Education	16,388	2.5	3.9	17,460	0.2	2.5	3.8	18,584	0.2
Public Administration	6,296	3.3	3.2	6,708	0.1	3.2	3.2	7,140	0.1
GDP at Factor Cost	164,448	3.9	0.8	172,105	4.4	4.0	0.9	180,623	4.6
Taxes on Expenditure	26,684	1.3	2.5	27,700	0.2	2.3	6.5	30,151	0.4
Subsidies	2,928	0.6	-0.6	2,929	0.0	1.2	-1.0	2,934	0.0
GDP at Market Prices	188,203	3.6	1.0	196,876	4.6	3.8	1.7	207,839	4.9
Net Factor Income	-30,975	6.8	1.6	-3,3621	-1.9	6.9	1.8	-36,613	-2.0
GNP at Market Prices	157,228	2.7	1.1	163,255	2.7	3.0	1.9	171,226	3.0

	2010 €m	Volume %	Price %	2011 €m	Cont. to Growth %	Volume %	Price %	2012 €m	Cont. to Growth %
Agriculture	4,392	1.0	3.3	4,585	0.0	1.0	3.2	4,778	0.0
Industry	64,078	3.3	1.1	66,920	1.8	3.7	-1.9	68,081	2.0
Manufacturing	45,979	3.8	-1.4	47,068	1.7	3.9	-1.5	48,152	1.7
Utilities	1,777	0.6	50.8	2,696	0.0	9.0	-35.0	1,911	0.2
Building	16,321	0.6	4.5	17,155	0.0	0.8	4.2	18,018	0.0
Market Services	87,657	3.9	1.1	92,097	1.9	3.4	3.5	98,605	1.7
Distribution	18,307	3.2	0.0	18,904	0.4	3.3	-0.1	19,516	0.4
Transport & Communications	10,560	3.9	0.9	11,073	0.3	3.8	1.0	11,605	0.3
Other Market Services	58,790	4.2	1.4	62,120	1.3	3.4	5.1	67,484	1.0
Non-Market Services	25,725	1.7	3.2	26,987	0.2	1.6	3.0	28,249	0.2
Health & Education	18,584	1.5	3.4	19,496	0.1	1.5	3.1	20,408	0.1
Public Administration	7,140	2.1	2.8	7,491	0.1	2.0	2.6	7,841	0.1
GDP at Factor Cost	180,623	3.4	1.4	189,360	3.9	3.3	1.4	198,486	3.9
Taxes on Expenditure	30,151	2.0	2.8	31,597	0.3	2.0	2.6	33,068	0.3
Subsidies	2,934	0.6	0.6	2,971	0.0	0.7	0.6	3,009	0.0
GDP at Market Prices	207,839	3.2	1.6	217,986	4.2	3.2	1.6	228,546	4.2
Net Factor Income	-36,613	3.1	1.9	-38,449	-0.9	3.0	1.8	-40,321	-0.9
GNP at Market Prices	171,226	3.3	1.5	179,537	3.3	3.3	1.5	188,225	3.3

Table A3.3: National Income and National Product, Current Prices, € million

	2004	2005	2006	2007	2008	2009	2010	2011	2012
Agricultural Incomes	2,998	3,035	3,097	3,204	3,399	3,568	3,741	3,923	4,104
Non-Agric. Wage Income	58,701	64,562	69,248	73,333	77,644	81,612	86,065	89,979	93,898
Non-Agric. Profits Net	51,505	53,897	57,806	60,323	62,783	64,856	67,200	70,484	74,077
Non-Agric. Profits Gross	51,196	54,406	58,256	60,773	63,233	65,306	67,650	70,934	74,527
Adjustment for Stock Appreciation	-309	509	450	450	450	450	450	450	450
Domestic Income	113,204	121,494	130,151	136,860	143,827	150,037	157,006	164,386	172,079
Depreciation	15,749	17,146	17,972	192,65	20,621	22,069	23,616	24,974	26,407
GDP (Factor Cost)	128,953	138,640	148,123	156,125	164,448	172,105	180,623	189,360	198,486
Taxes on Expenditure	19,639	21,993	23,980	25,420	26,684	27,700	30,151	31,597	33,068
Domestic	19,323	21,263	23,160	24,540	25,740	26,687	29,064	30,455	31,870
EC	316	730	820	880	944	1,013	1,087	1,141	1,198
Subsidies (-)	2,652	2,887	2,927	2,925	2,928	2,929	2,934	2,971	3,009
Domestic	864	905	920	948	981	1,012	1,047	1,084	1,122
EC	1,788	1,982	2,007	1,977	1,947	1,917	1,887	1,887	1,887
GDP (Market Prices)	145,939	157,746	169,177	178,620	188,203	196,876	207,839	217,986	228,546
Net Factor Income	-23624	-24,323	-26,209	-28,385	-30,975	-33,621	-36,613	-38,449	-40,321
Gross National Product	122316	133,423	142,968	150,235	157,228	163,255	171,226	179,537	188,225

Table A3.4: Personal Income and Personal Expenditure, Current Prices, € million

	2004	2005	2006	2007	2008	2009	2010	2011	2012
Agricultural Incomes	2,998	3,035	3,097	3,204	3,399	3,568	3,741	3,923	4,104
Non-Agric. Wage Income	58,701	64,562	69,248	73,333	77,644	81,612	86,065	89,979	93,898
Transfer Income	15,498	18,038	18,757	19,985	21,286	22,594	23,875	25,234	26,527
Domestic	15,457	17,534	18,024	19,229	20,510	21,799	23,054	24,385	25,648
Foreign	41	504	733	756	775	794	821	849	878
Other Personal Income	15,703	15,460	16,564	16,300	15,853	15,112	14,363	14,515	14,753
Non-Agricultural Profits	51,196	54,406	582,56	60,773	63,233	65,306	67,650	70,934	74,527
National Debt Interest	1,747	1,790	1,828	1,664	1,683	1,696	1,706	1,707	1,712
Net Factor Income	-23,624	-24,323	-26,209	-28,385	-30,975	-3,3621	-36,613	-38,449	-40,321
Government Trading & Investment Income (-)	1,246	1,450	1,800	1,891	1,980	2,055	2,156	2,260	2,370
Other Private Income	28,073	30,423	32,075	32,160	31,961	31,326	30,586	31,931	33,548
Undistributed Profits (-)	12,370	14,962	15,510	15,860	16,109	16,214	16,223	17,416	18,795
Personal Income	92,900	101,096	107,666	112,822	118,182	122,886	128,044	133,651	139,281
Taxes on Personal Income	17,616	18,887	20,441	21,597	23,352	25,410	26,165	27,614	29,043
Personal Disposable Income	75,285	82,209	87,225	91,224	94,830	97,476	101,880	106,036	110,238
Personal Consumption	67,079	72,080	77,714	81,435	84,742	87,322	91,170	94,767	98,418
Personal Savings	8,205	10,129	9,511	9,790	10,088	10,153	10,710	11,270	11,820
Tax Ratio (% Personal Income)	19.0	18.7	19.0	19.1	19.8	20.7	20.4	20.7	20.9
Savings Ratio (% of Disposable Income)	10.9	12.3	10.9	10.7	10.6	10.4	10.5	10.6	10.7

Table A3.5: Balance of Payments, Current Prices, € million

	2004	2005	2006	2007	2008	2009	2010	2011	2012
Exports – Total	122,301	127,758	135,570	144,807	154,040	163,855	174,393	185,488	197,161
Merchandise	81,058	83,378	88,020	93,183	98,342	103,656	109,236	115,050	121,102
Services	41,243	44,381	47,550	51,624	55,697	60,199	65,158	70,438	76,059
Imports – Total	100,446	106,101	112,486	118,871	124,639	130,747	137,815	145,667	154,030
Balance of Trade	21,855	21,658	23,084	25,936	29,401	33,108	36,578	39,821	43,132
as % of GNP	17.9	16.2	16.1	17.3	18.7	20.3	21.4	22.2	22.9
International Transfers									
EC Subsidies	1,788	1,982	2,007	1977	1,947	1,917	1,887	1,887	1,887
EC Taxes (-)	316	730	820	880	944	1,013	1,087	1,141	1,198
Government Payments (-)	1,484	1,721	1,900	2,012	2,129	2,246	2,383	2,506	2,637
Government Receipts	277	174	130	137	143	148	156	163	171
Private Transfers	41	504	733	756	775	794	821	849	878
Net International Transfers	306	209	150	-23	-208	-400	-606	-749	-899
Factor Income Flows	-23,624	-24,323	-26,209	-28,385	-30,975	-3,3621	-36,613	-38,449	-40,321
National Debt Interest (-)	1,554	1,664	1,770	1,660	1,670	1,676	1,683	1,686	1,691
Profits etc. Outflows (-)	26,348	28,156	30,564	32,246	33,976	35,541	37,520	38,480	39,430
Other Factor income	4,279	5,497	6,125	5,520	4,670	3,597	2,590	1,717	800
Current Account Balance	-1,463	-2,456	-2,974	-2,472	-1,781	-913	-642	623	1,912
as % of GNP	-1.2	-1.8	-2.1	-1.6	-1.1	-0.6	-0.4	0.3	1.0
Capital Transfers	401	360	340	351	360	368	381	394	407
Effective Current Balance	-1,062	-2,096	-2,634	-2,121	-1,422	-545	-261	1,017	2,320
as % of GNP	-0.9	-1.6	-1.8	-1.4	-0.9	-0.3	-0.2	0.6	1.2

Table A3.6: National Debt, Current prices, € million

	2004	2005	2006	2007	2008	2009	2010	2011	2012
Total Government Securities	19,568	19,578	19,544	19,548	19,506	19,437	19,399	19,354	19,306
Other Borrowing from Central Bank	5,781	5,781	5,781	6,075	6,358	6,601	6,924	7,260	7,611
Small Savings	4,518	4,518	4,517	4,492	4,459	4,417	4,373	4,314	4,242
Total Debt Held Domestically	16,799	16,809	16,774	17,046	17,255	17,388	17,627	17,860	18,091
Total € Debt	29,867	29,877	29,842	30,114	30,323	30,456	30,695	30,928	31,159
Foreign Debt:									
Foreign Currency	-5	-46	97	350	641	960	1,103	1,250	1,372
Government Securities	13,068	13,068	13,068	13,068	13,068	13,068	13,068	13,068	13,068
Total Foreign Debt	13,063	13,022	13,165	13,418	13,709	14,028	14,171	14,318	14,440
Total National Debt	29,862	29,831	29,939	30,464	30,964	31,416	31,798	32,178	32,531
General Government Debt	47,261	48,072	47,596	48,122	48,621	49,073	49,455	49,835	50,188
Other Bank Borrowing	-1,300	-1,300	-1,300	-1,366	-1,430	-1,484	-1,557	-1,633	-1,712
Debt Ratios (% of GNP)									
Total National Debt	24.4	22.4	20.9	20.3	19.7	19.2	18.6	17.9	17.3
General Government Debt	38.6	36.0	33.3	32.0	30.9	30.1	28.9	27.8	26.7
Total Domestic Debt	13.7	12.6	11.7	11.3	11.0	10.7	10.3	9.9	9.6
Total Foreign Debt	10.7	9.8	9.2	8.9	8.7	8.6	8.3	8.0	7.7
Total € Debt	24.4	22.4	20.9	20.0	19.3	18.7	17.9	17.2	16.6
Total Foreign Currency Debt	0.0	0.0	0.1	0.2	0.4	0.6	0.6	0.7	0.7
Debt Ratios (% of GDP)									
Total National Debt	20.5	18.9	17.7	17.1	16.5	16.0	15.3	14.8	14.2
General Government Debt	32.4	30.5	28.1	26.9	25.8	24.9	23.8	22.9	22.0
Total Foreign Debt	9.0	8.3	7.8	7.5	7.3	7.1	6.8	6.6	6.3

Table A3.7: Public Authorities Accounts, Current Prices, € million

	2004	2005	2006	2007	2008	2009	2010	2011	2012
Taxes on Income and Wealth	22,972	24,336	26,384	27,964	29,995	32,323	33,305	35,012	36,802
Company	5,365	5,458	5,953	6,376	6,653	6,924	7,152	7,410	7,771
Personal	17,607	18,878	20,431	21,588	23,342	25,399	26,154	27,603	29,031
Taxes on Expenditure	19,323	21,263	23,160	24,540	25,740	26,687	29,064	30,455	31,870
Gross	19,332	21,687	23,674	25,114	26,377	27,393	29,844	31,290	32,762
EC Budget Contribution (-)	9	423	513	573	638	706	780	835	892
Net Trading & Investment Income	1,246	1,450	1,800	1,891	1,980	2,055	2,156	2,260	2,370
Transfers From Abroad	277	174	130	137	143	148	156	163	171
Total Current Receipts	43,827	47,232	51,484	54,542	57,867	61,224	64,692	67,903	71,225
Subsidies	864	905	920	948	981	1,012	1,047	1,084	1,122
National Debt Interest	1,747	1,790	1,828	1,664	1,683	1,696	1,706	1,707	1,712
Other Transfer Payments	16,941	19,255	19,924	21,241	22,639	24,046	25,436	26,891	28,285
Foreign	1,484	1,721	1,900	2,012	2,129	2,246	2,383	2,506	2,637
Residents	15,457	17,534	18,024	19,229	20,510	21,799	23,054	24,385	25,648
Public Consumption	20,761	22,477	24,452	25,832	27,297	28,751	30,299	31,581	32,980
Total Current Expenditure	40,313	44,427	47,123	49,684	52,600	55,504	58,489	61,263	64,099
Public Authorities Savings (net)	3,514	2,805	4,361	4,858	5,267	5,721	6,203	6,640	7,126
as % of GNP	2.87	2.10	3.05	3.23	3.35	3.50	3.62	3.70	3.79
Total Capital Receipts	2,895	2,964	3,045	3,079	3,113	3,143	3,196	3,247	3,298
Grants – Housing	98	100	102	102	101	99	102	105	108
Grants – Industry	57	59	62	65	69	73	76	80	83
Investment	6,133	6,572	7,044	7,396	7,766	8,154	8,562	8,990	9,440
Other Capital Expenditure	746	943	857	899	944	992	1,041	1,093	1,148
Total Capital Expenditure	7,033	7,675	8,065	8,463	8,880	9,317	9,781	10,268	10,779
Borrowing for Capital Purposes	-4,139	-4,711	-5,019	-5,384	-5,768	-6,174	-6,586	-7,021	-7,481
Total Borrowing	-625	-1,906	-659	-526	-501	-453	-383	-381	-355
as % of GNP	-0.51	-1.43	-0.46	-0.35	-0.32	-0.28	-0.22	-0.21	-0.19
Budgetary Definitions									
Exchequer Surplus	112	-2,008	-1,942	-1,810	-1,784	-1,737	-1,667	-1,665	-1,639
as % of GNP	0.1	-1.5	-1.4	-1.2	-1.1	-1.1	-1.0	-0.9	-0.9
Current Budget Surplus	5,699	5,141	5,157	5,654	6,063	6,517	6,999	7,436	7,922
as % of GNP	4.7	3.9	3.6	3.8	3.9	4.0	4.1	4.1	4.2
EU Definitions									
General Government Balance	-2,117	811	-476	-608	-634	-681	-752	-753	-780
as % of GDP	-1.5	0.5	-0.3	-0.3	-0.3	-0.3	-0.4	-0.3	-0.3
as % of GNP	-1.7	0.6	-0.3	-0.4	-0.4	-0.4	-0.4	-0.4	-0.4

Table A3.8: Employment and the Labour Force, Thousands, Mid-April

	2004	2005	2006	2007	2008	2009	2010	2011	2012
Agriculture	114	110	109	105	102	100	97	94	92
Industry	504	526	531	527	527	526	531	531	531
Manufacturing:									
Traditional	98	98	98	97	96	95	94	92	90
Food Processing	47	48	47	46	46	45	45	44	43
High Technology	141	133	130	131	133	134	136	134	133
Manufacturing	286	278	275	275	275	275	275	271	266
Utilities	13	13	14	14	14	14	14	14	13
Building	204	234	242	239	239	238	242	247	251
Market Services	754	802	826	846	864	878	895	914	936
Distribution	260	277	287	288	288	287	288	290	292
Transport & Communications	112	112	112	112	113	114	116	118	120
Other Market Services	382	413	427	446	462	477	491	507	524
Non-Market Services	402	415	429	440	451	462	474	481	488
Health & Education	307	317	327	335	343	352	361	366	371
Public Administration	95	98	103	105	108	111	113	115	117
Total Employment	1,774	1,853	1,895	1,919	1,944	1,966	1,996	2,021	2,047
Unemployment	109	105	110	135	154	174	181	193	192
Labour Force	1,883	1,958	2,005	2,054	2,099	2,139	2,177	2,214	2,238

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from John McCarthy

Central Bank Quarterly Bulletin

The Central Bank Quarterly Bulletin will be published today. The Bank is forecasting GDP growth of 5¼ per cent this year, a slight deceleration from the estimated 5½ per cent outturn in 2004. GNP this year is forecast to rise by 4¾ per cent, compared to 5 per cent last year. These overall growth rates are very much in line with our own forecasts published on Budget day. Employment is forecast to increase by 44,000 (2.4 per cent), resulting in an unemployment rate of 4¼ per cent this year.

The Bank views the prospects for the economy this year as being broadly favourable. Notwithstanding this, their forecasts have been revised downwards slightly mainly due to a slightly less favourable international environment (slightly slower growth forecasts in some of our major trading partners – mainly some euro area countries – as well as the recent appreciation of the euro-dollar bilateral exchange rate). The Bank identifies uncertainty regarding oil prices and the strength of the exchange rate (partly related to the current account deficit in the US) as the main risks facing the economy this year. In addition, the loss in competitiveness over the last number of years is identified as a cause for concern. This deterioration in competitiveness reflects our higher wage and price inflation (both of which have exceeded that in our major trading partners for some time), exacerbated more recently by exchange rate movements.

The Bank makes a number of observations on fiscal policy, most notably in relation to Budget 2005. In particular, the absence of indirect tax increases in the Budget, together with the pay terms of Sustaining Progress will, according to the Bank, contribute to maintaining a low inflation environment this year. CPI inflation is forecast to average 2½ per cent this year, in line with our own forecasts published on Budget day. In addition, the Bank highlights the easing in the stance of fiscal policy (i.e. a negative change in the cyclically-adjusted balance), although it points out that fiscal policy satisfies the 'close-to-balance' requirements of the Stability and Growth Pact.

The Bank also expresses concern about the current high rate of house price inflation. However, the rate of increase in prices is projected to moderate this year on foot of continued very strong housing output. Nevertheless, concern is expressed at the fact that aggregate household debt (both mortgage and non-mortgage debt) exceeded household disposable income last year for the first time. This raises the exposure of households to adverse developments in income (for instance a rise in unemployment) or interest rates.

Table 1: Macro-Economic Forecasts for 2005 (growth rates unless otherwise stated)

	Central Bank	Dept. of Finance
GDP	5¼	5.1
GNP	4¾	4.7
Employment	2.4	1.9
Unemployment (rate)	4¼	4.4
CPI	2½	2.5

CC. Secretary General, Mr. McNally, Mr. Moran, Mr. O'Murchadha, Press Office

Speaking Points

- The Central Bank views the prospects for the Irish economy as broadly favourable this year. In overall terms, the Bank is forecasting GDP growth of 5¼ per cent; GNP is forecast to increase by 4¾ per cent.
- The Bank's forecasts for this year are broadly similar to my own Department's projections, published with the Budget day documentation.
- I share the Bank's concern regarding the importance of maintaining and indeed improving the competitiveness of the economy. In this context, I note that inflation declined to 2.2 per cent last year, the lowest rate of increase since 1999. Moreover, I made no increases to indirect taxes in the Budget and this will help to maintain low inflation this year.
- The Bank identifies the uncertainty regarding oil price developments and the potential for further exchange rate appreciation as risks to the Irish economy this year. I agree with these risks and highlighted them on Budget day.
- We have no control over many of the external risks facing the economy. We can, however, seek to ensure that our domestic cost base does not exacerbate competitiveness difficulties. This is why we need sensible income policies and a greater role for competition in the economy. This is the best way we can protect jobs.

Minister,
from John McCarthy
6 October 2005

ESRI Autumn 2005 Quarterly Economic Commentary

The ESRI Autumn 2005 Quarterly Economic Commentary will be published tomorrow. The ESRI are forecasting GDP growth of 5.7 per cent this year, easing to 5.0 per cent next year. GNP is forecast to rise by 5.6 per cent this year, with a deceleration to 4.9 per cent in 2006. The overall growth rates for this year are somewhat higher (by around ½ percentage points) than our own ERO forecasts. Employment is forecast to increase by 80,000 (4.3 per cent), resulting in an unemployment rate of 4.2 per cent this year. Employment growth of 49,000 (2.5 per cent) is projected for next year. CPI inflation is projected to average 2.3 per cent this year, increasing slightly to 2.5 per cent in 2006. A general government deficit of 0.5 per cent of GDP is being forecast for this year, with a surplus of 0.3 per cent of GDP next year.

Table 1: Macro-Economic Forecasts (growth rates unless otherwise stated)

	ESRI for 2005	ESRI for 2006	Dept. of Finance for 2005 (ERO)
GDP	5.7	5.0	5.1
GNP	5.6	4.9	5.0
Employment	4.3	2.5	2.9
Unemployment (rate)	4.2	4.2	4.2
CPI	2.3	2.5	2.4

The ESRI remain optimistic about the prospects for growth in the Irish economy this year, with only a minor (0.3 per cent) reduction from their previous forecasts. The main reason for this is that the ESRI are taking the view that the labour market data (which show employment growth of 5.1 per cent in the second quarter) indicate that the economy is performing well. This broad view is consistent with our own.

The ESRI sees the outlook for next year as broadly favourable, with GDP growth of 5.0 per cent currently projected. Nevertheless, the risks to growth are highlighted in the analysis. The risks identified are similar to our own and include:

- Output and employment are overly concentrated in the construction sector;
- Divergent growth patterns in some of our major trading partners, with indications that the UK economy may be slowing a particular risk;
- Global imbalances (most notably the current account deficit in the US) is a risk to the global economy (potentially a larger risk than oil prices in the view of the ESRI).

From a policy perspective, the ESRI note (as we have also done) that recent employment growth has been concentrated in the construction sector, and that this is disguising employment losses in the exposed (mainly manufacturing) sector of the economy. At some stage, employment in construction

will have to revert to more sustainable levels. In these circumstances, the burden for absorbing the additional labour arising from job losses in the construction and manufacturing sectors will fall on the services sector. This could give rise to "structural unemployment" as the skills required in services are different from those in manufacturing and construction. This will require policy intervention in order to retrain and up-skill those losing their jobs in these latter sectors.

CC. Secretary General, Mr. McNally, Mr. Moran, Mr. Hegarty, Ms. Daly, Press Office

Mr McNally,
from John McCarthy

Each 10,000 drop in new house completions: Macroeconomic Impact

Under a paper produced by BED earlier this year, the following results were identified:

	GDP	employment	unemployment	deficit
Year 1	- [½-1]	- [½-1]	+ ½	- €600 million

i.e., each 10,000 decline in house completions reduces growth in GDP by around ½ - 1 percentage points.

Note that the increase in unemployment is lower than the assumed loss in employment growth, due to assumed outward migration of recent immigrants in the construction sector.

Everything else being equal, there would be little impact in year 2, although the level of GDP and employment would be lower than baseline due to lower growth in output and employment in the previous year. However, if confidence were to be adversely affected, there could be an impact in the second year.

Under the situation in which housing output falls back by 10,000 each year to reach medium term demand levels (about 45,000-50,000 units), there would be an impact on the growth rates each year. These annual impacts would be similar to those above.

08/rw/04

seen by Minister
Returned herewith 24/11

24/11/05

1. Donal McNally,
2. Secretary General
3. Minister from David Doyle

Q Could a significant decline in Housing output be offset by an expansion in Public Investment. ?

The attached note considers this question, which is posed from time to time on a "what if" basis. It looks at a hypothetical reduction of 10,000 in housing output, with an expansion of a similar number in local authority houses or other public investment. It concludes that such an offsetting step would be impractical., with the net cost of about 1.8 billion euro being at stake. The key points are in the box at page one, while the basis for the costings are set out in the appendix.

Economic and Fiscal Implications of a Reduction in Housing Output

- Housing output (at nearly 77,000 units last year) accounts for a very large portion of output and employment in Ireland. This cannot persist indefinitely, as current levels of housing output exceed medium term demand. The inevitable decline in private sector output will simply be an equilibrium phenomenon – the decline in output to lower levels would represent a permanent shift to lower levels of underlying demand. When the decline in output eventually materialises, there will be adverse implications for output and employment as well as for the public finances.
- The question has been posed – could the Government offset a decline in housing output with an increase in capital investment?
- Filling the shortfall in private sector housing output by, say, increasing public (social housing) output would be impractical. Each 10,000 reduction in private sector output which is offset by 10,000 additional social houses would cost around €1.8 billion (1.5 per cent of GNP).
- Other issues such as the availability of serviced land, planners, and project managers would also need to be considered.

1 Current output

Total new house completions last year amounted to 76,954 units, 11.8 per cent higher than in 2003. As a result, new house completions accounted for around 1 percentage point of the 4.9 per cent increase in overall economic output last year. Moreover, growth in construction employment accounted for one-third of the overall increase in employment last year; as a result, employment in construction now accounts for 12 per cent of total employment, a figure which is very high in both historical and international terms.[1] In terms of cross-country comparisons, total new housing output in 2004 was the equivalent of 19 additional units for every each 1,000 persons in the State; on a per capita basis, this is about 4 times the output in the EU and the US.

2 Long-term demand

It is widely accepted that current housing output exceeds the medium term demand for housing, which is estimated to be in the region of 45,000 – 50,000 units per annum. In this context, the Budget-day projections[2] were based on a 5 per cent volume reduction in housing output (which translates into 73,000 units) this year, with a further decline to 67,000 units and 59,000 units in the following two years.[3] However, it was also assumed that any 'slack' this year would be absorbed by increased expenditure on housing maintenance and repair.

[1] QNHS data for the construction sector are not broken down between housing and non-housing employment.
[2] It should be noted that these forecasts for housing output are currently being revised as part of the BSM.
[3] The Construction Industry Federation has recently projected a 6 per cent volume decline this year while the ERSI in their Spring QEC are forecasting a 2 per cent decline in housing output this year followed by a 3 per cent decline next year.

3 Economic and fiscal implications of a sharp fall in housing output

The question arises as to the economic and budgetary implications of a decline in housing output to more "normal" levels. In the absence of any compensatory changes in public sector construction activity, a rough rule of thumb is that each 10,000 volume decline in housing output *ceteris paribus* reduces economic growth by around ½ - 1 percentage points. As a result, employment growth would be around ½ - 1 percentage point lower than would otherwise be the case. Unemployment would rise by about ½ percentage point relative to benchmark; in actual numbers, this would translate into an increase of about 10,000 in the numbers unemployed. The impact on the labour market is mitigated by the fact that part of the increase in employment in construction over the last number of years has taken the form of immigration. Therefore, a 'shock' to construction employment would probably lead to some reversal of these flows, so that the impact on unemployment is less severe. There could also be an element of increased maintenance and repair construction activity, as households increase expenditure in this area due to a relaxing of capacity constraints, and this would mitigate the unemployment impact. Wage inflation in the construction sector would also be lower.

The likely fiscal impacts are difficult to estimate at the tax head level as the methodology is not sufficiently disaggregated to estimate highly specific impacts. However, a broad rule of thumb is that each 10,000 reduction in housing output would reduce revenue by around €500 million. Expenditures would be higher due to the increase in unemployment; a simple guide is that each 10,000 increase in the Live Register adds around €70 million to social welfare expenditure.

Therefore, if housing output was to fall to 50,000 (i.e. longer term demand levels), total revenues would fall by around €1,500 million, and unemployment payments could be over €200 million higher. However, it is important to realise that these broad orders of magnitude do not include non-linear 'spill-over' effects, which would almost certainly be a feature of such a sharp decline in housing output. These non-linear effects would arise through negative confidence effects spreading through to the wider economy, leading to a rise in the household savings ratio with adverse implications for indirect taxation receipts. In addition, employment in the wider economy could be expected to decline via negative multiplier effects. In overall terms, therefore, the fiscal numbers referred to above may understate the actual fiscal implications.

4 Market intervention by the State

The above analysis illustrates the main macro-economic consequences of a decline in housing output, based on a "no-policy change" assumption. The question arises as to the implications if the State were to increase its capital expenditure in order to compensate for the decline in labour demand in the private housing sector. This could take the form of increased social housing

output or increased PCP expenditure. In terms of the former, increasing the output of social housing by an amount commensurate with the decline in private sector output would reduce the macro-economic implications of lower output and employment in private-sector house completions.

The cost (including land costs) of a local authority house (whether by purchase or new build) is approximately €150,000 in current prices. Therefore, the cost of 10,000 additional social houses would be approximately €1.5 billion.[4] At present, we're spending approximately €700 million a year producing about 5,000 social houses so this would involve an increase of 200 per cent.

While the macro-economic implications would be reduced, there would, however, be fiscal implications as the higher borrowing or taxes required to fund the additional expenditure (or the compensatory lower expenditure elsewhere) would ultimately have implications for the wider economy. As multi-annual envelopes for the period 2005-2009 have now been set, any additional expenditure in relation to social housing will have to be considered in this context.

The second form that public sector intervention could take would be to increase PCP expenditure more generally. However, it should be noted that the impact of undertaking higher non-residential capital expenditure would need to take into account the greater capital-intensity of civil engineering. In addition, some of the skills in residential construction may not be immediately transferable to non-residential construction. Thus, increased expenditure on the latter (depending on the magnitude) may not be sufficient to absorb the reduction in labour demand stemming from lower private-sector housing output. Moreover, while wage inflation may be lower on foot of spare capacity, other input costs such as land and tender costs could rise, resulting in value for money considerations.

A further consideration is the potential capacity constraints in terms of serviced land availability, local authorities' planners, project managers and even the building industry itself. It must be remembered that local authorities deliberately now tend to build small mixed housing schemes rather than large ones - and these schemes tend to be of interest only to small scale builders. Significantly increasing social housing output could therefore have implications for how local authorities carry out their housing functions.

[4] The alternative might be to purchase spare capacity from the private sector at market value. Moreover, at an average cost of €250,000 this would involve a gross spend of €2.5 billion.

5 Balance sheet effect

Taking all of the above into account, a stylised summary of the net financial position on the basis of the assumptions set out above (i.e. 10,000 reduction in private housing output offset by a commensurate increase in public housing output) would be as follows:

Revenue = €300 million lower[5]
Current expenditure = unchanged[6]
Capital expenditure = €1,500 million higher
Total = fiscal deterioration of €1,800 million

Note: A more detailed version of the calculations used in this table is available in the appendix.

Therefore, the net cost to the Exchequer of increasing the stock of public housing to offset lower private sector output is of the order €1,800 million, equivalent to 1.5 per cent of GNP.

6 Economic rationale for state intervention

Increasing the stock of public housing in order to maintain employment and taxes at current levels raises a number of other issues. Firstly, while public intervention would artificially sustain supply at the current level, thereby preventing any short-term economic effects, the question of how long this intervention can last needs to be addressed. Secondly, public intervention may have market-distorting effects. Any decline in output is simply an equilibrium phenomenon: the market is delivering housing output in a particular period in order to meet market demand in that period. Because the long term trend is downwards, artificially propping up supply is simply postponing the inevitable adjustment which must take place. Thirdly, additional expenditure of the magnitude outlined above would have crowding out effects on other priority Government interventions.

Finally, public sector intervention in the housing market cannot be considered in isolation, with other economic developments also likely to impact on the housing market. For instance, the release of the SSIA funds into the economy in 2006/07 could potentially affect the housing market, as some individuals may have been using the scheme as a savings vehicle for a new house deposit. As a result, new private-housing demand could conceivably pick-up in this period. Alternatively, for existing home owners, SSIA funds could be directed towards increased housing maintenance and repair expenditure, which would also have an impact on construction

[5] The €500 million loss due to lower private sector output is partly offset by €200 million higher income tax take from the public housing output. Tax returns from public intervention, however, will not recover the full loss because social houses are not built to be sold so that there is no VAT take. Note that the figure used is for illustration only.

[6] It is assumed that there is no increase in unemployment expenditure as there is full substitution of labour from private to public production. This may be an optimistic assumption.

employment. Thus, if the increase in public sector housing output was to occur over this period, it could potentially lead to greater capacity constraints in the construction sector (and lead to further value for money considerations as the price of construction labour / land was bid upwards).

At the same time, the increase in demand for non-housing goods and services on foot of the SSIA release, if combined with a substantial injection of public sector expenditure could result in the build up of inflationary pressures in the economy more generally.

Appendix

Calculation of Balance Sheet Effect

Action	Economic Implications		Cost, €m
10,000 decline in private houses			
	lower income taxes & VAT	a	- 500
	higher live register payments	b	- 70
	total cost = a+b	c	- 570
10,000 local authority houses			
	increase in capital expenditure	d	- 1,500
	income taxes are higher	e	+ 200
	no VAT take on these houses	f	0
	live register saving	g	+ 70
	net cost = d+e+f+g	h	- 1,230
	overall cost = c+h		**- 1,800**

"-" represents a cost to the Exchequer.

a: the decline in employment resulting from lower housing output reduces the income tax take and lowers VAT (on housing) receipts;

b: the decline in construction employment leads to an increase in unemployment resulting in higher social welfare expenditure;

d: the cost of 10,000 social houses is approximately €1.5 billion;

e: because employment levels are maintained, some of the capital expenditure is clawed back in the form of income taxes;

f: there is no VAT on social houses as they are not built to be sold;

g: because unemployment does not increase, social welfare payments are not affected.